GURPS is the most flexible roleplaying system ever created. With just this book, you can adventure in any world you can imagine. Use all types of weapons from clubs to lasers . . . magic and martial arts . . . psionics and superpowers.

Create exactly the character you want to play . . . your favorite fictional hero, or your own invention. Choose from over 400 advantages and disadvantages, over 350 skills, spells, and techniques. Customize your character with individual perks and quirks, and you’re ready to go.

No more switching game systems when you change campaigns! GURPS gives you one set of clear, comprehensive rules to cover any background. This new Fourth Edition is based on 16 years of gamer feedback from the Third Edition, and is faster and easier to play than ever before.

GURPS makes the Game Master’s job easy and fun. All rules are carefully organized, indexed, and cross-referenced. Charts and tables are clear and legible. And to help you introduce new players to the system, there’s a “Quick Start” section which covers the basics in a few pages . . . and the introductory version of the rules, GURPS Lite, is available free online!

This is Book 1 of the two-volume Basic Set. Only this book is necessary to play. Game Masters, and players wanting more detail, will find Book 2 valuable.

By Steve Jackson, David L. Pulver, and Sean M. Punch
Edited by Andrew Hackard and Steve Jackson
Cover Art by John Zeleznik   Cover Design by Victor R. Fernandes
Illustrated by Abrar Ajmal, Alex Fernandez, Ted Galaday, Eric Lofgren, John Moriarty, Torstein Nordstrand, Glen Osterberger, V. Shane, Bob Stevlic, Eric Wilkerson, and Jim Zubkavich
# Contents

1. **Creating A Character** .......... 10
   - Character Points .......... 10
   - Character Concept .......... 11
   - How *GURPS* Works: Realism and Game Balance .......... 11
   - Character Types .......... 12
   - Example of Character Creation: Dai Blackthorn .......... 12
   - Character Creation Checklist .......... 13

2. **Sample Character Sheet** .......... 13
   - Things Not Shown on the Character Sheets .......... 13

3. **Basic Attributes** .......... 14
   - How to Select Basic Attributes .......... 14
   - Handicaps .......... 14
   - How *GURPS* Works: IQ, Sentience, and Sapience .......... 15

4. **Secondary Characteristics** .......... 15

5. **Damage Table** .......... 16
   - Machines and Fatigue .......... 16

6. **Basic Lift and Encumbrance Table** .......... 17
   - Example of Character Creation (cont’d) .......... 18

7. **Build** .......... 18
   - Size Modifier (SM) .......... 19
   - Shopping for the Big, Tall, Thin, and Small .......... 20

8. **Age and Beauty** .......... 20
   - Age .......... 20
   - Physical Appearance .......... 21
   - Other Physical Features .......... 21
   - Example of Character Creation (cont’d) .......... 22
   - Social Background .......... 22
   - Technology Level (TL) .......... 22
   - Culture .......... 23
   - Language .......... 23
   - Sapience and Language .......... 23
   - Accents .......... 24
   - Broken to Broken .......... 24
   - Example of Character Creation (cont’d) .......... 25

9. **Wealth and Influence** .......... 25
   - Wealth .......... 25
   - Starting Wealth .......... 26
   - Reputation .......... 26
   - Tech Level and Starting Wealth .......... 27
   - Importance .......... 28
   - Classless Meritocracies .......... 28
   - Special Rules for Rank .......... 29
   - Example of Character Creation (cont’d) .......... 30
   - Privilege .......... 30
   - Social Restraints .......... 30

10. **Friends and Foes** .......... 31
    - Associated NPCs .......... 31
    - Contacts .......... 31
    - Identities .......... 31
    - Alternate Identity vs. Secret Identity .......... 31

11. **Advantages** .......... 32
    - Types of Advantages .......... 32
    - Advantage Origins .......... 33
    - Potential Advantages .......... 33
    - What’s Allowed .......... 34
    - Turning Advantages Off and On .......... 34
    - Advantage List .......... 34
    - Frequency of Appearance .......... 36
    - Limited Defenses .......... 46
    - Alternative Attacks .......... 61
    - Perks .......... 100
    - Modifiers .......... 101
    - Enhancements .......... 102
    - Attack Enhancements and Limitations .......... 102
    - Turning Enhancements Off and On .......... 102
    - Limitations .......... 110
    - Optional Rule: Limited Enhancements .......... 111
    - Examples of Modified Attacks .......... 114
    - Gadget Limitations .......... 116
    - Example of Character Creation (cont’d) .......... 116

12. **New Advantages** .......... 117
    - Modifying Existing Advantages .......... 117

13. **Disadvantages** .......... 119
    - Disadvantages for Heroes .......... 119
    - Restrictions on Disadvantages .......... 120
    - Types of Disadvantages .......... 120
    - Secret Disadvantages .......... 120
    - Self-Control for Mental Disadvantages .......... 120
    - Self-Imposed Mental Disadvantages .......... 121
    - “Buying Off” Disadvantages .......... 121
    - Disadvantage List .......... 122
    - Example of Character Creation (cont’d) .......... 122

14. **Quirks** .......... 162
    - Mental Quirks .......... 162
    - Example of Character Creation (cont’d) .......... 164
    - Physical Quirks .......... 165
    - New Disadvantages .......... 165
    - Modifying Existing Disadvantages .......... 165
    - Brand-New Problems .......... 166

15. **Skills** .......... 167
    - Controlling Attribute .......... 167
    - Choosing Your Beginning Skills .......... 167
    - Difficulty Level .......... 168
    - Technological Skills .......... 168
    - Tech-Level Modifiers .......... 168
    - Prerequisites .......... 169
    - Specialties .......... 169
    - Grouped Skills .......... 169
    - Familiarity .......... 169
    - Buying Skills .......... 170
    - Skill Notation .......... 170
    - Improving Your Skills .......... 170
GURPS stands for “Generic Universal RolePlaying System.” It was originally a joke . . . a code word to describe the game while we looked for a “real” name. Years went by – literally – as the game developed. We never found a better name, and now that the Fourth Edition is in your hands, the name is more appropriate than ever.

“Generic.” Some people like quick, fast-moving games, where the referee makes lots of decisions to keep things moving. Others want ultimate detail, with rules for every contingency. Most of us fall somewhere in between. GURPS starts with simple rules, and – especially in the combat system – builds up to as much optional detail as you like. But it’s still the same game. You may all use it differently, but your campaigns will all be compatible.

“Universal.” I’ve always thought it was silly for game companies to publish one set of rules for fantasy; another one for Old West, another one for science fiction, and another one for super-powered. GURPS is one set of rules that’s comprehensive enough to let you use any background. There are worldbooks and supplements that “fine-tune” the generic system for any game world you want. But they are still compatible. If you want to take your Wild West gunslinger and your WWII commando for- tune hunting in Renaissance Italy . . . go for it! And because that’s exactly the kind of game that so many of our fans play, the Fourth Edition adds an overarching background created to support just such campaigns.

“RolePlaying.” This is not just a hack-and-slash game. The rules are written to make true roleplaying possible – and, in fact, to encourage it. GURPS is a game in which you take on the persona of another character – and pretend, for a little while, to be that character.

“System.” It really is. Most other RPGs started out as a simple set of rules, and then were patched and modified, ad infinitum. That makes them hard to play. GURPS, more than ever in the Fourth Edition, is a unified whole. We’ve gone to a great deal of effort to make sure that it all works together; and it all works. GURPS will let you create any character you can imagine, and do anything you can think of . . . and it all makes sense.

GURPS has been in print now for nearly 20 years. It was not designed in a vacuum; every game builds on the ones that came before. We learn from our successes – and from the successes of others. I think the best games are those that are simple, clear and easy to read, and I’ve tried hard to make GURPS “friendly.” One important influence was Hero Games’ Champions, for the flexibility of its character-creation system. Another was Flying Buffalo’s Tunnels & Trolls, for its appeal to solitaire gamers. Finally, M.A.R. Barker’s Empire of the Petal Throne remains noteworthy, even after decades of competition and imitation, for the detail and richness of its alien game world.

But there’s more to GURPS than trying to repeat past success. The failures of earlier systems are important, too. In GURPS, I’ve tried to achieve several things I think earlier designs missed.

First and foremost, of course, is the flexibility of a “universal” system. Others have tried this, but have fallen into the twin traps of watered-down combat (where a lightning bolt is just like a .45 pistol) or incompatibility (where players have to learn so many alternate rules for each new game and characters don’t easily cross over). GURPS presents a single, unified system that allows for great diversity without losing its coherence. This Fourth Edition incorporates dozens of rules that originally appeared in supplements published for the Third Edition. They seemed important enough to bring into the Basic Set – so here they are.

Second is organization. Every gamer has had the experience of hunting frantically through one book after another, looking for a rule . . . and not finding it. GURPS is extensively cross-referenced, with a Table of Contents, an Index, and a Glossary of terms used in the game.

Third is ease of play. In GURPS, most of the detailed calculations are done before you start play . . . they are entered on the character sheet, and saved until you need them. Once play actually begins, it should not be complex. I’ve tried to make GURPS as fast-moving yet realistic as possible. It’s up to you to decide whether I succeeded.

Most roleplaying systems depend for their success on a continual flow of “official” supplements and adventures. GURPS is different. True, we’ve released a lot of material already, and we plan to do much more; a totally universal system offers great leeway, and we’ve got a supplement list as long as your arm. But GURPS is designed to be as compatible as possible with supplements written for different games. The reason? Simple. Suppose that you’re a GURPS player. You’re at the hobby shop, and you see a really interesting supplement package. But it’s by another publisher; for another game. No problem. The GURPS system breaks everything down into plain English and simple numbers. Distances are given in feet and miles, rather than arbitrary units; times are given in minutes and seconds. That’s what makes it generic. That also makes it easy to translate. If you see an interesting supplement for another game, go right ahead and get it. You can use it as a sourcebook for GURPS.

Likewise, if your gaming group favors other systems . . . you can still use your GURPS adventures. As long as that other game uses units that you can translate into feet, minutes, and other plain-English terms, you can import your GURPS adventures.

When GURPS was launched, we dreamed of it becoming the “standard” roleplaying system. The hobby has grown hugely since then! There will never be a single standard . . . but GURPS is one of the standards, and that’s fine. We have never tried to drive others out of the market, or even to force them to conform to us. Instead, we are conforming to them – by producing a system that will work with any clearly written adventure.
At any rate, here it is. I’m satisfied that GURPS is the most realistic, flexible, and “universal” system ever developed. This Fourth Edition is the culmination of 18 years of continuous development and two years of concerted revision. I hope you like it.

In closing, I want to acknowledge and thank the two revisors of this edition. Sean Punch, the GURPS line editor; and David Pulver spent two years collating feedback, experimenting with variant systems, and knitting a decade and a half of rules material into a coherent whole. It would not have happened without them.

— Steve Jackson

Notes on the Fourth Edition

This edition represents a leap forward in more ways than just rules. As the hobby has grown, standards have become higher. You expect more from a roleplaying game than you did a decade ago; it’s our job to deliver. So . . .

• The book is bigger. Future GURPS releases will also be large . . . most will be over 200 pages . . . and they’ll be hardback. Feedback has been clear on this point; most people want more material in each book, and they want the durability and looks of hardcover.

• The art is better. It’s full-color throughout, and it’s treated as an integral part of the book, not as filler material. Many will find this the most dramatic change in the new edition!

• Regular support will continue. We plan to release one high-quality hardcover sourcebook every month . . . indefinitely. As I write this in April of 2004, we’re already scheduled more than three years out.


The first two editions of Basic Set — released in 1986 and 1987 — were boxed sets containing cardboard figures, combat maps, dice, and two rulebooks (sound familiar?). Book 1: Characters was aimed mainly at players, while Book 2: Adventuring was more of a GM’s guide. This was a logical division of content for a RPG, and quite common in the ’80s.

By the time of the third edition (1988), gamers had come to prefer economical all-in-one rulebooks to expensive boxed sets. We decided to dispense with the box and release Basic Set, Third Edition as a single book. We managed to shoehorn everything into one volume. We continued to call it the Basic Set — even though it was not a boxed set — so that retailers and customers would know that it was the same game.

By 1995, we had published over 100 titles for GURPS. However, it just wasn’t feasible to keep them all in print, so it became progressively harder to find certain supplements. Meanwhile, gamers with large GURPS libraries were finding it increasingly difficult to locate specific rules. To solve these problems, we compiled the most frequently used rules from all of GURPS into two expansion volumes: Compendium I: Character Creation and Compendium II: Combat and Campaigns.

Most GURPS supplements written between 1996 and 2003 required one or both of the Compendia. The basic rules had effectively spread to three books. In the process, several internal inconsistencies became evident — the almost-inevitable result of growth by agglomeration.

Basic Set, Fourth Edition addresses the inconsistencies by recasting Basic Set, Third Edition and the two Compendia as a unified system. It occupies two volumes not because we think we will make more money that way, but because condensing three books into one proved impossible — there was too much material! But these two volumes contain the best of 18 years of GURPS development, making Fourth Edition comprehensive in a way that few other RPGs are.

About the Authors

Steve Jackson

Steve Jackson has been playing games for entirely too many years, and designing them professionally since 1977. His other game-design credits include Ogre and G.E.V., the award-winning Illuminati, the best-selling Car Wars, the atrocious Munchkin and its offshoots, and many others. He has served as an officer and volunteer for various industry associations, and was the youngest person ever inducted into the Origins “Hall of Fame.”

He is the founder of Steve Jackson Games, in Austin, Texas. Steve is an active member of the Science Fiction Writers of America. He is a semi-retired science fiction fan, and once spent a great deal of time writing for various zines and helping to run conventions. He now enjoys reading others’ writing and attending others’ cons. So it goes.

His other hobbies include surfing the net, playing with Lego and rolling-ball toys, gardening (especially water lilies), and tropical fish.

David L. Pulver

David L. Pulver grew up in Canada, England, and New Zealand. He has been a science fiction fan for most of his life, an avid gamer since 1978, and a professional author since 1988. GURPS Ultra-Tech was his first book. He has since written over 50 RPGs and supplements, among them Transhuman Space, GURPS Bio-Tech, and Big Eyes, Small Mouth, Second Edition. He lives in Victoria, British Columbia.

Sean M. Punch

Sean “Dr. Kromm” Punch set out to become a particle physicist and ended up as the GURPS Line Editor. Since 1995, he has compiled the two-volume GURPS Compendium and GURPS Lite, written GURPS Wizards and Undead, edited or revised more than 20 other GURPS books, and masterminded the rules behind dozens more.

Sean has been a fanatical gamer since 1979. His nongaming interests include cinema, computers, and wine. He lives in Montréal, Québec, with his wife, Bonnie. They have three cats and one bird.
And because this edition’s Basic Set is comprehensive, there is no need to “bolt on” extra rules that will come to be seen as mandatory. This should put the brakes on growth by agglomeration. The Basic Set is truly all you need to run nearly any kind of game: fantasy, science fiction, supers, horror . . . anything. We believe that’s a big win, and we think you will agree!  
– Sean Punch

What Is Roleplaying?

In a roleplaying game (RPG), each player takes the part of a “character” participating in a fictional adventure. A referee, called the Game Master (GM), chooses the adventure. He determines the background and plays the part of the other people the characters meet during their adventure. The adventure may have a fixed objective – save the Princess, find the treasure, stop the invasion – or it may be open-ended, with the characters moving from one escapade to the next. A roleplaying “campaign” can be open-ended, lasting for years, as characters (and players) come and go. It’s all up to the GM and the players.

No game board is necessary for a roleplaying game – although some systems, including GURPS, include optional “boardgame” rules for combat situations. Instead, the game is played verbally. The GM describes the situation and tells the players what their characters see and hear. The players then describe what they are doing to meet the challenge. The GM describes the results of these actions . . . and so on. Depending on the situation, the GM may determine what happens arbitrarily (for the best possible story), by referring to specific game rules (to decide what is realistically possible), or by rolling dice (to give an interesting random result).

Part of the object of a roleplaying game is to have each player meet the situation as his character would. A roleplaying game can let a player take the part of a stern Japanese samurai, a medieval jester, a wise priest, a stowaway gutter kid on her first star-trip . . . or absolutely anyone else. In a given situation, all those characters would react differently. And that’s what roleplaying is about! Thus, good roleplaying teaches cooperation among the players, and broadens their viewpoints.

But roleplaying is not purely educational. It’s also one of the most creative possible entertainments. Most entertainments are passive: the audience just sits and watches, without taking part in the creative process. In roleplaying, the “audience” joins in the creation. The GM is the chief storyteller, but the players are responsible for portraying their characters. If they want something to happen in the story, they make it happen, because they’re in the story. Other types of media are mass-produced to please the widest possible audience, but each roleplaying adventure is an individual gem, crafted by those who take part in it. The GM provides the raw material, but the final polish comes from the players themselves.

Mini-Glossary

Below are a few important terms used in this book. The complete glossary appears on pp. 563-565.

- **advantage**: A useful trait that gives you an “edge” over another person with comparable attributes and skills. See Chapter 2.
- **attributes**: Four numbers – Strength, Dexterity, Intelligence, and Health – that rate a character’s most basic abilities. Higher is always better! See pp. 14-15.
- **cinematic**: A style of play where the needs of the story outweigh those of realism, even when that would produce improbable results. See p. 488.
- **d**: Short for “dice.” “Roll 3d” means “roll three ordinary six-sided dice and add them up.” See p. 9.
- **Dexterity (DX)**: An attribute that measures agility and coordination. See p. 15.
- **disadvantage**: A problem that renders you less capable than your other traits would indicate. See Chapter 3.
- **enhancement**: An extra capability added to a trait. This increases the point cost of the trait by a percentage. See pp. 102-109.
- **Fatigue Points (FP)**: A measure of resistance to exhaustion. See p. 16.
- **Health (HT)**: An attribute that measures physical grit and vitality. See p. 15.
- **Hit Points (HP)**: A measure of ability to absorb punishment. See p. 16.
- **Intelligence (IQ)**: An attribute that measures brainpower. See p. 15.
- **limitation**: A restriction on the use of a trait. This reduces the point cost of the trait by a percentage. See pp. 110-117.
- **point**: The unit of “currency” spent to buy traits for a character. The more points you have, the more capable you are. Point costs for traits are often written in brackets; e.g., “Combat Reflexes [15]” means the Combat Reflexes trait costs 15 points. See p. 10.
- **prerequisite**: A trait you must have to qualify for another trait. If the prerequisite is a skill, you must have at least one point in it. See p. 169.
- **skill**: A number defining your trained ability in an area of knowledge or broad class of tasks. See Chapter 4.
- **Strength (ST)**: An attribute that measures physical muscle and bulk. See p. 14.
- **trait**: An advantage, attribute, disadvantage, skill, or other character “building block” that affects game play and costs points to add, modify, or remove.
**Materials Needed for Play**

- **GURPS Basic Set Characters.** Everyone will need access to this book in order to create characters and look up character abilities. A large group will find it handy to have several copies available, especially during character creation.
- **GURPS Basic Set Campaigns.** The GM will need a copy of this book, which contains rules for success rolls, physical feats, combat, injury, animals, and vehicles, as well as advice on how to run the game and design a campaign.
- **Character sheets.** Each player will need a copy of the Character Sheet (pp. 335-336) on which to record his PC's statistics. You may make as many copies as you like for your own use (but not for resale).
- **Three six-sided dice.** A set of three dice for each player, and another set for the GM, is even better.
- **Pencils and scratch paper.** For taking notes, sketching maps, etc.

The other important thing about roleplaying is that it doesn’t have to be competitive. In most roleplaying situations, the party will succeed or fail as a group, depending on how well they cooperate. The greatest success of good roleplaying comes not in “winning,” but in character development. The more successfully a player portrays his character (as judged by the GM), the more that character will gain in ability.

When it’s all said and done, the GM and the players will have created a story . . . the story of how the characters met, learned to work together, encountered a challenge, and (we hope) triumphed!

**How to Learn GURPS**

If you have some experience with roleplaying games already, you should find GURPS easy to pick up. But if this is your first RPG, you’ll have a little more to learn. Relax — if you got this far, you’ll be fine!

Don’t be alarmed by the physical size of the game. There’s a lot of material here — two thick books — but we’ve done our best to make it easy to use.

The tables of contents (pp. 3-4 and 339-341) and the index (pp. 329-334 or 570-575) are as detailed as we could manage.

We’ve also added several features to make the rules easier to learn. The Quick-Start (below) and Conventions (p. 9) sections cover the most important game concepts. The Glossary (pp. 563-565) defines the terms used in the game — and an abridged version (see Mini-Glossary, p. 7) appears here so you can understand the Quick Start rules without flipping pages.

The best way to learn GURPS is to join a group of friends who already play. If you’re starting out on your own, here’s what we recommend:

1. Quickly skim this book, just to get the flavor of the game. Don’t worry about the details yet.
2. Read the Mini-Glossary (p. 7) to learn the basic terminology.
3. Read the Quick-Start and Conventions sections to learn the basic game concepts.
4. Read Creating a Character (pp. 10-12) to get an idea of the different things characters can do.
5. Read the rest of the rules in detail, as your time permits.

GURPS Lite may also be useful to you. It’s a 32-page distillation of the basic system; you can download it free at www.sjgames.com/gurps/lite/.

Once you have absorbed the rules, you can be the GM for your friends, and help them learn the game. You can do whatever you want . . . that’s the whole point of the system.

Most important: Have fun!

**Quick Start**

This section is a brief guide to the whole GURPS game system. The Basic Set spans two thick volumes, but most of that is detail, “color,” and special cases. The game system is actually easy. GURPS is designed to be “friendly,” both for the player and the Game Master. The rulebooks include a lot of detail, but they’re indexed and cross-referenced to make things easy to find. And all the detail is optional — use it only when it makes the game more fun.

There are only three basic “game mechanics” in GURPS. Learn these and you can start to play.

(1) **Success Rolls.** A “success roll” is a die roll made when you need to “test” one of your skills or attributes. For instance, you might test, or roll against, your Strength to stop a heavy door from closing, or against your Guns skill to hit an enemy with your pistol.

The only dice used in GURPS are six-sided ones. Roll three dice for a success roll. If your roll is less than or equal to the skill or ability you are testing, you succeeded. Otherwise, you failed. For example, if you are rolling against Strength, and your ST level is 12, a roll of 12 or less succeeds.

Sometimes you will have modifiers to a roll. For instance, if you were trying to stop a very heavy door from closing, you might have to roll against Strength at -2 (or ST-2, for short). In that case, with a Strength of 12, you would need to roll a 10 or less to succeed. Rolling a 10 or less is harder than rolling a 12 or less, just as stopping a heavy door is harder than stopping an ordinary one.

For an especially easy task, you would get a bonus to your attempt. You might roll “Animal Handling+4” to make friends with a very friendly dog. If your Animal Handling skill were 12, a roll of 16 or less would succeed. Making a roll of 16 or less is easier than making the base skill roll of 12 or less, because a friendly dog is easy to deal with.

For details on success rolls, see pp. 343-361.

(2) **Reaction Rolls.** A “reaction roll” is a roll made by the Game Master (or GM) to determine how his nonplayer characters (NPCs) react to the player characters. This roll is always optional; the GM may predetermine reactions.

Don’t be alarmed by the physical size of the game. There’s a lot of material here — two thick books — but we’ve done our best to make it easy to use.

The tables of contents (pp. 3-4 and 339-341) and the index (pp. 329-334 or 570-575) are as detailed as we could manage.

Once you have absorbed the rules, you can be the GM for your friends, and help them learn the game. You can do whatever you want . . . that’s the whole point of the system.

Most important: Have fun!
But sometimes it’s more fun to let the dice control the reactions.

To check reactions, the GM rolls 3 dice and consults the Reaction Table (pp. 560-561). The higher his roll, the better the NPCs will react, and the better the treatment they will give the PCs.

Many traits give reaction modifiers that add to or subtract from reaction rolls. If you have a +2 reaction due to your good looks, the GM will add 2 to any reaction roll made by someone who can see you. This is likely to improve the way they behave toward you!

For details on reaction rolls, see p. 494.

(3) Damage Rolls. A “damage roll” is a roll made in a fight, to see how much harm you did to your foe. Damage rolls use the “dice+adds” system (see Dice, below).

Many things can affect the final injury inflicted by your attack. Armor reduces the damage received by the wearer. Certain attacks do extra damage if they get through armor. “Critical hits” can do extra damage. All these things are explained in the combat rules – see Chapters 11-13. But the combat system is “modular”; you can use all the rules for a complex, detailed, realistic combat simulation – or just those in Chapter 11 for a quick game.

There’s another important system – but you don’t need to know it to start with. It’s the character creation system. The GM will give each player a number of points to spend on his character. High attribute levels cost points, as do advantages and skills. Disadvantages, such as Greed and Berserk, are also available; these give you extra points. Details appear in Chapters 1-4.

These rules let you do all your calculations before play starts, and enter them on the Character Sheet (p. 13). That way, you don’t have to bother with calculations during play!

Got all that? Good. Now you can play GURPS. The rest is just detail. Have fun.

Conventions

GURPS uses the following mathematical conventions.

Dice

GURPS uses six-sided dice only. All “success rolls,” and most other rolls, require you to throw three dice (“3d”) at once, add up the number of pips, and compare the total to a “target number.”

To figure out combat damage, and for many other things, GURPS uses the “dice+adds” system. If a weapon does “4d-2” damage, this is shorthand for “roll 4 dice and add 2 to the total.” Likewise, “3d-3” means “roll 3 dice and subtract 3 from the total.”

If you see just “2d,” that means “roll two dice.” For instance, if an adventure says, “The base is guarded by 5d human soldiers and 2d+1 robots,” that’s short for, “Roll five dice for the number of human guards at the base. Then roll two dice, and add 1, for the number of robots.”

For really huge numbers, dice can be multiplied. For instance, “2d×10” means “roll 2 dice and multiply by 10.”

Rounding

A mathematical formula is often the best way to ensure that a rule is fair, realistic, or universal. But formulas sometimes yield inconvenient fractions. Except where instructed otherwise, round off fractions as follows:

Round up for point costs. When you modify a point cost by a percentage, or multiply it by a factor, round all fractions up. For instance, a 25% enhancement to a 15-point ability would result in 18.75 points, which would round to 19 points. For negative numbers, “up” means “in the positive direction” e.g., if you multiply -7 points by 1/2 to get -3.5 points, round the result to -3 points.

Round down for character feats and combat results. When you do math to determine what a character can do – how much he can lift, how far he can jump, etc. – or to calculate injury or other combat results, round all fractions down. For instance, for an attack that inflicts 3 points of injury with a 50% damage bonus, round down from 4.5 to 4 points.

Exceptions and special cases (such as “round to the nearest whole number” or “do not round off”) are noted explicitly with the relevant rule.

Metric Conversions

GURPS uses the old imperial units of measurement, rather than metric, because most of our readers are Americans who use the old system. But not all! Every year, more and more people in the rest of the world start GURPS campaigns. And outside the U.S., people think in metric. We can’t afford to do two editions of everything, but we can provide this conversion table.

Note that there are two conversion columns. The first column is an approximation, easy to do in your head, and good enough for gaming. The second column is the real metric equivalent, for those times when you want to be exact.

<table>
<thead>
<tr>
<th>Imperial</th>
<th>Game Metric</th>
<th>Real Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 inch (in.)</td>
<td>2.5 cm</td>
<td>2.54 cm</td>
</tr>
<tr>
<td>1 foot (ft.)</td>
<td>30 cm</td>
<td>30.48 cm</td>
</tr>
<tr>
<td>1 yard (yd.)</td>
<td>1 meter</td>
<td>0.914 meters</td>
</tr>
<tr>
<td>1 mile (mi.)</td>
<td>1.5 km</td>
<td>1.609 km</td>
</tr>
<tr>
<td>1 pound (lb.)</td>
<td>0.5 kg</td>
<td>0.454 kg</td>
</tr>
<tr>
<td>1 ton</td>
<td>1 metric ton</td>
<td>0.907 metric tons</td>
</tr>
<tr>
<td>1 gallon (gal.)</td>
<td>4 liters</td>
<td>3.785 liters</td>
</tr>
<tr>
<td>1 quart (qt.)</td>
<td>1 liter</td>
<td>0.946 liters</td>
</tr>
<tr>
<td>1 ounce (oz.)</td>
<td>30 grams</td>
<td>28.349 grams</td>
</tr>
<tr>
<td>1 cubic inch (ci)</td>
<td>16 cubic cm</td>
<td>16.387 cu. cm</td>
</tr>
<tr>
<td>1 cubic yard (cy)</td>
<td>0.75 cubic m</td>
<td>0.765 cubic m</td>
</tr>
</tbody>
</table>

Temperature: When dealing with changes in temperature, one Fahrenheit degree is 5/9 the size of a degree Celsius. So a change of 45°F is equal to a change of 25°C. To convert actual thermometer readings, subtract 32 from the Fahrenheit temperature and multiply the result by 5/9. So 95°F is 5/9 of (95-32), or 5/9 of 63, or 35°C.
CHAPTER ONE
CREATING A CHARACTER

When you roleplay, you take the part of another person – a “character” that you create. GURPS lets you decide exactly what kind of hero you will become. Asteroid miner? Wizard? Professional time-traveler? You can take your inspiration from a fictional hero or heroine, or create your new “self” from the ground up. Once you know what role you want to play, it’s time to bring that character to life!

The GM (Game Master – the person “running” the game) will give you a number of character points with which to “buy” your abilities. For instance, the stronger you want to be, the more points it will cost. You can also buy advantageous social traits, such as wealth, and special abilities called advantages (see Chapter 2).

If you want more abilities than you can afford on the budget given to you by your GM, you can get extra points by accepting below-average strength, appearance, wealth, social status, etc., or by taking disadvantages – specific handicaps such as bad vision or fear of heights (see Chapter 3).

Advanced players can fine-tune these traits by adding enhancements and limitations; see pp. 101-117. Such modifiers will raise or lower the basic point cost of the modified trait.

Start with a character sheet (see p. 13) and fill it in as you go along, keeping track of the points you spend. We have included examples at each stage to illustrate the process.

CHARACTER POINTS

Character points are the “currency” of character creation. Anything that improves your abilities costs character points: you must spend points equal to the listed price of an ability to add that ability to your character sheet and use it in play. Anything that reduces your capabilities has a negative cost – that is, it gives you back some points. For instance, if you start with 125 points, buy 75 points of advantages, and take -15 points of disadvantages, you have 125 - 75 + 15 = 65 points remaining.

Starting Points

The GM decides how many character points the player characters (PCs) – the heroes – start with. This depends on how capable he wants them to be, and can range from under 25 points (small children) to 1,000 points or more (godlike beings), with 100-200 points being typical for career adventurers.

This beginning point level is sometimes referred to as the power level of the campaign (see Power Level, p. 487). This is not the same as the “stakes” of the campaign! Heroes with abilities that let them overcome even the toughest opposition in an optimistic fantasy campaign might face mortal danger in a dark horror scenario.

In most campaigns, all the PCs start at the same power level. This is simple and fair. However, not all people are equally capable in real life, and it is common in fiction for one character to be obviously superior. If everyone agrees, some players might play “lead protagonists,”
worth more points than the other PCs, or "sidekicks," worth fewer points.

Disadvantage Limit

A disadvantage is anything with a negative cost, including low attributes, reduced social status, and all the specific disabilities listed in Chapter 3. In theory, you could keep adding disadvantages until you had enough points to buy whatever advantages and skills you wanted. In practice, most GMs will want to set a limit on the disadvantage points a PC may have.

The purpose of a disadvantage limit is to keep the game from becoming a circus, with the PCs' troubles stealing the spotlight from the setting, the adventure, and everything else the GM has created. Most GMs find it difficult to run an engaging game if the PCs are completely dysfunctional — e.g., clumsy, one-eyed, alcoholic outlaws who are afraid of the dark.

A disadvantage cap serves another purpose as well: it restricts the abilities available to starting characters, allowing the GM to set an upper limit on the capabilities of the PCs. A good rule of thumb is to hold disadvantages to 50% of starting points — for instance, -75 points in a 150-point game — although this is entirely up to the GM.

However, if the GM rules that all PCs must have certain disadvantages (e.g., all the PCs are spies, with a Duty to their agency), these "campaign disadvantages" should not count against the disadvantage limit. Disadvantages that are part of your racial makeup (your "racial template"; see p. 260) are also exempt.

Character Points in Play

Your character's starting point total is only relevant when he first enters play. Shortly thereafter, he will start to change. The GM will sometimes reward you with extra points to spend, or even new abilities . . . but you might lose capabilities, too. All of these things will change your point total.

Eventually, your PC will be worth more or fewer points than those of your companions, even though you all started out equal. Don't worry about it! Develop the habit of regarding your point total as a useful measure of your capability at this time — not as a gauge of overall campaign power level, or of your personal success or importance relative to the other players or PCs.

For more on character evolution, see Chapter 9.

CHARACTER CONCEPT

The two most important things to know about your character are who he is and what role you want him to play in his adventures. Find out what kind of game the GM plans to run and what kinds of characters he intends to allow. Then start filling in the details. There are several ways to approach this.

You can choose the abilities you want, spend your character points, and work out a character concept that fits the abilities. A good character is much more than a collection of abilities, but "shopping" for abilities can be a great inspiration.

You might instead decide on your character's focal qualities first — the handful of things that define him, such as personal history, appearance, behavior, aptitudes, and skills. Think about how he acquired those qualities, then spend your points on features that go with these traits. (You might find it useful to work out a biography first, as described below.)

Finally, you might find it helpful to answer some basic questions about your character, using the answers to develop a biography before you spend any points. For instance:

- Where was he born and where did he grow up? Where does he live now?
- Who were his parents? (Does he know?) Are they still alive? If not, what became of them? If so, does he get along with them?
- What training does he have? Was he an apprentice? A student? Or is he self-taught?
- What is his current occupation? What other jobs has he held?
- What social class does he belong to? How wealthy is he?
- Who are his friends? His enemies? His closest professional associates?
- What were the most important moments of his life?
- What are his likes and dislikes? Hobbies and interests? Morals and beliefs?
- What are his motivations? Plans for the future?

You can answer such questions in your head, on paper, or in an interview with the GM. You can even discuss them with the other players (but you will want to keep some secrets, even from your friends). Or you might prefer to answer them by writing a life history.
**Creating a Character**

### Life Histories
To really solidify your character concept, you can write your character's life history, or "character story." You don't have to write a character story – but it's recommended. If you do, then you should show this story to the GM, but not necessarily to the other players. This can serve as a great aid to roleplaying, and can help the GM integrate your character into his campaign world.

As your character adventures and gains experience, his "story" will get longer and more detailed. Not only will you have the adventures themselves to remember . . . the more you play your character, the more you'll work out his background, history, and motivations.

### Characterization Bonus
Writing a life history amounts to roleplaying a character before the campaign begins. The GM might choose to reward players who write detailed character stories with a few extra character points for good roleplaying (see p. 498) – perhaps 1 to 5 points. The story need not be a literary masterpiece to merit bonus points, but it should be more than just a token effort, and should attempt to answer all of the questions listed under Character Concept that are relevant to the character.

### Character Types
A character can have any combination of abilities he can afford, provided the GM agrees. (Players of other RPGs take note: this means that GURPS does not use character classes.) However, all of his abilities should paint a picture consistent with his character concept. Some inspirations from heroic fiction:

**Exotic.** An alien, angel, robot, "super" (a comic-book superhuman), or other hero defined by his unusual powers or nature. Most of his starting points should go toward high attributes, exotic or supernatural advantages (see p. 32), or a racial template (see p. 260). As a result, he probably has fewer mundane abilities than his fellow adventurers.

**Jack-of-All-Trades.** A many-skilled hero: mercenary, bush pilot, reporter, etc. DX and IQ are most important. Advantages such as Talent and Versatile can help. Pick one or two skills from those suggested for each of the other character types. A Jack-of-All-Trades isn't as good as a dedicated expert, but he has some skill in many areas.

**Mouthpiece.** A bard, con man, or other person who exploits wit and charm. IQ is crucial. Charisma, Cultural Familiarity, Rapier Wit, Voice, and a good appearance are all useful. Most important are skills that emphasize social interaction: Carousing, Fast-Talk, Merchant, Public Speaking, and so on.

**Sage.** A "wise man" – priest, professor, scientist, etc. High IQ is essential. Classic advantages are Eidetic Memory, Intuition, Language Talent, and Languages (and, in some campaigns, Illuminated!). He needs several related IQ/Hard skills in obscure fields (Expert Skills are especially suitable), as well as Research, Teaching, and Writing.

**Scout.** A seasoned outdoorsman or "ranger." All attributes are equally important; some extra Basic Move and Perception can be extremely useful. The archetypal scout advantage is Absolute Direction. Valuable skills include Area Knowledge, Camouflage, Naturalist, Navigation, Survival, and Tracking.

**Sneak.** Thieves and spies need high DX and IQ, as well as good Perception. Helpful advantages include High Manual Dexterity and Night Vision. Many skills are appropriate – Acting, Current Affairs, Disguise, and Savoir-Faire suit a worldly spy, while a fantasy thief should pick Climbing, Lockpicking, Pickpocket, and Traps. Stealth skill is universal!

**Specialist.** An expert at one skill. His knowledge runs deep and narrow; he is

---

**Example of Character Creation: Dai Blackthorn**

To illustrate character creation, we present Dai Blackthorn, thief extraordinaire! Dai hails from the Infinite Worlds setting in Chapter 20. Dai's career started on Yrth, a medieval fantasy world populated by descendants of Crusades-era folk pulled from Earth by a dimensional rift. He remembers nothing of his birth or early childhood; he was a street kid. When he was about seven, he was taken in by an old thief who taught him to be a pickpocket and second-story man, and Dai learned well. But the Thieves' Guild didn't like the competition, and when Dai was 15, the Guild set fire to the old man's house, and picked off the fleeing occupants with crossbows. Only Dai escaped.

At the time, he thought that he had made a terror-fueled leap from the burning building's roof to the next one. Later he realized that that jump had been impossible. Something else had happened. In fact, the fear of death had unlocked his psionic gift of teleportation, though it took time before he realized the truth and gained control of his abilities. When he did, he became a master thief indeed, living in quiet comfort and reveling in the marketplace talk of "impossible robberies" that no lock and no wizard could stop.

Then Dai crossed paths, and swords, with an equally formidable rival . . . a world-jumping criminal using stolen technology to loot Yrth's treasures. Matters were complicated further by the arrival of an ISWAT team pursuing the world-jumper. When the dust had settled, two of the agents owed their lives to the little thief . . . but he knew too much. They couldn't just let him go.

So they recruited him. After all, a good teleport is hard to find. As for Dai, he was ready for new challenges . . .

We'll create Dai as a full member of ISWAT. As an established hero, he'll have a base of 250 points.

---

**Dai Blackthorn**

- **Attributes and Skills:**
  - DX: 12
  - IQ: 13
  - HT: 11
  - DX+IQ: 25
  - WT: 100 lbs
  - ST: 11
  - Per: 15
  - Mov: 12
  - IQ: 13
  - MV: 12

- **Advantages:**
  - Graceful: +2 to DX
  - PSI: Teleport

- **Disadvantages:**
  - No Disadvantages

- **Gear:**
  - Gun
  - Knife

---

**References:**


---

**Notes:**

- Dai's character concept is informed by his role as a thief and his telepathic abilities.
- His background is filled with adventure and mystery, reflecting his life as a street kid and his rise to become a master thief.
- Dai's Teleport advantage is a key part of his character, allowing him to move with ease and evade detection.
- His equipment is minimal, focusing on tools necessary for his profession.

---

**Further Reading:**

- GURPS: Advanced Rules
- Infinite Worlds Campaign Guide

---

**Conclusion:**

Dai Blackthorn is a compelling character with a rich backstory that makes him a valuable addition to any setting. His telepathic abilities and quick thinking make him a formidable opponent. His life history and character concept provide a solid foundation for further development in any campaign.
the opposite of the Jack-of-All-Trades. His skill is very high (at least 18), with a good score in the attribute it is based on. Any advantage that gives a skill bonus is helpful – especially Talent.

Tinkerer. An engineer, inventor, technician, or other mechanical genius. IQ is vital; DX is useful. Any kind of technological skill fits this sort of character (see Skills for Design, Repair, and Use, p. 190), and Scouring skill is de rigueur. Cinematic inventors should also have High TL, Gadgeteer, and Gizmos.

Warrior. A professional fighter needs high ST, DX, and HT, and might wish to buy up Hit Points and Basic Speed. Useful advantages include Combat Reflexes, Hard to Kill, and High Pain Threshold; cinematic warriors should also consider Extra Attack and Weapon Master. Combat skills are a must, and Leadership, Strategy, and Tactics can help. Modern commandos should add skills such as Explosives, Forward Observer, and Parachuting.

Wizard. IQ and Magery are crucial. Extra Fatigue Points are useful for powering magic. Of course, a wizard needs spells – as many as he can afford! Although wizards are most common in magical worlds, the “surprise value” of a mage on a low-magic world can compensate for his reduced effectiveness.

CHARACTER CREATION CHECKLIST

Be sure to visit all of the following sections during character creation:

- Basic Attributes (p. 14) and Secondary Characteristics (p. 15). These affect almost everything else on your character sheet, so pick them first.
- Build (p. 18) and Age and Beauty (p. 20). These sections describe the in-game effects of height, weight, age, looks, etc.
- Social Background (p. 22), Wealth and Influence (p. 25), Friends and Foes (p. 31), and Identities (p. 31). Determine what kind of society you are from, where you stand in the game world, how others regard you, and who you can count on for support – or for a knife in the back!

See pp. 335-336 for a full-sized, two-page character sheet which you may copy for your own use. This and other GURPS forms may also be downloaded at www.sjgames.com/gurps/resources/.

Things Not Shown on the Character Sheet

There are several things you might want to keep track of separately:

Job Details. It can be important to know what you do for a living when you’re not adventuring (unless adventuring is your job – lucky you!) and how long you spend doing it. This determines your income and on-the-job training opportunities. Military characters should keep a service record.

Life History. If you write down your character story, keep it in a separate file so you can easily expand it as your adventures unfold.

Spells. Wizards often know dozens of spells – more than easily fit on a character sheet. If you wish, you can just note the total point cost of all your spells under “Skills” and write out your full spell list on a separate “grimoire” or “spellbook” sheet.

Vital Statistics. If you think your parents’ names, your place and date of birth (or zodiacal birth sign), your bloodline (or race – in some settings, you might need to specify that you are an ordinary human!), and similar traits are likely to matter, keep a separate “personnel file” on yourself that contains such details.
Basic Attributes

How to Select Basic Attributes

The basic attributes you select will determine your abilities – your strengths and weaknesses – throughout the game. Choose wisely.

6 or less: Crippling. An attribute this bad severely constrains your lifestyle.

7: Poor. Your limitations are immediately obvious to anyone who meets you. This is the lowest score you can have and still pass for “able-bodied.”

8 or 9: Below average. Such scores are limiting, but within the human norm. The GM may forbid attributes below 8 to active adventurers.

10: Average. Most humans get by just fine with a score of 10!

11 or 12: Above average. These scores are superior, but within the human norm.

13 or 14: Exceptional. Such an attribute is immediately apparent – as bulging muscles, feline grace, witty dialog, or glowing health – to those who meet you.

15 or more: Amazing. An attribute this high draws constant comment and probably guides your career choices.

All of the above assumes a human. For nonhumans, read each point above or below the human norm of 10 as a 10% deviation from the racial norm instead.

Strength (ST)

±10 points/level

Strength measures physical power and bulk. It is crucial if you are a warrior in a primitive world, as high ST lets you dish out and absorb more damage in hand-to-hand combat. Any adventurer will find ST useful for lifting and throwing things, moving quickly with a load, etc. ST directly determines Basic Lift (p. 15), basic damage (p. 15), and Hit Points (p. 16), and affects your character’s Build (p. 18).

Lifting capacity is proportional to the square of ST. Compared to the average human adult (ST 10 – 10x10 = 100), ST 14 is about twice as strong (14x14 = 196), ST 17 is roughly three times as strong (17x17 = 289), and ST 20 is four times as strong (20x20 = 400 = 4x100). Likewise, ST 7 is about half as strong (7x7 = 49), ST 6 is approximately 1/3 as strong (6x6 = 36), and ST 5 is only 1/4 as strong (5x5 = 25 = 100/4).

Handedness

Decide whether you are right-handed or left-handed. Whenever you try to do anything significant with the other hand, you are at -4 to skill. This does not apply to things you normally do with your “off” hand, like using a shield.

GURPS assumes you are right-handed unless you decide otherwise or buy Ambidexterity (p. 39). If you choose to be left-handed, any combat result that would damage your right hand affects your left instead, and vice versa. Left-handedness is a feature worth 0 points.
Strength is more “open-ended” than other attributes; scores greater than 20 are common among beings such as large animals, fantasy monsters, and robots. Even a human could have a ST over 20 – record-setting weightlifters can be very strong!

Those with nonhuman physiologies may, with the GM’s permission, purchase their ST with one or both of the limitations below. You may not reduce a point cost by more than 80% through limitations; treat any total over -80% as -80%. (For more on limitations, see p. 110.)

**Special Limitations**

*No Fine Manipulators:* If you have either level of the disadvantage No Fine Manipulators (p. 145), you may purchase ST more cheaply. -40%.

*Size:* Large creatures may purchase ST more cheaply; see p. 19 for details. -10% ¥ Size Modifier, to a maximum limitation of -80% (for Size Modifier +8 or higher).

**Dexterity (DX)**

±20 points/level

Dexterity measures a combination of agility, coordination, and fine motor ability. It controls your basic ability at most athletic, fighting, and vehicle-operation skills, and at craft skills that call for a delicate touch. DX also helps determine Basic Speed (a measure of reaction time, p. 17) and Basic Move (how fast you run, p. 17).

Those with nonhuman physiologies may, with the GM’s permission, purchase their DX with the following limitation.

**Special Limitations**

*No Fine Manipulators:* If you have either level of the disadvantage No Fine Manipulators (p. 145), you may purchase DX more cheaply. -40%.

**Intelligence (IQ)**

±20 points/level

Intelligence broadly measures brainpower, including creativity, intuition, memory, perception, reason, sanity, and willpower. It rules your basic ability with all “mental” skills – sciences, social interaction, magic, etc. Any wizard, scientist, or gadgeteer needs a high IQ first of all. The secondary characteristics of Will (p. 16) and Perception (p. 16) are based on IQ.

**Health (HT)**

±10 points/level

Health measures energy and vitality. It represents stamina, resistance (to poison, disease, radiation, etc.), and basic “grit.” A high HT is good for anyone – but it is vital for low-tech warriors. HT determines Fatigue Points (p. 16), and helps determine Basic Speed (p. 17) and Basic Move (p. 17).

Damage (Dmg)

see Striking ST (p. 88)

Your ST determines how much damage you do in unarmed combat or with a melee weapon. Two types of damage derive from ST:

**Thrusting** damage (abbreviated “thrust” or “thr”) is your basic damage with a punch, kick, or bite, or an attack with a thrusting weapon such as a spear or a rapier.

**Swinging** damage (abbreviated “swing” or “sw”) is your basic damage with a swung weapon, such as an axe, club, or sword – anything that acts as a lever to multiply your ST.

Consult the Damage Table (p. 16) for your basic damage. This is given in “dice+adds” format; see Dice (p. 9). Note that specific attack forms and weapons can modify this!

Add 1d to both thrust and swing damage per full 10 points of ST above 100.

Damage is often abbreviated “Dmg.” On your character sheet, list thrust followed by swing, separated by a slash; e.g., if you had ST 13, you would list “Dmg 1d/2d-1.”

**Basic Lift (BL)**

see Lifting ST (p. 65)

Basic Lift is the maximum weight you can lift over your head with one hand in one second. It is equal to (ST ¥ ST)/5 lbs. If BL is 10 lbs. or more, round to the nearest whole number; e.g., 16.2 lbs. becomes 16 lbs. The average human has ST 10 and a BL of 20 lbs.

Doubling the time lets you lift 2 ¥ BL overhead in one hand. Quadrupling the time, and using two hands, you can lift 8 ¥ BL overhead.
The amount of equipment you can carry – armor, backpacks, weapons, etc. – is derived from BL. For more on this, as well as a ST-to-BL table, see Encumbrance and Move (p. 17).

Hit Points (HP)

±2 points per ±1 HP

Hit Points represent your body’s ability to sustain injury. By default, you have HP equal to your ST. For instance, ST 10 gives 10 HP.

You can increase HP at the cost of 2 points per HP, or reduce HP for -2 points per HP. In a realistic campaign, the GM should not allow HP to vary by more than ±30% of ST; e.g., a ST 10 character could have between 7 and 13 HP. Nonhumans and supers are not subject to this limit.

You can temporarily lose HP to physical attacks (such as swords), energy attacks (such as lasers), supernatural attacks, disease, poison, hazards, and anything else that can injure or kill. You can also “burn” HP to power certain supernatural abilities. If you lose enough HP, you will eventually fall unconscious; if you lose too many HP, you will die. Lost HP do not reduce ST, despite being based on ST.

Injury is often compared to a multiple of your HP; e.g., “2×HP” or “HP/2.” Where this is the case, use your basic HP score in the formula, not your current HP total.

For information on the effects of injury and on recovering lost HP, see pp. 418-425.

Those with nonhuman physiologies may, with the GM’s permission, buy additional HP with the following limitation.

Special Limitations
Size: Large creatures may purchase HP more cheaply; see p. 19 for details. -10% × Size Modifier, to a maximum limitation of -80% (for Size Modifier +8 or higher).

Will

±5 points per ±1 Will

Will measures your ability to withstand psychological stress (brainwashing, fear, hypnotism, interrogation, seduction, torture, etc.) and your resistance to supernatural attacks (magic, psionics, etc.). By default, Will is equal to IQ. You can increase it at the cost of 5 points per +1, or reduce it for -5 points per -1. You cannot raise Will past 20, or lower it by more than 4, without GM permission.

Note that Will does not represent physical resistance – buy HT for that!

Perception (Per)

±5 points per ±1 Per

Perception represents your general alertness. The GM makes a “Sense roll” against your Per to determine whether you notice something (see Sense Rolls, p. 358). By default, Per equals IQ, but you can increase it for 5 points per +1, or reduce it for -5 points per -1. You cannot raise Per past 20, or lower it by more than 4, without GM permission.

Fatigue Points (FP)

±3 points per ±1 FP

Fatigue Points represent your body’s “energy supply.” By default, you have FP equal to your HT. For instance, HT 10 gives 10 FP.

You can increase FP at the cost of 3 points per FP, or reduce FP for -3 points per FP. In a realistic campaign, the GM should not allow FP to vary by more than ±30% of HT; e.g., a HT 10 character could have between 7 and 13 FP. Nonhumans and supers are not subject to this limit.

You can temporarily lose FP to physical attacks (such as swords), energy attacks (such as lasers), supernatural attacks, disease, poison, hazards, and anything else that can injure or kill. You can also “burn” FP to power certain supernatural abilities. If you lose enough HP, you will eventually fall unconscious; if you lose too many HP, you will die. Lost HP do not reduce ST, despite being based on ST.

Injury is often compared to a multiple of your HP; e.g., “2×HP” or “HP/2.” Where this is the case, use your basic HP score in the formula, not your current HP total.

For information on the effects of injury and on recovering lost HP, see pp. 418-425.

Those with the Machine meta-trait (p. 263) should list FP as “N/A,” regardless of HT. They can neither buy extra FP nor reduce FP to save points. This is both an advantage and a disadvantage: machines do not fatigue, but they cannot spend FP to use extra effort or fuel special abilities. When a machine operates beyond its normal limits, it risks lasting structural damage. This takes the form of reduced HT, not lost FP. A character with the Machine meta-trait should buy up HT to be more tolerant of being “redlined.”

Overall, this is a 0-point feature (see Features and Taboo Traits, p. 261).
13 FP. Nonhumans and supers are not subject to this limit. Also, while HT is usually limited to 20, there is no such limit on FP.

You burn FP gradually during strenuous activity. Disease, heat, hunger, missed sleep, and the like can also sap FP. You can deliberately “spend” FP to fuel extra effort (see p. 356) and supernatural powers (e.g., magic spells). As well, some attacks cause FP damage instead of or in addition to HP damage. If you lose enough FP, you will slow down or fall unconscious – and if you lose too many, you risk death from overexertion! Lost FP is not recoverable by magic spells. As well, some attacks can sap FP. You can deliberately “spend” FP to fuel extra effort (see p. 52).

For more on losing and recovering FP, see pp. 426-427.

**Basic Speed**

$\pm 5$ points per $\pm 0.25$ Speed

Your Basic Speed is a measure of your reflexes and general physical quickness. It helps determine your running speed (see Basic Move, below), your chance of dodging an attack, and the order in which you act in combat (a high Basic Speed will let you “out-react” your foes).

To calculate Basic Speed, add your HT and DX together, and then divide the total by 4. Do not round it off. A 5.25 is better than a 5!

You can increase Basic Speed for 5 points per +0.25, or reduce it for -5 points per -0.25. In a realistic campaign, the GM should not allow characters to alter Basic Speed by more than 2.00 either way. Nonhumans and supers are not subject to this limit.

*Dodge:* Your Dodge defense (see Dodging, p. 374) equals Basic Speed + 3, dropping all fractions. For instance, if your Basic Speed is 5.25, your Dodge is 8. Encumbrance reduces Dodge; see Encumbrance and Move (below). You must roll under your Dodge on 3d to duck or sidestep an attack.

**Basic Move**

$\pm 5$ points per $\pm 1$ yard/second

Your Basic Move is your ground speed in yards per second. This is how fast you can run – or roll, slither, etc. – without encumbrance (although you can go a little faster if you “sprint” in a straight line; see p. 354).

Basic Move starts out equal to Basic Speed, less any fractions; e.g., Basic Speed 5.75 gives Basic Move 5. An average person has Basic Move 5; therefore, he can run about 5 yards per second if unencumbered.

You can increase Basic Move for 5 points per yard/second or reduce it for -5 points per yard/second. For normal humans, training or a sleek build can justify up to 3 yards/second of increased Basic Move, while disability or poor fitness can explain up to 3 yards/second of reduced Basic Move. Nonhumans and supers are not subject to these limits. Races and supers who can move very fast should see Enhanced Move (p. 52).

Your Move score in combat is your Basic Move modified for your encumbrance level; see Encumbrance and Move (below).

**Encumbrance and Move**

“Encumbrance” is a measure of the total weight you are carrying, relative to your ST. The effects of encumbrance are divided into five “encumbrance levels.” All but the lowest level will reduce your actual Move to a fraction of your Basic Move and give a penalty to Dodge, as follows:

- **No Encumbrance (0):** Weight up to Basic Lift. Move = Basic Move. Full Dodge.
- **Light Encumbrance (1):** Weight up to 2xBL. Move = Basic Move \times 0.8. Dodge -1.
- **Medium Encumbrance (2):** Weight up to 3xBL. Move = Basic Move \times 0.6. Dodge -2.
- **Heavy Encumbrance (3):** Weight up to 6xBL. Move = Basic Move \times 0.4. Dodge -3.
- **Extra-Heavy Encumbrance (4):** Weight up to 10xBL. Move = Basic Move \times 0.2. Dodge -4.

Drop all fractions. Encumbrance can never reduce Move or Dodge below 1.

Note that these levels are numbered from 0 to 4. When a rule tells you to add or subtract your encumbrance level from a die roll, this is the number to use. For instance, encumbrance gives a penalty to Climbing, Stealth, and Swimming skills.

**Home Gravity**

Gravity is measured in “Gs.” Earth’s gravity is 1G. Note the gravity of your home world if it differs from 1G; e.g., “1.2G” for a world with 1.2
times Earth’s gravity. All weights are multiplied by local gravity, so to function like someone with a given BL on Earth, multiply the desired BL by your home gravity and buy the ST corresponding to the adjusted BL. For instance, to operate in 1.2G as if you were a ST 10 person in 1G, start with BL for ST 10, which is 20 lbs., and multiply by 1.2 for gravity to get a BL of 24 lbs. This BL corresponds to ST 11, so you’d need ST 11 in 1.2G to function as well as a ST 10 person in 1G.

Move in Other Environments

Water Move is normally Basic Move/5, rounded down. You can increase water Move directly for 5 points per yard/second, or reduce it for -5 points per yard/second. Members of land-dwelling races must have Swimming skill (p. 224) to increase water Move, and cannot buy more than +2 yards/second. If you’re Amphibious (p. 40), both water and ground Move equal Basic Move, and changes to Basic Move adjust both scores. If you’re Aquatic (p. 145), water move equals Basic Move and ground Move is 0.

Air Move is 0 without special advantages. If you have Flight (p. 56), air Move equals Basic Speed ¥ 2 (not Basic Move ¥ 2). You can increase air Move directly for 2 points per yard/second, or reduce it for -2 points per yard/second. If you have Walk on Air (p. 97), your air Move equals your ground Move, because the air is like solid ground beneath your feet.

Build

The extremes of each weight range usually match the extremes of the associated height range. Overlaps are intentional. Consider two ST 10 men who stand 5’8” and weigh 175 lbs.: one might be big-boned and lean, the other fine-boned and chubby. Depending on muscle tone, a 160-lb. man could have any ST from 9 to 13 and claim “Average” build.

Regardless of weight, you never have to take a build-related disadvantage. If you want to be ST 9, 5’1,” and 250 lbs. with “Average” build, the GM should allow it.

Build-related disadvantages are described below. In some settings, the GM may require you to take reaction modifiers if you select these traits, but this is not automatic.

Skinny

You have approximately 2/3 the average weight for your ST. This gives you -2 to ST when you resist
knockback. You get -2 to Disguise – or to Shadowing, if you are trying to follow someone in a crowd. Your HT may not be above 14.

**Overweight**

-1 point

You have approximately 130% the average weight for your ST. You get -1 to Disguise – or to Shadowing, if you are trying to follow someone in a crowd. However, your extra fat gives you +1 to Swimming rolls, and +1 to ST when you resist knockback.

**Fat**

-3 points

You have approximately 150% the average weight for your ST. You get -2 to Disguise – or to Shadowing, if you are trying to follow someone in a crowd. However, your extra fat gives you +3 to Swimming rolls, and +2 to ST when you resist knockback. Your HT may not be above 15.

**Very Fat**

-5 points

You have approximately twice the average weight for your ST. You get -3 to Disguise – or to Shadowing, if you are trying to follow someone in a crowd. However, the extra fat gives you +5 to Swimming rolls, and +3 to ST when you resist knockback. Your HT may not be above 13.

---

**Size Modifier Table**

<table>
<thead>
<tr>
<th>Longest Dimension</th>
<th>Size Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05 yard (1.8&quot;)</td>
<td>-10</td>
</tr>
<tr>
<td>0.07 yard (2.5&quot;)</td>
<td>-9</td>
</tr>
<tr>
<td>0.1 yard (3.5&quot;)</td>
<td>-8</td>
</tr>
<tr>
<td>0.15 yard (5&quot;)</td>
<td>-7</td>
</tr>
<tr>
<td>0.2 yard (7&quot;)</td>
<td>-6</td>
</tr>
<tr>
<td>0.3 yard (10&quot;)</td>
<td>-5</td>
</tr>
<tr>
<td>0.5 yard (18&quot;)</td>
<td>-4</td>
</tr>
<tr>
<td>0.7 yard (2&quot;)</td>
<td>-3</td>
</tr>
<tr>
<td>1 yard (3&quot;)</td>
<td>-2</td>
</tr>
<tr>
<td>1.5 yards (4.5&quot;)</td>
<td>-1</td>
</tr>
<tr>
<td>2 yards (6&quot;)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Longest Dimension</th>
<th>Size Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 yards (9&quot;)</td>
<td>+1</td>
</tr>
<tr>
<td>5 yards (15&quot;)</td>
<td>+2</td>
</tr>
<tr>
<td>7 yards (21&quot;)</td>
<td>+3</td>
</tr>
<tr>
<td>10 yards (30&quot;)</td>
<td>+4</td>
</tr>
<tr>
<td>15 yards (45&quot;)</td>
<td>+5</td>
</tr>
<tr>
<td>20 yards (60&quot;)</td>
<td>+6</td>
</tr>
<tr>
<td>30 yards (90&quot;)</td>
<td>+7</td>
</tr>
<tr>
<td>50 yards (150&quot;)</td>
<td>+8</td>
</tr>
<tr>
<td>70 yards (210&quot;)</td>
<td>+9</td>
</tr>
<tr>
<td>100 yards (300&quot;)</td>
<td>+10</td>
</tr>
<tr>
<td>150 yards (450&quot;)</td>
<td>+11</td>
</tr>
</tbody>
</table>

**How GURPS Works: ST, Mass, and Move**

It would be more realistic to calculate Basic Move from ST-to-mass ratio; for instance, a Fat character would move slower than one of Average build. If you want to simulate this, buy +1 Basic Move if your PC is Skinny, -1 if he is Overweight, -2 if he is Fat, or -3 if he is Very Fat, all at the usual point cost.

Women are on average lighter and weaker than men. You can simulate this by buying -1 or -2 to ST for the usual point cost. Choose a weight appropriate to this lower ST.

The GM should never require either of the above options. Most players prefer to choose ST, height, weight, and sex without being penalized! **GURPS** handles mass considerations descriptively for nonhumans; e.g., a race that stumbles along under excess body weight will have a racial penalty to Basic Move.

**Size Modifier (SM)**

Size Modifier rates a person or object’s most significant dimension: length, width, or height. It is a modifier to rolls to hit you in combat and to Vision rolls made to spot you. Thus, it is a bonus for large creatures, a penalty for small ones. Although large creatures are easier targets, a positive SM qualifies them to buy ST and HP more cheaply by taking the “Size” limitation. Most humans – and humanoids, robots, etc. that can pass for human – have SM 0, and can ignore this rule. Nonhumans use the SM on their racial template. However, your SM may deviate from racial average if you are not full-grown, or if you are a genetic dwarf or giant.

When creating a creature that is larger or smaller than a human, find its SM by looking up its longest dimension – height for upright creatures such as giants, length for horizontal creatures such as cats and dragons, diameter for blobs – on the Size Modifier Table (above).

If a creature’s longest dimension falls between two entries on the table, base its SM on the higher value. Box-, sphere-, or blob-shaped characters add +2 to SM; elongated boxes, like most ground vehicles, add +1.

It is neither an advantage nor a disadvantage to have a nonzero SM – the benefits and drawbacks tend to cancel out. The exceptions are genetic dwarfism and gigantism, as these conditions affect bodily proportions (notably relative arm and leg length) and have social ramifications (you stand out in a crowd).

**Dwarfism (-1 SM)**

-15 points

You are abnormally short for your species. Regardless of ST, your height falls below the lowest value on the Build Table – under 4’4”, for a human. This gives you Size Modifier -1. Choose your weight from the first line of the Build Table and reduce it by 15%.

You have -1 to Basic Move (short legs). In combat, your reach is reduced by 1 yard. This is partly because you have short arms and partly because you must use scaled-down weapons (regardless of your ST, your arms lack the leverage to control full-sized weapons).

You get -2 to Disguise – or to Shadowing, if your are trying to follow someone in a crowd. In backward settings, the GM may require you to take a Social Stigma if you suffer from Dwarfism.
Shopping for the 
Big, Tall, Thin, and Small

If you are Skinny, Fat, or Very Fat, or have Dwarfism or Gigantism, clothing and armor tailored for average folk will not fit you! A shop in a city or large town, especially at TL6+, might have a selection that fits. Otherwise, you will have to pay an extra 10% or 20% for Gigantism or Very Fat – to have something made for you. This premium almost always applies to medieval/fantasy armor.

A member of any race may be a dwarf. Scale down height by a factor of 0.75 from the racial average, and modify racial SM by -1. Otherwise, the rules remain the same.

**Gigantism (+1 SM)**

0 points

You are abnormally tall for your species. Regardless of ST, your height falls above the highest value on the Build Table – over 7’, for a human. This gives you Size Modifier +1 and +1 to Basic Move (long legs), and qualifies you to buy ST and HP at a discount. Choose your weight from the last line of the Build Table and increase it by 10%.

You get -2 to Disguise – or to Shadowing, if you are trying to follow someone in a crowd. On the other hand, height often provides a bonus to Intimidation skill (see p. 202). In backward settings, the GM may require you to take a Social Stigma if you suffer from Gigantism.

A member of any race may be a giant. Scale your height up by a factor of 1.25 from the racial average, and modify racial SM by +1. Otherwise, the rules remain the same.

Age and Beauty

Age and physical appearance play a major role in how others perceive you. Choose carefully! Except in settings with magic or advanced biotechnology, you will be unable to change your mind after the game begins.

**AGE**

You are free to pick any age the GM agrees is within the usual lifespan for your race. Adventurers usually fall somewhere between “young adult” and “old” – 18 to 70 years, for humans – but fiction is full of heroic youths and sharp 90-year-old veterans.

**Children**

In many game worlds, especially those based on cartoons and fairytales, children are just small adults. By real-world standards, such children would be exceptional. However, even in a realistic campaign, those who wish to roleplay “heroic” children do not have to play less-capable characters – they can create their characters normally.

Players interested in complete realism are welcome to make children smaller and less capable than adults. To create a believable child, decide what his attributes will be when he is full-grown, reduce them, and purchase the reduced values instead of the full values.

A human infant has 30% of his adult ST score, 40% of his adult DX, 50% of his adult IQ, and Size Modifier -3. A 5-year-old has 60% of his adult ST, 70% of his adult DX and IQ, and SM -2. A 10-year-old has 80% of his adult ST, 90% of his adult DX and IQ, and SM -1. A 15-year-old has adult scores. Interpolate between these values for children in other age groups. HT is usually unaffected by age, but young children might be at -1 or so relative to their adult HT. Note that there is no point cost for Size Modifier; this is merely a special effect.

For nonhumans, use the above rules, but adjust the age categories upward or downward in proportion to the race’s rate of development. For instance, a race that reaches adulthood at age 36 instead of age 18 doubles the age thresholds given above. Size Modifier is equal to the sum of the SM given for a human child and the racial SM.

In many societies, children are subject to social restrictions. A child generally is Dead Broke (see p. 25), worth -25 points, and has Social Stigma (Minor) (see p. 155), for -5 points. These traits are usually balanced against Patron (Parents; 15 or less), worth 30 points – see Patrons (p. 72).

As a child grows up, he should gradually improve his attributes toward their full adult values, reduce the appearance roll for his Patron (and eventually get rid of it altogether), increase his wealth, and buy off his Social Stigma. These changes have their usual point costs.

**The Elderly**

If you are in play, you will eventually have to make HT rolls to avoid attribute loss (see Age and Aging, p. 444). These rolls start at the first “aging threshold” for your race, becoming more frequent at the second threshold and again at the third. These thresholds are 50, 70, and 90 years for humans.

If you start at an advanced age, you have no special disadvantages. Not everyone ages well, but heroes are exceptional, and you are free to make elderly characters as fit and as capable as you wish. There are plenty of examples of this kind of person in fiction – and in real life!

To create a character who has declined with age, first decide what his attributes were before he got old. Reduce his ST, DX, and HT by 10% at the second aging threshold, or reduce ST, DX, and HT by 20% and IQ by 10% at the third aging threshold. Then purchase the reduced values instead of the values he had in his prime.

Note that in many societies, the elderly enjoy great respect. Represent this by taking Social Regard (Venerated) – see p. 86.
PHYSICAL

APPEARANCE

Appearance is mostly a “special effect” - you may choose any physical appearance you like. At minimum, note the color of your skin, hair, and eyes (or other features appropriate to your race: scales, feathers, paint job, etc.). However, certain traits count as advantages or disadvantages.

Appearance Levels

Appearance is rated in levels. Most people have “Average” appearance, for 0 points. Good looks give a reaction bonus; this is an advantage and costs points. Unappealing looks give a reaction penalty; this is a disadvantage, and gives you back points. These reaction modifiers only affect those who can see you! Those who cannot see you might have to make a new reaction roll upon first meeting you in person (GM’s option).

reaction modifiers due to appearance only affect members of your own race, a very similar race, or a dissimilar race that finds your race attractive (for whatever reason). In all cases, the GM’s word is final; humans are “very similar” to elves, but bug-eyed monsters are unlikely to care about a human’s appearance except in a silly campaign.

Horrific: You are indescribably monstrous or unspeakably foul, and cannot interact with normal mortals. This gives -6 on reaction rolls. The GM may decide that this trait is supernatural and unavailable to normal characters. -24 points.

Monstrous: You are hideous and clearly unnatural. Most people react to you as a monster rather than a sapient being. This gives -5 on reaction rolls. Again, this trait might not be appropriate for normal characters. -20 points.

Hideous: You have any sort of disgusting looks you can come up with: a severe skin disease, wall-eye... preferably several things at once. This gives -4 on reaction rolls. -16 points.

Ugly: As above, but not so bad - maybe only stringy hair and snaggle teeth. This gives -2 on reaction rolls. -8 points.

Unattractive: You look vaguely unappealing, but it’s nothing anyone can put a finger on. This gives -1 on reaction rolls. -4 points.

Average: Your appearance gives you no reaction modifiers either way; you can blend easily into a crowd. A viewer’s impression of your looks depends on your behavior. If you smile and act friendly, you will be remembered as pleasant-looking; if you frown and mutter, you will be remembered as unattractive. 0 points.

Attractive: You don’t enter beauty contests, but are definitely good-looking. This gives +1 on reaction rolls. 4 points.

Handsome (or Beautiful): You could enter beauty contests. This gives +4 on reaction rolls made by those attracted to members of your sex, +2 from everyone else. 12 points.

Very Handsome (or Very Beautiful): You could *win* beauty contests – regularly. This gives +6 on reaction rolls made by those attracted to members of your sex, +2 from others. Exception: Members of the same sex with reason to dislike you (more than -4 in reaction penalties, regardless of bonuses) resent your good looks, and react at -2 instead. As well, talent scouts, friendly drunks, slave traders, and other nuisances are liable to become a problem for you. 16 points.

Transcendent: You are an “ideal specimen.” This gives +8 (!) on reaction rolls made by those attracted to members of your sex, +2 from others, and all the troublesome side effects of Very Handsome. The GM is free to reserve this trait for angels, deities, and the like. Such entities frequently possess Charisma (p. 41) or Terror (p. 93) as well. 20 points.

Special Options

The following options are available for above-average appearance, and do not affect point costs:

Androgynous: If your appearance is Handsome (Beautiful) or better, you may specify that your looks appeal equally to both sexes. You get a flat reaction modifier instead of a sex-dependent bonus: +3 for Handsome, +4 for Very Handsome, or +5 for Transcendent.

Impressive: If you are Attractive or better, you can specify that you have exceptional physical presence that doesn’t manifest as sexual magnetism. This is typical of tigers and aged royalty. If your appearance is Handsome (Beautiful) or above, use the “flat” reaction bonuses given for Androgynous.

Special Enhancements

Universal: Your reaction modifier applies to *everyone* who can see you, regardless of race. If your appearance is Handsome (Beautiful) or above, use the “flat” reaction bonuses given for Androgynous. This modifier is most common for Hideous or worse monsters and for Attractive or better gods, faeries, and the like. The GM may deem it off-limits to normal mortals. +25%.

Special Limitations

Off-the-Shelf Looks: You can apply this to any appearance better than Attractive. Through ultra-tech or magic, your looks are a variation on a standard type or famous person. You’re as beautiful as ever, but you get half the usual reaction bonus with people from your own culture, because they’ve seen it all before. (“Oh, look! Another Mr. Universe 2003!”) -50%.

OTHER PHYSICAL FEATURES

There is more to appearance than good (or not-so-good) looks. You may take any combination of the following traits in conjunction with any appearance level.

Fashion Sense

5 points

Your look is always one step ahead of the crowd. You have the ability to create a fashion statement out of the cheapest and most nondescript materials. This gives +1 to reaction rolls in social situations when you have a chance to plan your attire in advance. You can also give someone *else* a +1 reaction bonus when you put together the outfit.

Mistaken Identity

-5 points

You are often mistaken for someone else. Your “double”’s allies approach you and tell you things you don’t want to know, and his acquaintances will treat you in strange and irritating ways. His enemies are after...
CREATING A CHARACTER

Level (TL)

“Technology level” (or “tech level”) is a number that rates technological development. The more advanced the society, the higher its TL; see Tech Level and Starting Wealth (p. 27) for examples from Earth’s history. The GM will tell you the TL of his world. Be sure to note this, as it affects your access to certain traits – notably skills – and equipment.

Characters also have a TL, equal to that of the technology with which they are most familiar. Unless you are especially primitive or advanced, you should record the TL of your game world as your personal TL and move on.

In some game worlds, your personal TL may differ from the campaign average. A world might be TL8 on average, but the citizens of one advanced nation might be TL9 while those from an underdeveloped region might be TL7. And the TL of a space, time, or dimension traveler might differ radically from that of his current surroundings.

Being from a higher TL than the campaign norm is an advantage; being from a lower TL is a disadvantage.

Low TL

-5 points/TL below campaign TL

Your personal TL is below that of the campaign world. You start with no knowledge (or default skill) relating to equipment above your personal TL. You will be able to learn DX-based technological skills (pertaining to vehicles, weapons, etc.) in play, if you can find a teacher, but fundamental differences in thinking prevent you from learning IQ-based technological skills. To overcome this limitation, you must buy off this trait, increasing your personal TL. This usually requires a lengthy period of re-education (see Chapter 9).

Unnatural Features

-1 point/level

You are superficially “normal” but have one or more disturbing cosmetic features. To qualify for points, these must be unnatural for your race. Pointed ears and eyes like hot coals would be unnatural for a human, but not for a demon from Hell! You must specify the origin of your Unnatural Features: magical curse, ultra-tech surgery, rare disease, etc.

Unnatural Features need not be unattractive (if they are, you can also claim points for below-average appearance), but they make it easy for others to identify you and hard for you to blend into a crowd. Each level, to a maximum of five levels, gives -1 to your Disguise and Shadowing skills and +1 to their attempts to identify or follow you (including their Observation and Shadowing rolls), unless almost everyone else in the crowd happens to share your features.

Odious Personal Habits

-5, -10, or -15 points

You usually or always behave in a manner repugnant to others. An Odious Personal Habit (OPH) is worth -5 points for every -1 to reaction rolls made by people who notice your problem. Specify the behavior when you create your character, and work out the point value with the GM.

Examples: Body odor, constant scratching, or tuneless humming would give -1 to reactions, and are worth -5 points apiece. Constant bad puns or spitting on the floor would give -2 to reactions, worth -10 points apiece. We leave -5-point habits (-3 to reactions) to the imagination of those depraved enough to want them!

The reaction penalty for an OPH applies only to members of your race. It is up to the GM to handle the reactions of other races. A constant drool will irritate other humans, but a Martian might not even notice – and a troll might think it was cute! Of course, an entire race can behave in a manner repugnant to most other races. These “Odious Racial Habits” are priced identically to OPHs.

Pitiable

5 points

Something about you makes people pity you and want to take care of you. You get +3 on all reaction rolls from those who consider you to be in a position of helplessness, weakness, or need (which never includes those with the Callous disadvantage). Taken in conjunction with above-average looks, Pitiable means you are “cute” instead of “sexy”; in combination with below-average looks, it means you are “appealingly homely,” like a basset hound.

Unnatural Features

-1 point/level

You are superficially “normal” but have one or more disturbing cosmetic features. To qualify for points, these must be unnatural for your race. Pointed ears and eyes like hot coals would be unnatural for a human, but not for a demon from Hell! You must specify the origin of your Unnatural Features: magical curse, ultra-tech surgery, rare disease, etc.

Unnatural Features need not be unattractive (if they are, you can also claim points for below-average appearance), but they make it easy for others to identify you and hard for you to blend into a crowd. Each level, to a maximum of five levels, gives -1 to your Disguise and Shadowing skills and +1 to others’ attempts to identify or follow you (including their Observation and Shadowing rolls), unless almost everyone else in the crowd happens to share your features.

Example of Character Creation (cont’d)

We want Dai to look unremarkable – thieves who stand out don’t last long! So we choose an Average build. For ST 8, this suggests a height between 4’10” and 5’8,” and a weight of 90 to 150 lbs. We pick 5’6” and 115 lbs. We make Dai’s appearance Average as well. Since Dai is average in all respects, he pays 0 points. His point total remains at 158 points.

Social Background

The next few sections discuss your society’s level of technological development, cultures, and languages. It is an advantage to be technologically advanced, culturally literate, or linguistically talented. Inadequacy in these areas can be a crippling disadvantage.

Technology Level (TL)

"Technology level" (or "tech level") is a number that rates technological development. The more advanced the society, the higher its TL; see Tech Level and Starting Wealth (p. 27) for examples from Earth’s history. The GM will tell you the TL of his world. Be sure to note this, as it affects your
High TL

5 points/TL above campaign TL

Your personal TL is above that of the campaign world. You may enter play with skills relating to equipment up to your personal TL. This is most useful if you also have access to high-TL equipment (see Tech Level and Equipment, p. 27), but the knowledge of a high-tech doctor or scientist can be very useful in a low-tech setting, even without specialized equipment!

Culture

You are automatically familiar with the social peculiarities of one major culture of your choice. You suffer no skill penalties when interacting with people from that culture. The GM will provide a list of cultures to choose from (or let you invent your own – many GMs appreciate players’ contributions to the game world!). When dealing with an unfamiliar culture, you have -3 to use any skill with a significant cultural component, including Carousing, Connoisseur, Criminology, Dancing, Detect Lies, Diplomacy, Fast-Talk, Games, Gesture, Heraldry, Intimidation, Leadership, Merchant, Poetry, Politics, Psychology, Public Speaking, Savoir-Faire, Sex Appeal, Sociology, Streetwise, and Teaching. To get rid of this penalty, buy the following advantage:

Cultural Familiarity

1 or 2 points/culture

You are familiar with cultures other than your own, and do not suffer the -3 penalty for unfamiliarity. This costs 1 point per culture of the same (or very similar) race, or 2 points per alien culture.

To prevent point-cost inflation, the GM should use broad definitions of culture: East Asian, Muslim, Western, etc. A single nation would have to be very different to merit its own Cultural Familiarity. In fantasy worlds, the GM might wish to have one culture per race; in a futuristic setting, an entire planet or even a galactic empire might have a single, monolithic culture.

See Cultural Adaptability (p. 46) for additional options.

Language

GURPS assumes that most characters can read and write their “native” language. This ability costs no points, but you should note your native language on your character sheet; e.g., “English (Native) [0].” The rest of this section is only important if you can communicate in more than one language (an advantage) or have difficulty with your native tongue (a disadvantage).
**Comprehension Levels**

The point cost to learn an additional language depends on your “comprehension level”: a measure of how well you function in that language overall. There are four comprehension levels:

None: You are completely incapable of functioning in the language. If you do not spend points on a non-native language, this comprehension level is assumed – there is no need to note it for every language you don’t know! 0 points/language.

Broken: You can recognize important words and understand simple sentences if they are spoken slowly. You have -3 when using skills that depend on language, such as Fast-Talk, Public Speaking, Research, Speed-Reading, Teaching, and Writing. This doubles to -6 for artistic skills that rely on the beauty of the language (Poetry, Singing, etc.). In stressful situations – e.g., encounters involving combat or reaction rolls – you must roll against IQ to understand or make yourself understood in the language. On a failure, you convey no information, but you may try again. Critical failure means you convey the wrong information! For hurried speech, bad phone connections, etc., this roll is at -2 to -8! Native speakers who already dislike foreigners (see Intolerance, p. 140) react to you at an extra -1. 2 points/language.

Accented: You can communicate clearly, even under stress. However, your speech and writing are idiosyncratic, and it is obvious that this is not your native language. You have -1 when using skills that depend on language, doubled to -2 for artistic skills. You receive no reaction penalty from native speakers, but you will be unable to pass for a native (this can be a major problem for would-be spies!). 4 points/language.

Native: You have full mastery of the language, including idioms. You can think in the language. You have no penalty to use skills that depend on language. You start with one language at this level for free. If you buy Native comprehension in a foreign tongue, you can pass for a native speaker. 6 points/language.

**Exceptional Competence and Incompetence**

Great orators, writers, and other masters of the language should start with Native-level comprehension, then learn skills such as Public Speaking and Writing at very high levels. Poorly educated individuals who can barely get by in their native tongue should take the point difference between their actual level and Native level as a disadvantage. For instance, someone who has his native tongue at Broken level has a -4-point disadvantage.

**Spoken vs. Written Language**

The point costs above assume that you read/write and speak the language equally well. If your written and spoken ability differ, select separate spoken and written comprehension levels and pay half cost for each. For instance, if you learned to write French from a book, you might have “French: Spoken (None)/Written (Native) [3].”

**Literacy**

Your written comprehension level determines your degree of literacy in that language:

- **Literacy** is a written comprehension of Accented or better. You can read and write competently and at full speed.

- **Semi-literacy** is a written comprehension of Broken. A semi-literate person would require three minutes to read this sentence, and would have to make an IQ roll to understand the full meaning! Many words are always unintelligible to a semi-literate person, including some in this paragraph.

- **Illiteracy** is a written comprehension of None. If this is the case, you really can’t read! Signs, scrolls, books, and names on maps (though not the maps themselves) are completely incomprehensible to you. The player may pass secret notes to the GM (and vice versa), but the character cannot read anything.

At TL4 and below, it is quite possible to go all your life without needing to read. In settings like this, illiteracy or semi-literacy is the norm. Most people have a spoken comprehension level of Native, but their written comprehension is Broken or None.

Illiteracy in your native tongue – Spoken (Native)/Written (None) – is a disadvantage worth -3 points. Semi-literacy – Spoken (Native)/Written

---

**Accents**

If your spoken comprehension is Broken or better, you can attempt to fake a regional accent. To fool someone, you must win a Quick Contest of Acting (p. 174) or Mimicry (Speech) (p. 210) vs. his IQ. You are at -6 for Broken comprehension, or -2 for Accented . . . but a non-Native listener has similar penalties to his IQ roll!

Each accent is a separate familiarity (see p. 169) for Acting or Mimicry. To memorize a new accent, you must listen to that accent used in conversation for at least one hour and make a successful roll against the higher of IQ or Linguistics, at +5 for Eidetic Memory or +10 for Photographic Memory (see Eidetic Memory, p. 51).

**Broken to Broken**

If you and the person with whom you are speaking both have a comprehension level of Broken, conversation will be difficult. This is definitely a "stressful situation"! Each of you must roll against IQ once per piece of information; all the usual modifiers apply. If you both succeed, you get the point across. If one of you fails, you just fail to communicate. But if both of you fail, the listener gets the wrong idea. This could be embarrassing or dangerous – possibly for both of you. The GM should be creative!
Example of Character Creation (cont’d)

Dai is from a TL3 (medieval) world, but that’s “background color” – his ISWAT trainers corrected this deficiency. He currently functions at TL8, which is standard in the Infinite Worlds setting. The cost to be at the campaign-average tech level is 0 points.

Dai is familiar with Yrth’s culture and knows one of its languages: Anglish. This costs 0 points; everybody gets a culture and a language for free. But Dai is also familiar with the culture of ISWAT’s world, Homeline, and has passable English. Cultural Familiarity (Homeline) is 1 point, while English (Accented) is another 4 points.

Dai pays a total of 5 points for his social background. This makes his current point total 163 points.

(Broken) – is worth -2 points. The GM should not count these points against the disadvantage limit if illiteracy is the norm in the game world.

Sign Language

A true sign language – e.g., American Sign Language – is complex, stylized, and can communicate almost any concept. Treat it as any other language, with one important difference: a sign language has one form (signed) instead of two (spoken and written). As a result, sign languages costs half as much: 1 point for Broken, 2 points for Accented, and 3 points for Native comprehension.

WEALTH AND INFLUENCE

Now you need to determine your position in your society: How much money do you have, what privileges do you enjoy, and how do others react to you?

WEALTH

Wealth is relative. A middle-class American lives in more luxury than a medieval king, though he may have fewer gold coins in his basement. It all depends on the game world – see Tech Level and Starting Wealth (p. 27). In most worlds, the range of standard starting wealth and income is relatively great, and your skills determine your job and income; see Economics (p. 514) for more information.

Personal wealth is rated in “wealth levels.” A level of “Average” costs no points, and lets you support an average lifestyle for your game world. The rest of these rules apply if you are unusually poor or wealthy, have a source of income that does not require you to work, or are in debt.

Wealth

Above-average Wealth is an advantage; it means you start with two or more times the average starting wealth of your game world. Below-average Wealth is a disadvantage; it means you start with only a fraction of average starting wealth. The precise meaning of each wealth level in a particular game world will be defined in the associated worldbook.

Dead Broke: You have no job, no source of income, no money, and no property other than the clothes you are wearing. Either you are unable to work or there are no jobs to be found. -25 points.

Poor: Your starting wealth is only 1/5 of the average for your society. Some jobs are not available to you, and no job you find pays very well. -15 points.

Struggling: Your starting wealth is only 1/2 of the average for your society. Any job is open to you (you can be a Struggling doctor or movie actor), but you don’t earn much. This is appropriate if you are, for instance, a 21st-century student. -10 points.

Average: The default wealth level, as explained above. 0 points.

Comfortable: You work for a living, but your lifestyle is better than most. Your starting wealth is twice the average. 10 points.

Wealth: Your starting wealth is five times average; you live very well indeed. 20 points.

Very Wealthy: Your starting wealth is 20 times the average. 30 points.

Filthy Rich: Your starting wealth is 100 times average. You can buy almost anything you want without considering the cost. 50 points.

Multimillionaire: “Filthy rich” doesn’t even begin to describe your wealth! For every 25 points you spend beyond the 50 points to be Filthy Rich, increase your starting wealth by another factor of 10: Multimillionaire 1 costs 75 points and gives 1,000 times average starting wealth, Multimillionaire 2 costs 100 points gives 10,000 times starting wealth, and so on. 50 points + 25 points/level of Multimillionaire.

Characters with the Deafness (p. 129) or Mute (p. 125) disadvantages start with one sign language and written ability in one regular language – both at Native level – instead of spoken and written ability in one language. Those who are illiterate, or incompetent at sign language, can buy down their language abilities using the usual rules.

Learning Languages

To learn a new language, use the rules for learning skills (p. 292): 200 hours of learning gives you one point to spend. Note that language study is four times as hard without a teacher!

If you live in another country and speak its language at all times, that is the automatic equivalent of 4 hours/day of training; there is no need to allocate specific study time unless you want to get more than this default. Thus, every 50 days, you get a character point to spend in that language.
Wealth and Status

In some game worlds, Status (see p. 28) is closely tied to Wealth. In a setting like this, if you are Wealthy or better, you get +1 Status for free. This bonus increases to +2 at Millionaire 1 and to +3 at Millionaire 2. No one may claim more than +3 Status from Wealth.

Independent Income

1 point/level

You have a source of income that does not require you to work: stock portfolio, trust fund, rental property, royalties, pension, etc. Your monthly income is 1% of your starting wealth (adjusted for wealth level) per level of this trait, to a maximum of 20%. If your income derives from investments, you need not specify their value; this trait assumes that you cannot or will not invade your capital.

This trait is unrelated to wealth level. A Filthy Rich heiress has Independent Income . . . but so do an Average pensioner and a Poor welfare recipient.

Independent Income most often means your occupation is something like dilettante, retiree, or welfare recipient – not an actual “job.” However, you can have Independent Income and a job, just add the income from both sources. If you are wealthy, this allows you to work less than full time (e.g., 10 hours per week instead of 40, for 1/4 the usual salary) and still make a good living.

Debt

-1 point/level

You owe money. This could represent a loan, back taxes, child support, or alimony . . . or “hush money” paid to blackmailers . . . or “protection money” extorted by gangsters. You must make a monthly payment equal to 1% of your starting wealth (adjusted for wealth level) per level of this trait, to a maximum of 20%. Debt can accompany any wealth level above Dead Broke; plenty of multimillionaires owe significant amounts of money!

Your monthly payment is deducted from your monthly earnings at your job. If your job cannot cover your Debt, you have to pay out of your cash reserves, take a second job, or steal.

If you cannot pay – or choose not to pay – there will be trouble. For bank loans, this means repossession of your worldly goods. For alimony, child support, fines, or taxes, this means a court date. And if you owe money to the mob, you might end up being strong-armed into criminal activities . . . or staring down the barrel of a shotgun. The GM should be creative!

It is assumed that you cannot easily rid yourself of this obligation. It takes more than money to buy off Debt – you must pay off the points and work out a logical in-game explanation with the GM.

Reputation

It is possible to be so well-known that your reputation becomes an advantage or a disadvantage. This affects reaction rolls made by NPCs (see p. 494). A reputation has four elements: Details, Reaction Modifier, People Affected, and Frequency of Recognition.

Details

The details of your reputation are entirely up to you; you can be known for bravery, ferocity, eating green
snakes, or whatever you want. However, you must give specifics. Reputation is, by definition, something noteworthy; there is no such thing as a “generic” reputation.

**Reaction Modifier**

Specify the reaction-roll modifier that you get from people who recognize you. This determines the base cost of your reputation. For every +1 bonus to reaction rolls (up to +4), the cost is 5 points. For every -1 penalty (up to -4), the cost is -5 points.

**People Affected**

The size of the group of people who might have heard of you modifies the base cost:

- Almost everyone in your game world (but not those from other universes – at least, not until they have met you!): \( \times 1 \).
- Almost everyone in your game world except one large class (everyone but the French, everyone but Elves, everyone but offworld visitors): \( \times \frac{2}{3} \) (round down).
- Large class of people (all people of a particular faith, all mercenaries, all tradesmen, etc.): \( \times \frac{1}{2} \) (round down).
- Small class of people (all priests of Wazoo, all literate people in 12th-century England, all mages in modern Alabama): \( \times \frac{1}{3} \) (round down).

If the class of people affected is so small that, in the GM’s opinion, you would not meet even one in the average adventure, your reputation isn’t worth points. This depends on the setting; for instance, mercenaries are rare in some game worlds, common in others.

**Frequency of Recognition**

Either your name or your face is enough to trigger a “reputation roll” to see if the people you meet have heard of you. Roll once for each person or small group you meet. For a large group, the GM may roll more than once if he likes. The frequency with which you are recognized modifies the cost of your reputation:

---

**Tech Level and Starting Wealth**

Tech level (p. 22) determines starting wealth, as technologically advanced societies tend to be richer. Below is a comparison of TLs and suggested starting wealth.

<table>
<thead>
<tr>
<th>TL</th>
<th>Description</th>
<th>Starting Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>TL0</td>
<td>Stone Age (Prehistory and later)</td>
<td>$250</td>
</tr>
<tr>
<td>TL1</td>
<td>Bronze Age (3500 B.C.+).</td>
<td>$500</td>
</tr>
<tr>
<td>TL2</td>
<td>Iron Age (1200 B.C.+).</td>
<td>$750</td>
</tr>
<tr>
<td>TL3</td>
<td>Medieval (600 A.D.+).</td>
<td>$1,000</td>
</tr>
<tr>
<td>TL4</td>
<td>Age of Sail (1450+).</td>
<td>$2,000</td>
</tr>
<tr>
<td>TL5</td>
<td>Industrial Revolution (1730+).</td>
<td>$5,000</td>
</tr>
<tr>
<td>TL6</td>
<td>Mechanized Age (1880+).</td>
<td>$10,000</td>
</tr>
<tr>
<td>TL7</td>
<td>Nuclear Age (1940+).</td>
<td>$15,000</td>
</tr>
<tr>
<td>TL8</td>
<td>Digital Age (1980+).</td>
<td>$20,000</td>
</tr>
<tr>
<td>TL9</td>
<td>Microtech Age (2025+?).</td>
<td>$30,000</td>
</tr>
<tr>
<td>TL10</td>
<td>Robotic Age (2070+?).</td>
<td>$50,000</td>
</tr>
<tr>
<td>TL11</td>
<td>Age of Exotic Matter:</td>
<td>$75,000</td>
</tr>
<tr>
<td>TL12+</td>
<td>Whatever the GM likes!</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

**GURPS** gives wealth and prices in “$” for convenience. The $ can stand for “dollars,” “credits,” “pennies,” or even units of barter. In a contemporary setting, $1 is a modern U.S. dollar. In other periods, $1 equates roughly with the amount of local currency needed to buy a loaf of bread or equivalent staple – not with historical U.S. dollars.

For example, in a high medieval society, each $ might be a copper farthing. In WWII-era America, each $ would convert to $0.10 in deflated 1940s-era dollars. And in a cyberpunk world with hyperinflation, each $ might equal $1,000 in grossly devalued 2030-era dollars! The **GURPS** $ is a constant, however. Variations in starting wealth by TL reflect increased prosperity due to civilization’s progress – not inflation.

Workbooks might give starting wealth, wages, and prices in local currency – historical U.S. dollars, British pounds, pieces of eight, etc. In such cases, they will always give a conversion factor to constant $.
Classless Meritocracies

In many societies, especially feudal ones, Status is the primary form of social rank. However, some societies, notably modern and futuristic ones, claim to be “classless.” This does not mean that social rank doesn’t exist! It just means that merit – most often in the form of wealth, education, or public service – replaces entitlement or birthright as the determiner of relative social position.

In a classless society, the GM may wish to limit the amount of Status that PCs can buy directly to only two levels. This represents some combination of higher education, professional license (such as in law or medicine), respected family name, and cultural achievements (anything from “rock star” to “poet laureate”). The only way to obtain higher Status is to get it for “free” from high Wealth (p. 25) or Rank (p. 29).

In a society where some form of Rank – not Status – is the official yardstick of power, it takes finesse to turn high Status to your advantage. For instance, you might come from a “good” family and have a decent education, allowing you to buy Status 2 outright. You might also be rich (Multimillionaire 1) for +2 Status and hold local office (Administrative Rank 3) for +1 Status. This would give you Status 5 in total. To overrule a senior bureaucrat with Administrative Rank 6 and Status 2, though, you’ll have to use your social connections. You might have more clout in high society (Status 5 vs. Status 2), but he outranks you in the eyes of the law (Rank 6 vs. Rank 3)!

All the time: \(x1\).
Sometimes (roll of 10 or less): \(x1/2\) (round down).
Occasionally (roll of 7 or less): \(x1/3\) (round down).

Of course, your reputation extends only within a certain area. If you travel far enough away, the GM may require you to “buy off” the disadvantage points you received for a bad reputation. (There is no corresponding bonus for losing a good reputation.)

Multiple Reputations

You may have more than one reputation, and your reputations can overlap. The GM should check each one before determining how an NPC reacts to you. Your total reaction modifier from reputations cannot be better than +4 or worse than -4 in a given situation.

Multifaceted Reputations

A single reputation can give different reaction modifiers with different groups, provided the groups do not overlap. Set the reaction modifier for each group, modify the cost for the size of the group, and then add up the resulting costs. Modify this total for frequency of recognition. The reputation is an advantage if the net point cost is positive, a disadvantage if negative. The final point cost may be 0, but you should still record it on your character sheet!

**Example 1:** Sir Anacreon has a reputation for fearless monster-slaying. This earns him a +2 reaction from those who recognize him. Everyone has heard of him (no modifier), and he is recognized on a roll of 10 or less \((x1/2)\). He has a 5-point advantage.

**Example 2:** The Green Dragon has a reputation as a crimefighter. He gets +3 reactions from honest citizens – which is almost everyone except the large class of dishonest citizens \((x2/3)\) – for 10 points. He receives a -4 reaction from the underworld – a large group \((x1/2)\) – for -10 points. The net point cost for his reputation is 0 points. If his player wished, he could specify a frequency of recognition, but the final cost would still be 0 points.

**Importance**

Your formally recognized place in society is distinct from your personal fame and fortune. To influence others through established channels (as opposed to relying on popularity or bribery), you must purchase one or more types of social rank, each of which has unique benefits and drawbacks.

**Status**

5 points/level

Status is a measure of social standing. In most game worlds, Status levels range from -2 (serf or street person) to 8 (powerful emperor or god-king), with the average man being Status 0 (freeman or ordinary citizen). If you do not specifically buy Status, you have Status 0. Status costs 5 points per level. For instance, Status 5 costs 25 points, while Status -2 is -10 points. Status also costs money to maintain (see p. 516).

Status is not the same as personal popularity (see Reputation, p. 26) or the popularity of your racial or ethnic group (see Social Regard, p. 86, and Social Stigma, p. 155). Status can sometimes influence others’ reactions, but its main effect is to spell out where you stand in the social pecking order. In short, Status represents power.

**High Status**

Status greater than 0 means you are a member of the ruling class in your culture. Your family may be hereditary nobles (e.g., Plantagenet, Windsor), successful businessmen or politicians (Rockefeller, Kennedy), or some other type of big shots. You may even have achieved Status by your own efforts. As a result, others in your culture only defer to you, giving you a bonus on all reaction rolls.

High Status carries various privileges, different in every game world; your GM will give you this information. Note that any high-Status person is a likely target for kidnappers and social climbers, and that some criminal types hate “the ruling class.”

**Low Status**

Status less than 0 means you are a serf or a slave, or simply very poor. This is not the same thing as Social Stigma (p. 155). In medieval Japan, for instance, a woman could have high Status, but still get a -1 on reactions due to the Social Stigma of being female. A modern-day criminal could theoretically have any level of Status.
in conjunction with the Social Stigma of a criminal record.

The interaction of Status, Social Stigma, and Reputation can give interesting results. For instance, a person who is obviously from a lower social class, or even a disdained minority group, might earn such a reputation as a hero that others react well to him. A group, might earn such a reputation across.

Indeed, if you have very high Status, and speech communicate your Status. Some settings, your bearing, dress, or perhaps the gaggle of servants that surrounds you gets the message.

If your Status is so low as to be negative, those of higher Status may give a penalty. If your Status is so low as to be negative, those of higher Status may give a penalty. If so, then high Rank grants additional Status at no extra cost: +1 to Status at Rank 2-4, +2 to Status at Rank 5-7, and +3 to Status at Rank 8 or higher. This represents society's respect for senior members of important social institutions. If you hold multiple types of Rank, then you may claim a Status bonus for each of them.

Alternatively, one form of Rank might replace Status; for instance, Religious Rank in a theocracy. In societies like this, Status does not exist. Each level of Rank gives all its usual benefits plus the effect of an equivalent level of Status.

**Rank**

**5 or 10 points/level**

Specific sectors of society – e.g., the civil service, the military, and certain powerful religions – often have internal ranking systems, distinct from Status. If an organization like this has significant social influence, or access to useful resources, then its members must pay points for their rank within the organization.

Rank comes in levels. Each Rank has authority over those of lower Rank – regardless of personal ability. In most cases, there are six to eight levels of Rank. The GM should determine the highest Rank available to starting characters, usually Rank 3-5.

Unlike Status, Rank costs no money to maintain. On the other hand, almost all forms of Rank come with a Duty (see p. 133). Rank often has stringent prerequisites, too – typically one of the traits given under Privilege (p. 30) or a minimum skill level. These things have their own point costs, not included in the cost of the Rank.

In a given society, there are usually several systems of Rank; the precise varieties depend on the game world. In most cases, you may hold more than one kind of Rank, although the GM is free to rule that holding one sort of Rank precludes holding another.

Rank may coexist with Status. If so, then high Rank grants additional Status at no extra cost: +1 to Status at Rank 2-4, +2 to Status at Rank 5-7, and +3 to Status at Rank 8 or higher. This represents society's respect for senior members of important social institutions. If you hold multiple types of Rank, then you may claim a Status bonus for each of them.

Alternatively, one form of Rank might replace Status; for instance, Religious Rank in a theocracy. In societies like this, Status does not exist. Each level of Rank gives all its usual benefits plus the effect of an equivalent level of Status.

**Special Rules for Rank**

A number of special situations might arise in play for those with Rank.

**Temporary Rank**

Those of higher Rank may temporarily increase your Rank for a predetermined amount of time – until the end of a project, battle, etc. This process is called brevetting in the case of Military Rank. To keep temporary Rank, you must meet all the usual requirements and pay the appropriate point cost.

**Courtesy Rank**

Those who have formerly held Rank may retain that Rank as “Courtesy Rank” for only 1 point per level. Those who currently hold a title that carries little real authority may also take Courtesy Rank. Courtesy Rank is for social situations only; it gives you a fancier title.

**Rank for Spies**

Officers of national intelligence services often possess a special category of Military Rank, distinct from that of line soldiers. Employees of civilian intelligence agencies usually possess some variety of Administrative Rank instead. Finally, some counterintelligence officers are actually police, and hold Police Rank. Those playing spies should consult with the GM before purchasing Rank of any kind!
Rank is worth 5 points per level if it coexists with Status, or 10 points per level if it replaces Status. Common varieties of Rank include:

**Administrative Rank:** Position within a governmental bureaucracy. When dealing with other administrators, differences in Rank work just like differences in Status (see p. 28). At TL5 and higher, a large bureaucracy might have several varieties of Rank: one per government department, and possibly extra categories for the senate, judiciary, etc. (Defense or law-enforcement officials use Military or Police Rank instead.) Note this on your character sheet; e.g., Administrative Rank (Judiciary).

**Merchant Rank:** Position within a national or transnational organization of merchants. This could be anything from the mercantile culture of the Aztecs (where Merchant Rank verged on being Status) to the "merchant marine" of a modern or futuristic society (where Merchant Rank often parallels Military Rank during wartime).

**Military Rank:** Position within a military organization. Each organization is structured differently. In general, personnel that are not specifically leaders will be Rank 0-2, while low-level officers and senior enlisted men will be Rank 3-4. Rank 5 and higher is normally limited to major commands and duties where the officer is responsible for extremely valuable or rare resources. Limited-duty officers, specialists, and personnel with little actual responsibility or command authority have a lower Rank in GURPS terms, despite possibly possessing titles identical to those of a higher Rank; represent this with one or more levels of Courtesy Rank (see Courtesy Rank, p. 29).

**Police Rank:** Position in a police force. Each agency has its own variety of Rank. You must buy Legal Enforcement Powers (p. 65) before you can buy Police Rank; this is the difference between a patrol officer (Police Rank 0, for 0 points) and an ordinary citizen (no Police Rank, also 0 points). Note that in a police state, there is no difference between Police Rank and Military Rank.

**Religious Rank:** Position in a religious hierarchy. Each religion has its own variety of Rank. You must buy Clerical Investment (p. 43) before you can buy Religious Rank; this is the difference between a novice (Religious Rank 0, for 0 points) and a layperson (no Religious Rank, also 0 points). Other common requirements include a minimum level of Theology skill and being of a particular sex or race. Differences in Rank work just like differences in Status (see p. 28) when dealing with co-religionists and those who respect your faith.

**Privilege**

You may buy special privileges within your society – e.g., a hard-to-obtain license, an “in” with an influential social group, or an exemption from certain laws – that allow you more latitude in your actions. Such advantages are not directly linked to Rank or Status. For instance, a spy with low Rank might have a “license to kill,” while his commander, a bureaucrat with much higher Rank, is bound by all the rules of polite society.

Privileges include the advantages of Claim to Hospitality (p. 41), Clerical Investment (p. 43), Legal Enforcement Powers (p. 65), Legal Immunity (p. 65), Security Clearance (p. 82), Social Regard (p. 86), and Tenure (p. 93).

**Social Restraints**

Your social situation can instead deprive you of freedom. This can take many forms: an onerous obligation; the need to hide your deeds or lifestyle in order to avoid persecution; or widespread disdain for your cultural group, occupation, or social class. Such traits are considered disadvantages – see Duty (p. 133), Secret (p. 152), and Social Stigma (p. 155). All of these traits are externally imposed. If you are limited by your values, see Self-Imposed Mental Disadvantages (p. 121) instead.
You can claim to know just about anyone – and maybe you really do! Your life history should include at least some details about your relationships – good, neutral, or bad – with other people in the game world.

It costs points to have associates you can rely on for assistance during an adventure. Likewise, individuals who complicate your life or actively seek to thwart you, personally, are worth points as disadvantages. Note that these NPCs need not be people – they might be spirits, animal sidekicks, or robots.

**NPCS**

You may also have associates who provide useful information or very minor favors, but who do not become physically involved in dangerous adventures. They appear only for long enough to help out, and then quickly depart. The GM will roleplay them and give them personalities, but since they are no more likely than any other friendly NPC to get involved in the action, they do not require full character sheets. Purchase such NPCs as Contacts (p. 44) or Contact Groups (p. 44).

**ASSOCIATED NPCs**

Some friends and foes physically enter play when they appear. These "Associated NPCs" have personalities, life histories, and character sheets, just like PCs. In each case, the GM will interview you regarding the attitude, character story, and general abilities of the NPC, and then use this information to create a character sheet.

Character sheets for Associated NPCs – like those of all NPCs – are for the GM's eyes only. You will not have access to them! When these NPCs become involved in the game, the GM plays their roles and control their actions. Thus, even your closest associates are never 100% predictable.

Buy advantageous Associated NPCs as Allies (p. 36) or Patrons (p. 72). Disadvantageous ones include Dependents (p. 131) and Enemies (p. 135). The GM's word is final in all cases. The GM is free to forbid an Associated NPC that he feels would be disruptive, unbalanced, or inappropriate. He might even choose to forbid entire classes of NPCs – Dependents, Enemies, Patrons, etc. – if he feels they would unduly disrupt the flow of the game.

**IDENTITIES**

By now, you should have a good idea of what you look like and who you are ... but this might be only one of several faces that you show the world. Most people have just one identity – but a criminal, spy, super, or vigilante might have multiple identities.

A functional alternate identity costs points; see Alternate Identity (p. 39). On the other hand, keeping your identity a secret can be troublesome and expensive enough to qualify as a Secret Identity disadvantage (p. 153). And if you have no legal identity, you are Zeroed (p. 100).

**Pseudonyms**

In many countries – including the present-day United States – it is legal to use a false name for privacy as long as you do not attempt to defraud or interfere with public records. You can rent an apartment as "Mr. Smith," paying cash, without problems. But you can't get a driver's license, etc., legally. This sort of "weak identity" costs no points, and is popular with rock stars and actors (who often use a "stage name"), writers (in the form of a nom de plume), and traveling royalty.

**Temporary Identities**

Anyone can have a hasty or low-quality Alternate Identity (p. 39). While useful, such a false identity will eventually be noticed and eliminated (and the user sought after!). This kind of identity is not considered an advantage, and costs no points; buy it with cash.

A standard Temporary Identity is guaranteed to be good for one week. At the end of that week, the GM rolls 3d. On a roll of 8 or less, the authorities have discovered the false records. Otherwise, the identity holds up for another week and the process repeats itself, but the "discovery roll" is at a cumulative +1 for every week past the first (9 or less at the end of the second week, 10 or less at the end of the third week, and so on).

The price of a Temporary Identity is negotiable, and depends on your contacts, skills, and the setting. The cheaper the identity, the more frequently the GM will roll – a really cheap one might only be good for a day, with rolls every day! More expensive identities, lasting longer or starting at a lower number, might also be available.

Someone who is Zeroed (p. 100) can use a Temporary Identity.

**Alternate Identity vs. Secret Identity**

A Secret Identity (p. 153) isn’t the same as an Alternate Identity (p. 39). If there are no false records to back up a Secret Identity, it doesn’t count as an Alternate Identity. And if you use an Alternate Identity only to hold a secret bank account (for instance), and never try to "live" that persona, it isn't a Secret Identity.
An “advantage” is a useful trait that gives you a mental, physical, or social “edge” over someone else who otherwise has the same abilities as you. Each advantage has a cost in character points. This is fixed for some advantages; others can be bought in “levels,” at a cost per level (e.g., Acute Vision costs 2 points/level, so if you want Acute Vision 6, you must pay 12 points). Advantages with “Variable” cost are more complicated; read the advantage description for details.

You can start out with many advantages as you can afford – although some advantages are forbidden to certain kinds of characters. You can also add advantages in play, if the GM permits. For instance, all the beneficial social traits in Chapter 1 (Status, Wealth, etc.) are advantages, and you could realistically acquire any of these in the course of the game. Magic and high technology can often grant advantages as well. For information on adding advantages in play, see Chapter 9.

**TYPES OF ADVANTAGES**

Advantages fall into several broad categories, each of which has affects who can possess those advantages and how they work in play.

*Mental*, *Physical*, and *Social*

*Mental* advantages originate from your mind, or perhaps even your soul. They stay with you even if your mind ends up in a new body due to possession, a brain transplant, etc. Magical, psionic, and spiritual traits usually fall into this category. Most mental advantages work automatically, but a few require a roll against IQ, Perception, or Will to use. Mental advantages are marked 🧠.

*Physical* advantages are part of your body. You lose these traits if your mind moves to a new body – and if another mind takes over your body, the body’s new owner gains your physical advantages. Advantages provided by bionics and similar implants usually fall into this category. Make a HT roll to activate any physical advantage that does not work automatically. Physical advantages are marked ♻.

*Social* advantages are associated with your identity. Whether identity is a facet of mind or of body depends on the game world. In a fantasy setting, a demon might possess a duke and “become” a respected noble instead of a feared demon, while in a far-future society, people might routinely “upload” into new bodies with no effect on social standing. As with all things, the GM’s word is final. Note that this category includes Rank, Status, Wealth, and related traits from Chapter 1. Social advantages are marked 🤝.

Many exotic and supernatural advantages (see below) could belong to more than one of these categories. This is noted (e.g., as 🧠/🧧) where especially appropriate. The GM has the final say. The 🧠, 🧧, and 🤝 markers are meant to assist GM judgment, not replace it.

*Exotic*, *Supernatural*, and *Mundane*

*Exotic* advantages are traits that ordinary humans cannot have without ultra-tech body modification or similar tampering; for instance, extra arms or death-ray vision. Nonhumans will often have exotic advantages on a racial basis, but this does not entitle them to add such traits freely. You need the GM’s permission to add exotic traits that do not appear on your racial template (see Chapter 7). Exotic advantages are marked 🧠.
Supernatural advantages are impossible in nature and cannot be justified by science – or even “super-science.” They rely on divine intervention, magic, psionics, etc. The classic example is magical talent (see Magery, p. 66). Supernatural traits differ from exotic ones in that anyone might be supernaturally gifted – even a “normal” human, if the GM permits. Having a trait like this does not automatically mark you as an alien or a mutant. Supernatural advantages are marked "^

Mundane advantages are inborn or learned edges and knacks that anyone might have. There are normally no restrictions on who may possess a mundane advantage. Mundane advantages are not specially marked – if you don’t see "\n or "^
, the advantage is mundane and available to anyone with the GM’s permission. This last point is important! Some mundane traits are intended for cinematic campaigns (see The Cinematic Campaign, p. 488); the GM may forbid them in realistic games. Cinematic traits are always clearly indicated in the text.

**ADVANTAGE ORIGINS**

When you select exotic or supernatural advantages, you must also choose an in-game justification for those abilities: biology, high technology, a divine gift, etc. Explaining your capabilities in terms that have meaning in the game world will give you a better “feel” for your character and give the GM some additional “adventure hooks.”

Origins are usually just special effects. For instance, if you can sprout claws, they use the rules under Claws (p. 42) whether they are natural, cybernetic, or a gift from the Tiger God. Sometimes, though, you will encounter things that can only affect or be affected by a specific class of abilities. Furthermore, the GM may rule that talents with certain origins are more or less effective in a particular situation. In those cases, it is important to know how your advantage works.

Most characters have only one origin for all of their abilities, but you may choose a separate origin for each of your advantages if you wish, subject to GM approval. The GM sets the origins available in his campaign. Examples include:

- **Biological:** Inborn features (unique to you or part of your racial makeup) and mutations. Medical science can detect and analyze these traits, and - at higher tech levels - add or remove them through genetic engineering, implants, or surgery.
- **Chi:** Powers that originate from the “inner strength” of martial artists and yoga masters (also known as *ki* and *prana*). Disease and similar afflictions can sometimes weaken such abilities - for instance, by throwing your *yin* and *yang* out of balance.
- **Cosmic:** Abilities that emanate from the universe itself or otherwise defy explanation. This is reserved for gods, powerful spirits, supers, etc. If your ability produces effects that only other cosmic powers can counteract, this is an enhancement; see Cosmic (p. 103).
- **Divine:** Gifts from the gods (if you are a god, use Cosmic). In areas of low “sacriety” for your god – e.g., the temple of a rival god, or a foreign land where your god is unknown – you might find your abilities reduced or unavailable.

**Potential Advantages**

You will sometimes see an advantage you would like to have but that would not make sense at the start of your career – or that you cannot afford on your starting points! Or you might just want to start your adventuring career with unrealized potential, like countless fictional heroes. In either situation, the GM may choose to let you set aside 50% of the cost of an advantage as a “down payment” against acquiring the advantage later on.

When you take a potential advantage like this, sit down with the GM and work out the in-game conditions under which you will acquire the desired trait. When these conditions are met, you must use bonus character points to pay the other half of the price as soon as possible; see Improvement Through Adventure (p. 290). The GM is free to assess partial or uncontrollable benefits befitting the trait until you finish paying for the full, controllable advantage.

Examples of potential advantages include:

- **Heir:** You stand to inherit wealth or a title. The GM decides when you will come into your inheritance. At that time, you acquire Status, Wealth, or other social privileges worth twice the points set aside for this trait. Until then, you enjoy extra money, reaction modifiers, etc. equal to half what you stand to gain. For instance, if you stood to inherit +2 to Status [10] and Comfortable wealth [10], Heir would cost 10 points, and give +1 to Status and a 50% bonus to starting wealth.

- **Schrödinger’s Advantage:** You can specify that at some critical juncture in an adventure, just when all seems lost, you will suddenly discover a new ability – worth twice the points you have set aside – that will help you out of trouble. You must immediately pay the remaining points to use your new ability. This is a powerful option. To keep things fair: points set aside this way provide no benefit until you discover your hidden talent.

- **Secret Advantage:** You have an advantage you don’t know about! The GM picks an advantage or set of advantages worth twice the points you have set aside... but he will not tell you what it is, or even give you a clue! The GM will reveal the truth at a suitably dramatic moment. Until then, the advantage provides the usual benefits – but it isn’t under your control, so you won’t be able to rely on it. The advantage functions normally once revealed and paid for.
What’s Allowed

The GM determines which exotic and supernatural traits are allowed – and to whom – in his campaign. In a futuristic “transhuman” game world, the GM might declare that it is possible to add specific exotic advantages via surgery or genetic modification, but rule that supernatural advantages simply do not exist. In a 1920s horror game, the GM might allow many supernatural abilities, but no exotic ones. And in a supers campaign, the GM could let the players buy anything they have points for; vetting troublesome traits on a case-by-case basis. Players should develop the habit of reading as “requires GM permission.”

High-Tech: Nonbiological implants in biological characters, as well as all abilities of cyborgs, robots, and vehicles. Sensors can detect and analyze such traits, and certain high-tech countermeasures might be able to neutralize them.

Magic: Talents that draw upon magical energy, or mana. You need not be a wizard yourself; this category includes such lasting sorcerous effects as personal enchantments. If your gifts do not function at all in areas without mana, and function at -5 to die rolls in low mana (like spells; see p. 235), then this is a limitation (see p. 110): Mana Sensitive, -10%.

Psionic: Advantages that originate from the power of the mind. In most settings where psi powers exist, there are drugs, gadgets, and specialized anti-psi powers that can detect and defeat them. As a result, they are bought with a special limitation; see Chapter 6.

Spirit: Abilities enabled by invoking spirits. You only seem to be the focus of the effects; in reality, invisible supernatural beings are doing your bidding. Obviously, if the spirits cannot reach you, your abilities do not work.

Turning Advantages Off and On

An advantage that never inconveniences you (e.g., Intuition), that has to be on at all times to be of benefit (e.g., Resistant), or that reflects a permanent trait of your species (e.g., Extra Arms) is always on. You cannot turn it off.

Most other advantages are switchable: you can turn them off and on at will. To do so requires a one-second Ready maneuver, with activation or deactivation occurring as soon as you execute the maneuver. Unlike certain skills and magic spells, this does not require concentration; switching an advantage is second nature, and cannot be “interrupted.” The default condition (while sleeping, unconscious, etc.) is “on.”

Attacks – notably Affliction (p. 35), Binding (p. 40), and Inmate Attack (p. 61) – are only “on” while you are attacking. An advantage like this requires a one-second Attack maneuver to use; you cannot switch it on continuously without a special enhancement.

Exceptions to these guidelines are noted explicitly.

Advance List

360° Vision

You have a 360° field of vision. You have no penalty to defend against attacks from the sides or rear. You can attack foes to your sides or rear without making a Wild Swing, but you are at -2 to hit due to the clumsy angle of attack (note that some Karate techniques do not suffer this penalty). Finally, you are at +5 to detect Shadowing attempts, and are never surprised by a danger that comes from behind, unless it also is concealed from sight.

Extra eyes are merely a special effect of this trait – you can have any number of eyes, but the point cost remains the same.

Special Limitations

Easy to Hit: Your eyes are on stalks, unusually large, or otherwise more vulnerable to attack. Others can target your eyes from within their arc of vision at only -6 to hit. -20%.

3D Spatial Sense

see Absolute Direction, below

Absolute Direction

You have an excellent sense of direction. This ability comes in two levels:

Absolute Direction: You always know which way is north, and you can always retrace a path you have followed within the past month, no matter how faint or confusing. This ability does not work in environments such as interstellar space or the limbo of the astral plane, but it does work underground, underwater, and on other planets. This gives +3 to Body Sense and Navigation (Air, Land, or Sea). (Note: The navigational sense that guides migratory creatures to their destination is too crude to qualify; treat it as a 0-point feature.) 5 points.

3D Spatial Sense: As above, but works in three dimensions. This ability is useful in deep space – although it does not help you if you travel across dimensions. You get the skill bonuses given for Absolute Direction, plus +1 to Piloting and +2 to Aerobatics, Free Fall, and Navigation (Hyperspace or Space). 10 points.
Special Limitations

- **Requires Signal**: You rely on signals from a navigational satellite network (like Earth's GPS) or similar system. Your ability does not function in the absence of such a system, and it can be jammed. -20%.

### Absolute Timing

2 or 5 points

You have an accurate mental clock. This ability comes in two levels, both of which are somewhat cinematic:

- **Absolute Timing**: You always know what time it is, with a precision equal to the best personal timepieces widely available in your culture (but never better than a few seconds). You can measure elapsed time with equal accuracy. Neither changes of time zone nor sleep interfere with this ability, and you can wake up at a predetermined time if you choose. Being knocked unconscious, hypnotized, etc. may prevent this advantage from working, and time travel will confuse you until you find out what the “new” time is. 2 points.

- **Chronolocation**: As above, but time travel does not interfere – you always know what time it is in an absolute sense. Note that things like Daylight Savings Time and calendar reform can still confuse you! When you travel in time, the GM may tell you, “You have gone back exactly 92,876.3 days,” and let you – or your character – deal with questions like, “What about leap year?” 5 points.

### Acute Senses

2 points/level

You have superior senses. Each Acute Sense is a separate advantage that gives +1 per level to all Sense rolls (p. 358) you make – or the GM makes for you – using that one sense.

- **Acute Hearing** gives you a bonus to hear something, or to notice a sound (for instance, someone taking the safety off a gun in the dark). 2 points/level.

- **Acute Taste and Smell** gives you a bonus to notice a taste or smell (for instance, poison in your drink). 2 points/level.

- **Acute Touch** gives you a bonus to detect something by touch (for instance, a concealed weapon when patting down a suspect). 2 points/level.

- **Acute Vision** gives you a bonus to spot things visually, and whenever you do a visual search (for instance, looking for traps or footprints). 2 points/level.

With the GM's permission, you may also buy Acute Sense advantages for specialized senses such as Scanning Sense and Vibration Sense.

You cannot usually buy Acute Senses in play – raise your Perception instead. However, if you lose a sense, the GM may allow you to spend earned points on other Acute Senses to compensate. For instance, if you are blinded, you might acquire Acute Hearing.

The GM determines which exotic and supernatural traits are allowed – and to whom – in his campaign.

### Administrative Rank

See Rank, p. 29

### Affliction

10 points/level

You have an attack that causes a baneful, nondamaging effect: blindness, paralysis, weakness, etc. This might be an ultra-tech beam weapon, a chemical spray, a supernatural gaze attack, or almost anything else. Specify the details when you buy the advantage.

By default, Affliction is a ranged attack with 1/2D range, Max 100, Acc 3, RoF 1, Shots N/A, and Recoil 1, although you can apply modifiers to change these statistics (see pp. 101-116).

If you hit, your victim gets a HT+1 roll to resist. Apply a penalty equal to the level of the Affliction (so Affliction 1 gives an unmodified HT roll). The victim gets a bonus equal to his DR unless the Affliction has one of the following modifiers: Blood Agent, Contact Agent, Cosmic, Follow-Up, Malediction, Respiratory Agent or Sense-Based. To reduce the effects of DR, add the Armor Divisor enhancement. The victim gets a further +3 if he is beyond 1/2D range.

If the victim makes his HT roll, he is unaffected. If he fails, he suffers the effects of the Affliction. By default, he is stunned (see p. 420). He may roll vs. HT+1 once per second to recover; but once again at a penalty equal to the level of the Affliction (DR has no effect on this roll).

If your Affliction causes an effect other than stunning, this is a special enhancement (see below). You can inflict more than one effect by giving your Affliction multiple special enhancements. These effects occur simultaneously, except where noted.

Successful Afflictions that produce the same effects are not normally cumulative. Use the single worst effect. Use the special enhancements below to create specific Afflictions. Many Attack Enhancements and Limitations (p. 102) are also logical. For instance, a blinding flash is Sense-Based (p. 109); most drugs have Follow-Up (p. 105), Blood Agent (p. 102), or Contact Agent (p. 103); supernatural attacks like the “evil eye” use Malediction (p. 106); and touch attacks call for Melee Attack (p. 112).

If an Affliction produces two or more effects due to the special enhancements below, some of these effects may be secondary. Secondary effects occur only if the victim fails his HT roll by 5 or more or rolls a critical failure. A secondary effect is worth 1/5 as much; e.g., Secondary Heart Attack is +60% rather than +300%.

Once you have chosen all the modifiers on your Affliction, describe the nature of the attack as detailed for Innate Attack (p. 61).
Special Enhancements

**Advantage:** The victim immediately experiences the effects of a specific physical or mental advantage. Advantages with instantaneous effects affect the target once, as soon as he is hit, if he fails his HT roll; e.g., Warp immediately teleports the subject. Advantages that can be switched on and off (such as Insubstantiality) are automatically “on” for one minute per point by which the victim fails his HT roll, and are **not** under the subject’s control. This is worth +10% per point the advantage is worth; e.g., Insubstantiality would be +800%! If the advantage comes in levels, specify the level.

**Attribute Penalty:** The victim suffers temporary attribute loss. This is +5% per -1 to ST or HT, or +10% per -1 to DX or IQ. For instance, an attack that caused DX-3 and IQ-2 would be +50%. Lower all skills based on reduced attributes by a like amount. ST penalties also reduce BL and damage, while IQ reductions also apply to Will and Perception. Secondary characteristics are not otherwise affected; for instance, HT reduction does not affect Basic Speed or FP. Penalties last for one minute per point by which the victim fails his HT roll.

**Coma:** The victim collapses, profoundly unconscious, and will likely die in days unless treated; see Mortal Conditions (p. 429), +250%.

**Cumulative:** Repeated attacks are cumulative! You must take this in conjunction with Attribute Penalty, or with an Advantage, Disadvantage, or Negated Advantage Enhancement that inflicts a “leveled” trait, +400%.

**Disadvantage:** The victim temporarily gains one or more specific physical or mental disadvantages (but **not** self-imposed mental disadvantages – see p. 121). This is worth +1% per point the temporary disadvantages are worth; e.g., Paranoia [-10] is worth +10%. If a disadvantage comes in levels, specify the level. The disadvantages last for one minute per point by which the victim fails his HT roll.

**Heart Attack:** The victim suffers an incapacitating heart attack, and will die in minutes unless treated; see Mortal Conditions (p. 429), +300%.

**Incapacitation:** The victim is incapacitated for a number of minutes equal to the margin of failure on his HT roll. After that, he is stunned until he can make a HT roll (roll once per second). If you combine Incapacitation with other effects (such as Irritant), those effects occur after the Incapacitation wears off; they replace the stunning and last for the same length of time the Incapacitation did. Incapacitation can take the form of any of the following: Daze, +50%; Hallucinating, +50%; Retching, +50%; Agony, +100%; Choking, +100%; Ecstasy, +100%; Seizure, +100%; Paralysis, +150%; Sleep, +150%; or Unconsciousness, +200%. See Incapacitating Conditions (p. 428) for the game effects.

**Irritant:** The victim suffers an impairing but non-incapacitating condition instead of being stunned. It lasts for a number of minutes equal to the margin of failure on his HT roll. The possibilities are Tipsy, +10%; Coughing, +20%; Drunk, +20%; Moderate Pain, +20%; Euphoria, +30%; Nauseated, +30%; Severe Pain, +40%; or Terrible Pain, +60%. For definitions, see Irritating Conditions (p. 428).

**Negated Advantage:** The victim loses a specific advantage for one minute per point by which he failed his HT roll. There is no effect if the victim lacks that advantage! This enhancement is worth +1% per point the advantage is worth. If the advantage comes in levels, you must specify the level negated.

**Stunning:** May only accompany Advantage, Attribute Penalty, Disadvantage, or Negated Advantage. If the victim fails to resist, he is stunned (per an unmodified Affliction) in addition to the effects of the other enhancement(s), +10%.

### Allies

Many fictional heroes have partners – loyal comrades, faithful sidekicks, trusted retainers, or lifelong friends – who accompany them on adventures. These partners are “Allies.”

The other PCs in your adventuring party are, in a sense, “allies.” But they can be unreliable allies indeed. Often they are chance acquaintances, first encountered at a roadside tavern only hours ago. They have their own hidden goals, ethics, and motives, which might not coincide with your own.

An NPC Ally, on the other hand, is wholly reliable. Perhaps you fought side by side in a long war, trained under the same master, or grew up in the same village. The two of you trust each other implicitly. You travel...
together, fight back-to-back, share rations in hard times, and trade watches through the night.

Your Ally is usually agreeable to your suggestions, but he is not your puppet. He will disagree with you from time to time. An Ally may try to dissuade you from a plan that seems foolish to him – and if he can't talk you out of the plan, he may refuse to cooperate. An Ally may even cause problems for you: picking fights, landing in jail, insulting a high noble . . . Of course, the Ally will also try to bail you out when you make mistakes.

The GM will not award you bonus character points for any play session in which you betray, attack, or unnecessarily endanger your Ally. Blatant, prolonged, or severe betrayal will break the trust between you and your Ally, and he will leave you permanently. If you drive your Ally off in this way, reducing your point value. Leading your Ally into danger is all right, as long as you face the same danger and are a responsible leader.

The point cost for an Ally depends on his power and frequency of appearance. Only PCs who take NPCs as Allies pay points for the privilege. Two PCs can be mutual “allies” for free, as can two NPCs – and NPCs never pay points for PCs as Allies. An Ally is specifically a skilled NPC associate for one PC.

**Ally's Power**

Consult the following table to determine how many points you must spend on your Ally. “Point Total” is the Ally's point total expressed as a percentage of the PC's starting points; “Cost” is the cost of the Ally. If the Ally's point total falls between two percentages, use the higher.

<table>
<thead>
<tr>
<th>Point Total</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>1 point</td>
</tr>
<tr>
<td>50%</td>
<td>2 points</td>
</tr>
<tr>
<td>75%</td>
<td>3 points</td>
</tr>
<tr>
<td>100%</td>
<td>5 points</td>
</tr>
<tr>
<td>150%</td>
<td>10 points</td>
</tr>
</tbody>
</table>

Ally Groups

You may purchase as many Allies as you can afford. Each Ally is normally a separate advantage, but you can treat a group of related Allies as a single trait to save space on your character sheet. For a group of individuals – with their own unique abilities and character sheets – add the costs of the individual Allies to find the cost of the group, adjust the total cost for frequency of appearance, and then apply any special modifiers.

For a group of more than five identical and interchangeable allies that share a single character sheet – for instance, an army of low-grade thugs or a swarm of robot drones – find the point cost to have one member of the group as an Ally, and then multiply that cost as follows to find the cost of the group:

<table>
<thead>
<tr>
<th>Size of Group</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10</td>
<td>x6</td>
</tr>
<tr>
<td>11-20</td>
<td>x8</td>
</tr>
<tr>
<td>21-50</td>
<td>x10</td>
</tr>
<tr>
<td>51-100</td>
<td>x12</td>
</tr>
</tbody>
</table>

Add x6 to the multiplier per tenfold increase in number (e.g., 100,000 Allies would be x30). The GM may require an Unusual Background (p. 96) if you wish to have hordes of Allies, or even prohibit groups larger than a certain size – although he might permit an army or other large group as a Patron. Frequency of appearance multipliers and special modifiers (if any) apply to the final cost of the entire group.

**Frequency of Appearance**

Choose a frequency of appearance (see p. 36). If your Ally appears at the start of an adventure, he accompanies you for the duration of that adventure.

**Allies in Play**

As with Dependents (p. 131), the GM will adjust your Ally's abilities in order to keep his point total a fixed percentage of your own as you earn points. This will keep his value as an advantage constant. The GM decides how the Ally evolves, although he might ask you for your input.

If your Ally dies through no fault of yours, the GM will not penalize you. You may put the points spent on the deceased Ally toward a new Ally. The new relationship should normally develop gradually, but the GM might allow an NPC to become an Ally on the spot if you have done something that would win him over (e.g., saving his life). This is especially appropriate in cultures where debts of honor are taken seriously!

There is no penalty for amicably parting ways with your Ally. You may use the points spent on him to buy a new Ally met during play. At the GM's discretion, you may trade in any remaining points for money (see p. 26), reflecting parting gifts.
Familiars
Wizards, telepaths, and so on are often supernaturally linked to special Allies known as familiars. These are usually animals or spirits.

Your Ally is usually agreeable to your suggestions, but he is not your puppet. He will disagree with you from time to time.

Work out a familiar’s basic abilities with the GM, starting with the racial template of an ordinary creature of its kind. If its racial IQ is 5 or less, raise it to at least 6. Consider buying off Cannot Speak, if applicable. Most familiars have supernatural advantages: Extra Lives for a cat (it has nine lives, after all!), Mindlink and Telesend for a familiar that can transmit its thoughts, etc.

Once you have determined the familiar’s abilities, work out its point total and its base value as an Ally. Select frequency of appearance as usual. This may be how often your familiar is available (on a failed appearance roll, it is sleeping, reporting to a demon lord, etc.) or how often its powers work (on a failure, it is no more capable than an ordinary member of its species, and cannot use or grant special powers) – your choice.

This kind of Ally usually has one or more special modifiers. Minion, Summonable, and Sympathy are common. Unwilling is typical of demonic or otherwise evil familiars. Take Special Abilities only if your familiar grants you powers; e.g., extra Fatigue Points with which to fuel spells or exotic or supernatural advantages that emulate the familiar’s own abilities (such as Flight, for a bird). You have no access to these abilities on a failed appearance roll; if your familiar is stunned, unconscious, or dead; or in areas where your special link does not function (GM’s decision). Buy these abilities with a -40% Accessibility limitation: “Granted by familiar.”

You can apply the following enhancements and limitations after calculating group cost (if applicable) and multiplying for frequency of appearance:

Special Limitations

Sympathy: If you are stunned, knocked out, mind-controlled, etc., your Ally is similarly affected. The reverse is also true, so you should take special care of your Ally! -25% if the death of one party reduces the other to 0 HP; -50% if the death of one party automatically kills the other. If your wounds affect your Ally, but your Ally’s wounds don’t affect you, reduce these values to -5% and -10%.

Unwilling: You have obtained your Ally through coercion (e.g., blackmail or magical binding). You do not have to treat him as well as you would a normal Ally. However, he hates you and is likely to act accordingly, reducing his overall reliability level. If you endanger such an Ally or order him to do something unpleasant, he may rebel (GM’s option) if the consequences of doing so would be less severe than those of doing your bidding. An Ally who rebels is gone, along with the points you spent on him. -50%.

Altered Time Rate

100 points/level

Your rate of time perception is faster than that of a normal human. The first level of this advantage lets you experience time twice as fast as a normal – that is, you experience two subjective seconds for each real second that passes. Each level past the first increases this ratio by one: three times as fast at level 2, four times as fast at level 3, and so on.

Each level of Altered Time Rate lets you take one additional maneuver on your turn in combat, allowing you to cast spells quickly by taking multiple Concentrate maneuvers, run very fast by taking multiple Move maneuvers, etc. Your turn doesn’t come any sooner, however! This advantage affects how fast you move when you react, but not how quickly you react in the first place.

Out of combat, Altered Time Rate allows you the luxury of extensive planning, even in crisis situations, as everything seems to happen in slow motion. You may always attempt a Senseroll, or an IQ-based skill roll to make plans or recall information (GM’s decision), at no penalty to additional actions.

Special Enhancements

Minion: Your Ally continues to serve you regardless of how well you treat him. This might be due to programming, fear, awe, or lack of self-awareness. Examples include robots, zombies, and magical slaves. You are free of the usual obligation to treat your Ally well. Mistreatment might result in an inconvenient breakdown (mental or physical), but the Ally will not leave. See Puppet (p. 78) for additional options. +0% if the Minion has IQ 0 or Slave Mentality (p. 154), as the benefits of total loyalty are offset by the need for close supervision; +50% otherwise.

Special Abilities: Your Ally wields power out of proportion to his point value. Perhaps he has extensive political clout or access to equipment from a TL higher than your own; perhaps he grants you exotic powers. Don’t apply this enhancement simply because your Ally has exotic abilities. If his powers are very uncommon, you will already be paying extra: your Ally requires an Unusual Background, which raises his point total and his value as an Ally. +50%.

Summonable: You conjure your Ally instead of rolling to see whether he appears at the start of an adventure. To do so, take a Concentrate maneuver and roll against frequency of appearance. On a success, your Ally appears nearby. On a failure, you cannot attempt to summon him again for one full day. Dismissing your Ally is a free action, but you may only dismiss him if he is physically present. +100%.
In order to do anything that depends on someone else’s reactions, you must deliberately “slow down” and function at his speed. This applies both when making a Feint in combat and when making an Influence roll (see p. 359) out of combat. For instance, if you choose to Feint, that is all you can do on your turn – you cannot take extra actions. (On the other hand, you could make an All-Out Attack followed by an Attack in order to beat down his defenses through sheer blinding speed!)

Alternate Identity

5 or 15 points per identity

You have multiple, seemingly legal identities. Each time you purchase this trait, your fingerprints (or other biometrics used to verify identity in your world) are registered under another name, and you have an extra set of identity documents (birth certificate, licenses, passport, etc.) good enough to pass close inspection. These identities may also have valid credit cards and bank accounts, but you must supply the money – additional wealth is not included in the package!

If an intelligence or law-enforcement agency attempts to identify you with no clue as to your name – for instance, using biometrics or photo-analysis – there is an equal chance for each of your identities to come up. The search will stop . . . unless they have reason to believe you are a ringer. If the search continues, your other identities will eventually surface, and you will be unmasked. Once a government agency determines who you really are, your Alternate Identities are lost for good.

There are two types of Alternate Identity:

Legal: Some spies and undercover policemen – and even supers, in settings where they are backed by the government – may have a legal Alternate Identity. This requires at least 10 points in Legal Enforcement Powers, Legal Immunity, Police Rank, Security Clearance, etc.; the GM sets the precise prerequisites. If a super has official permission to conceal his original name (e.g., to protect his family) and to hold property in his “super” name, then that is a legal Alternate Identity combined with a Secret Identity (see p. 153). 5 points.

Illegal: A criminal or foreign agent may have an illegal Alternate Identity. This has the advantage of being completely unknown when you first start out, and of course it cannot be revoked by the government. On the other hand, should it ever be discovered, you will face a stiff fine, a jail sentence, or execution, depending on the time and place. 15 points.

Ambidexterity

5 points

You can fight or otherwise act equally well with either hand, and never suffer the -4 DX penalty for using the “off” hand (see p. 14). Note that this does not allow you to take extra actions in combat – that’s Extra Attack (p. 53). Should some accident befall one of your arms or hands, assume it is the left one.
Amphibious 🐊 🐊 10 points
You are well-adapted to movement in the water. You do not suffer skill penalties for working underwater; you can swim at your full Basic Move. You still require air (but see Doesn’t Breathe, p. 49). Typical features include smooth, seal-like skin and webbed fingers and toes.

If you can move only in the water, take the Aquatic disadvantage (p. 145) instead.

Animal Empathy 🐢 🐢 5 points
You are unusually talented at reading the motivations of animals. When you meet an animal, the GM rolls against your IQ and tells you what you “feel.” This reveals the beast’s emotional state – friendly, frightened, hostile, angry, etc. – and whether it is under supernatural control. You may also use your Influence skills (see p. 359) on animals just as you would on sapient beings, which usually ensures a positive reaction.

This ability frequently accompanies some level of Animal Friend (see Talent, p. 89), and often Sense of Duty (Animals) or Vow (Vegetarianism).

Animal Friend

see Talent, p. 89

Appearance

see Appearance Levels, p. 21
Above-average appearance is treated as an advantage.

Arm DX 🗡️ 🗡️
12 or 16 points per +1 DX
Some of your arms have extra DX relative to the DX of your body. This DX applies only to things done with those arms or hands. It does not affect Basic Speed! If a task requires two or more arms, and they don’t have the same DX, use the lowest DX. Combat skills rely on bodily DX, and do not benefit from this DX at all.

Arm DX costs 12 points per +1 DX for one arm and 16 points per +1 DX for two arms. To raise the DX of three or more arms, buy up overall DX. If you bought your DX with the No Fine Manipulators limitation, apply this limitation to Arm DX as well.

Arm ST 🗡️ 🗡️
3, 5, or 8 points per +1 ST
Some of your arms have extra ST relative to the ST of your body. This ST applies only to efforts to lift, throw, or attack with those arms or hands. It does not affect HP or overall Basic Lift! If a task requires multiple hands, and they don’t have the same ST, use the average ST.

Arm ST costs 3 points per +1 ST for one arm, 5 points per +1 ST for two arms, and 8 points per +1 ST for three arms. To raise the ST of four or more arms, buy up overall ST. If you bought your ST with the No Fine Manipulators or Size limitations, apply the same limitation(s) to Arm ST.

Artificer

see Talent, p. 89

Binding ⚅ ⚅ 2 points/level
You have an attack that can hold your target in place. Specify how this works when you buy the advantage: entangling your victim in vines, tying him up with webs, freezing him inside a block of ice, turning the ground to quicksand beneath his feet, etc.

Binding is a ranged attack with 1D+1D –, Max 100, Acc 3, RoF 1, Shots N/A, and Recoil 1. You can add modifiers to change these statistics (see pp. 101-116).

On a hit, your victim is grappled (see p. 370) and rooted in place. He cannot select the Move or Change Posture maneuvers or change facing, and is at -4 to DX. The ST of this effect is equal to your Binding level, but you can layer additional attacks on a successfully bound victim. Each extra layer gives +1 to ST.

To break free, the victim must win a Quick Contest of ST or Escape skill against the ST of your Binding. Each attempt takes one second. If the victim fails to break free, he loses 1 FP but may try again. Alternatively, he may try to destroy the Binding. Innate Attacks hit automatically; other attacks are at -4. External attacks on the Binding take no penalty, but risk hitting the victim on a miss (see Striking Into a Close Combat, p. 392). The Binding has DR equal to 1/3 your level (rounded down). Each point of damage reduces ST by one. At ST 0, the Binding is destroyed and the victim is freed.

To simulate vines, webs, and so forth, add one or more of Area Effect (p. 102), Persistent (p. 107), and Wall (p. 109) – and possibly some of the special modifiers below.

Special Enhancements

Engulfing: Your attack pins the target. He cannot move his limbs or speak; his only options are to use purely mental abilities, to attack the Binding with an Innate Attack, or to try to break free using ST (not Escape skill). If he tries to break free and fails, he is only allowed a repeated attempt every 10 seconds – and on a 17 or 18, he becomes so entangled that he cannot escape on his own! +60%.

Only Damaged By X: Only specific damage types can damage your Binding. +30% for one of burning, corrosion, crushing, or cutting; +20% for any two; +10% for any three.

Sticky: Your Binding is treated as Persistent (p. 107), but only affects those who actually touch the original target of your attack. +20%.

Unbreakable: Your Binding cannot be destroyed. The only way to escape is to break free. +40%.

Special Limitations

Environmental: Your Binding manipulates an existing condition or object in the environment, and won’t work in its absence. This is worth from -20% (victim must be touching the ground) to -40% (victim must be standing in dense vegetation), at the GM’s option.

One-Shot: You cannot layer your Binding to increase its ST. -10%.

Blessed 🕉️ 🕉️ 10 or more points
You are attuned to a god, demon lord, great spirit, cosmic power, etc. This can take various forms, but in all cases, you will lose this advantage if you fail to act in accordance with your deity’s rules and values.

Blessed: You sometimes receive wisdom from your deity. After communing with your god (meditating, praying, etc.) for at least one hour, you see visions or witness omens that have some bearing on future events. Work out the details with your GM; for
instance, the God of Fire might require you to stare into flames for an hour; after which you hear a voice in the flames. The GM rolls secretly against your IQ to determine whether you gain any useful insight from this experience. The ritual is fatiguing, however; at the end of the hour, you lose 10 FP. As a side benefit, followers of your deity sense your special status and react to you at +1. **10 points.**

**Very Blessed:** As above, but your IQ roll to interpret visions is at +5 and the reaction bonus from your god's followers is +2. **20 points.**

**Heroic Feats:** Your blessing gives you the ability to perform a particular heroic feat. Once per game session, you may add 1d to one of ST, DX, or HT (other traits, such as Basic Move, are at the GM's discretion). You must specify which trait is boosted when you buy the advantage. This bonus lasts 3d seconds, after which your abilities revert to normal and you suffer any penalties amassed during the "heroic" period. (For instance, if your blessing boosts HP and you are reduced to -5 x your normal HP but not -5 x your "blessed" HP, you will die when the bonus HP wear off unless you receive some sort of healing.) **10 points.**

The GM may choose to allow other blessings as well.

**Brachiator**  
You can travel by swinging on vines, tree branches, ropes, chandeliers, etc. You get +2 to Climbing skill, and can move at half your Basic Move while brachiating. **5 points**

**Breath-Holding**  
You are adept at holding your breath. Each level doubles the length of time you can do so (see *Holding Your Breath*, p. 351). Normal humans may not take this advantage – to be a world-record diver, learn Breath Control (p. 182). Nonhumans and supers can combine this advantage with Breath Control! **2 points/level**

**Business Acumen**  
See *Talent*, p. 89

**Catfall**  
You subtract five yards from a fall automatically (treat this as an automatic Acrobatics success – don't check again for it). In addition, a successful DX roll halves damage from any fall. To enjoy these benefits, your limbs must be unbound and your body free to twist as you fall. **10 points**

This is a minor form of possession: the spirit can use your body only to communicate. However, if it has the Possession ability (p. 75), it is considered to be touching you, and can attempt *full* possession while you are in a trance. You are considered "wary," and thus get +5 to resist.

**Charisma**  
You have a natural ability to impress and lead others. Anyone can acquire a semblance of charisma through looks, manners, and intelligence – but real charisma is independent of these things. Each level gives +1 on all reaction rolls made by sapient beings with whom you actively interact (converse, lecture, etc.); +1 to Influence rolls (see *Influence Rolls*, p. 359); and +1 to Fortune-Telling, Leadership, Panhandling, and Public Speaking skills. The GM may rule that your Charisma does not affect members of extremely alien races. **5 points/level**

**Claim to Hospitality**  
You belong to a social group that encourages its members to assist one another. When you are away from home, you may call on other members of this group for food, shelter, and basic aid. The point cost depends on the extent and wealth of the group. A single friend with a house in another city is worth 1 point; a small family, 2 points; a society of merchants along an important trade route, 5 points; and a vast alliance of wealthy figures, such as "every merchant in the world," 10 points. In the appropriate situation, members of the group should be easy to find (14 or less after 1d-1 hours of searching), but the chance of meeting one at random is small (6 or less to meet one in a small crowd in an appropriate place).

Claim to Hospitality mainly saves the cost and trouble of finding lodging while "on the road" (although if you are wealthy, you might be expected to give gifts to your hosts), but there are side benefits. Members of the group are friendly to each other.

**Chronolocation**  
See *Absolute Timing*, p. 35

**Extended**

**Chronolocation**

**Extended:** You can change your surface pattern to blend into your surroundings. In any situation where being seen is a factor, you get +2 per level to Stealth skill when perfectly still, or +1 per level if moving. Clothing reduces this bonus to +1 per level when you are motionless, with no bonus if you are moving (unless the clothing is, in the GM's opinion, camouflaged relative to your current environment).

Chameleon does not normally help in the dark or against someone relying upon senses other than sight. However, you can specify that your ability is effective against a particular visual or scanning sense (e.g., Infravision or Radar) *instead* of normal vision.

**Special Enhancements**  
**Extended:** Your ability affects more than one visual or scanning sense. Each sense beyond the first is +20%.

**Special Limitations**  
**Always On:** You cannot turn this ability off. Strangers react at -1; the flickering effect is irritating. -10%.

**Channeling**  
You can become a conduit for the spirit world, allowing spirits to speak through you. To do so, you must enter a trance, achieved through one minute of concentration and a Will roll (at +2 if you have Autotrance, p. 101). You are unaware of the world around you while you are in this state.

Once you have entered your trance, any spirit in the immediate vicinity can enter your body and use it to speak or write messages. The GM controls what the spirit does or says. The spirit answers questions put to it by others, but it is not bound to tell the truth. **10 points**

*This is a minor form of possession: the spirit can use your body only to communicate. However, if it has the Possession ability (p. 75), it is considered to be touching you, and can attempt *full* possession while you are in a trance. You are considered “wary,” and thus get +5 to resist.*
(+3 reactions), and may provide advice, introductions, and small loans, if asked. The level of assistance might occasionally approach that of Contacts (p. 44). If you expect anything more, though, buy Allies (p. 36) or Patrons (p. 72).

This advantage cuts both ways. If you take it, you can be asked, when at home (at the GM’s whim), to provide NPCs with exactly the same sort of hospitality you claim while away. This may become an adventure hook! If you refuse such aid, you will eventually get a bad name and lose this advantage.

**Clairsentience 🕵️‍♀️**

*50 points*

You can displace all of your ranged senses (for humans: sight, hearing, and smell) to a point outside your body. This “viewpoint” must be a specific location within 10 yards. You can modify this range with Increased Range (p. 106) or Reduced Range (p. 115). You can double your range temporarily by spending 2 FP per minute.

To initiate Clairsentience, pick the desired viewpoint (which can be inside something) and its facing, concentrate for one minute, and then make an IQ roll. If the viewpoint is out of sight, you must specify distance and direction, and the roll is at -5.

On a success, you can use your ranged senses as if you were physically present at the viewpoint (this means you cannot sense the environment around your body!). Your vision ignores darkness penalties completely. You cannot see through solid objects, but if your viewpoint were inside (for example) a closed chest, you would see what was inside despite the lack of light. If you are using or subjected to range-dependent abilities (e.g., spells), calculate all ranges from your body, not your viewpoint. You can maintain Clairsentience for as long as you like.

On failure by 1, your senses go to some other viewpoint of the GM’s choosing. On any greater failure, nothing happens at all. Critical failure cripples your ability for 1d hours.

To return your displaced senses, move them elsewhere, or change their facing (usually only important for vision), you must concentrate for one second and make another IQ roll. However, a viewpoint inside a moving object (e.g., a car) will move with that object with no special concentration on your part. You can only have one viewpoint at a time – you cannot put hearing in one location, vision in another, etc.

**Special Limitations**

- **Clairaudience**: Only your sense of hearing is displaced. -30%.
- **Clairosmia**: Only your sense of smell is displaced. -60%.
- **Clairvoyance**: Only your sense of sight is displaced. -10%.
- **ESP**: Your ability is part of the ESP psi power (see p. 255). -10%.
- **Visible**: Your senses have a visible manifestation – for instance, a floating face. -10%.

**Claws 🐈** *(Variable)*

You have claws. This advantage modifies all your hands and feet; there is no discount for claws on only some of your limbs. There are several variations:

- **Blunt Claws**: Very short claws, like those of a dog. Add +1 per die to the damage you inflict with a punch or kick; e.g., 2d-3 becomes 2d-1. *3 points.*
- **Hooves**: Hard hooves, like those of a horse. Add +1 per die to the damage you inflict with a kick, and give your feet (only) +1 DR. *3 points.*
- **Sharp Claws**: Short claws, like those of a cat. Change the damage you inflict with a punch or kick from crushing to cutting. *5 points.*
Clerical Investment ♦ 5 points

You are an ordained priest of a recognized religion. You enjoy a number of privileges that a layman lacks, notably the authority to preside over weddings, funerals, and similar ceremonies. This gives you a +1 reaction bonus from co-religionists and those who respect your faith, and entitles you to use a title – Father, Sister, Rabbi, etc.

Remember that not all clerics are "good"! Aka'Ar, high priest of the unholy Cult of Set, is also a vested priest. The blessings and marriages he performs are as meaningful to his followers as those of a vicar are to his parish. And – if Set so wills – Aka'Ar can perform exorcisms as potent as those of a Christian priest, if not more so. After all, Aka'Ar has a better working knowledge of demons . . .

Clerical Investment is purely social in nature. It does not confer miraculous powers. If you wish to wield divine power by proxy, take Blessed (p. 40), Power Investiture (p. 77), or True Faith (p. 94).

Clerical Investment includes Religious Rank 0 (see p. 30). If you want more influence within your church, buy up your Rank.

Clinging ♦ 20 points

You can walk or crawl on walls and ceilings. You can stop at any point and stick to the surface without fear of falling. Neither feat requires a roll against Climbing skill, provided the surface is one you can cling to. Move while clinging is half your Basic Move.

If you are falling and try to grab a vertical surface to break your fall, the GM must first decide whether there is anything in reach. If there is, make a DX roll to touch the surface, and then make a ST roll at -1 per 5 yards already fallen. If you succeed, you stop your fall. Otherwise, you continue to fall – but you may subtract 5 yards from the height of the fall thanks to the slowing effect of the failed Clinging attempt. Variations in gravity affect these distances; e.g., in 0.5G, the ST roll would be at -1 per 10 yards.

Special Limitations

Specific: You can only cling to a particular substance. Common materials, such as brick, metal, rock, or wood, are -40%; uncommon materials, such as adobe, ice, or rubber, are -60%; absurd materials, such as chocolate, are -80%.

Combat Reflexes 15 points

You have extraordinary reactions, and are rarely surprised for more than a moment. You get +1 to all active defense rolls (see Defending, p. 374), +1 to Fast-Draw skill, and +2 to Fright Checks (see Fright Checks, p. 360). You never “freeze” in a surprise situation, and get +6 on all IQ rolls to wake up, or to recover from surprise or mental “stun.” Your side gets +1 on initiative rolls to avoid a surprise attack – +2 if you are the leader. For details, see Surprise Attacks and Initiative (p. 393).

Combat Reflexes is included in Enhanced Time Sense (p. 52). If you have ETS, you cannot also take Combat Reflexes.

Common Sense 10 points

Any time you start to do something the GM feels is STUPID, he will roll against your IQ. A successful roll means he must warn you: “Hadn’t you better think about that?” This advantage lets an impulsive player take the part of a thoughtful character.

Compartmentalized Mind 50 points/level

Your mental coordination gives you, in effect, more than one mind. Each mind – or “compartment” – functions independently and at full capability. Your compartments are identical, but hypnotism, magic, psionics, and the like affect them separately (e.g., one compartment could be hypnotized without affecting any of the others).

This advantage does not allow your body to perform more than one task. A normal character may select one maneuver on his turn in combat. This may be physical or mental. Each level of Compartmentalized Mind adds one extra mental maneuver to this allotment. For instance, Compartmentalized Mind 1 would let you perform one mental maneuver and one physical maneuver (e.g., Concentrate on a spell and Attack) or two mental maneuvers (e.g., Concentrate on two spells), but never more than one physical maneuver – for that, see Extra Attack (p. 53).

If one compartment is under external influence, roll a Quick Contest of Will to see whether it gains control of the body. The compartment currently in control of the body rolls at +1. Battling compartments may attempt to use mental powers on each other. Treat them as completely separate minds for this purpose, each with your IQ, Will, and mental abilities (such as Mind Shield).

Two variations on this advantage are available for vehicles built as characters:

Controls: Each level buys one set of controls. Controls let an operator perform his own physical or mental maneuvers using your abilities (e.g., Innate Attack or Radar), as per the rules for vehicular combat (see p. 467). The operator directs all actions of an IQ 0 vehicle with this advantage. Physical limits still apply; for instance, a vehicle can make no more attacks than it has ready weapons. Resolve conflicts between operators by rolling a Quick Contest of vehicle operation skill. 25 points/level.

Dedicated Controls: As Controls, but each set of controls handles a specific task; e.g., “tail gunner.” The person manning them can’t operate anything else. 10 points/level.

Constriction Attack ♦ 15 points

Your musculature is optimized for crushing your opponents – whether by “hugging” like a bear or constricting like a python. To use this ability, you must first successfully grapple your intended victim, whose Size Modifier (p. 19) cannot exceed your own. On your next turn, and each successive turn, roll a Quick Contest: your ST vs. your victim’s ST or HT, whichever is higher. If you win, your victim takes damage equal to your margin of victory; otherwise, he takes no damage.
**Contact Group**

**Variable**

You have a network of Contacts (see Contacts, below) placed throughout a particular organization or social stratum. You must specify a corporation, criminal syndicate, military unit, police department, or similar organization, or the underworld, merchants, upper class, etc. of one particular town. Broader Contact Groups are not allowed.

You may request information from a Contact Group exactly as you would an individual Contact, using the same rules for frequency of appearance, effective skill, and reliability. The difference is that a Contact Group's effective skill reflects ability at an entire category of skills — e.g., "business skills" if your Contact Group is a corporation, or "military skills" if your Contact Group is a military unit — as opposed to one specific skill. You must define this area of knowledge when you purchase the Contact Group, and it must be appropriate to the organization.

The GM rolls against the group's effective skill when you request any information that it could reasonably provide. However, this is an abstract success roll, not a roll against a specific skill. For instance, a police Contact Group could provide ballistics comparisons, criminal profiles, legal advice, police records, and introductions to criminals. It would not specifically use Forensics, Criminology, Law, Administration, or Streetwise skills for this, but the information provided might be appropriate to any of these "police skills."

To determine the point cost of a Contact Group, select its effective skill, frequency of appearance, and reliability level just as you would for a simple Contact, then multiply the resulting cost by 5.

**Contacts**

**Variable**

You have an associate who provides you with useful information, or who does small (pick any two of "quick," "nonhazardous," and "inexpensive") favors for you. The point value of a Contact is based on the skill he uses to assist you, the frequency with which he provides information or favors, and his reliability as a person.

**Effective Skill of Contact**

First, decide on the type of Contact you have. He might be anything from a wino in the right gutter to a head of state, depending on your background. What is important is that he has access to information, knows you, and is likely to react favorably. (Of course, offering cash or favors is never a bad idea; the GM will set the Contact's "price."

Next, choose the useful skill your Contact provides. This skill must match the Contact's background; e.g., Finance for a banker or Forensics for a lab technician. Since the GM rolls against this skill when you request aid from your Contact, you should select a skill that can provide the results you expect. If you want ballistics comparisons, take a Contact with Forensics, not Finance!

After that, select an effective skill level. This reflects the Contact's connections, other skills, Status, etc. It need not be his actual skill level (the GM will set this, if it matters). For instance, the president of a local steel mill might have business-related skills of 12-14, but his effective skill might be 18 because of his position in the company. This skill level determines the Contact's base cost:

<table>
<thead>
<tr>
<th>Effective Skill</th>
<th>Base Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1 point</td>
</tr>
<tr>
<td>15</td>
<td>2 points</td>
</tr>
<tr>
<td>18</td>
<td>3 points</td>
</tr>
<tr>
<td>21</td>
<td>4 points</td>
</tr>
</tbody>
</table>

Add 1 point to these costs for Contacts who can obtain information using supernatural talents (ESP, magical divination, etc.). This is common for spirits, wizards, etc.

**Frequency of Appearance**

Select a frequency of appearance, as explained under Frequency of Appearance (p. 36), and apply its multiplier to the base cost of the Contact. When you wish to reach your Contact, the GM rolls against his frequency of appearance. On a failure, the Contact is busy or cannot be located that day. On a 17 or 18, the Contact cannot be reached for the entire adventure! On a success, the GM will roll against the Contact's effective skill once per piece of information or minor favor you request.

**Reliability**

Contacts are not guaranteed to be truthful. Reliability multiplies the Contact's point cost as follows:

- **Completely Reliable:** Even on a critical failure on his effective skill roll, the Contact's worst response will be "I don't know." On an ordinary failure, he can find information in 1d days. x3.
- **Usually Reliable:** On a critical failure, the Contact lies. On any other failure, he doesn't know now, " . . . but check back in (1d) days." Roll again at that time; a failure then means he can't find out at all. x2.
- **Somewhat Reliable:** On a failure, the Contact doesn't know and can't find out. On a critical failure, he lies — and on a natural 18, he lets the opposition or authorities (as appropriate) know who is asking questions. x1.
- **Unreliable:** Reduce effective skill by 2. On any failure, he lies; on a critical failure, he notifies the enemy. x1/2 (round up; minimum final cost is 1 point).

**Money Talks**

Bribery, whether cash or favors, motivates a Contact and increases his reliability level. Once reliability reaches "usually reliable," further levels of increase go to effective skill; bribery cannot make anyone completely reliable!

A cash bribe should be about equivalent to one day's income for a +1 bonus, one week's income for +2, one month's for +3, and one year's
Contacts in Play
You may add new Contacts in play, provided you can come up with a good in-game justification. The GM might even turn an existing NPC into a Contact for one or more PCs – possibly in lieu of character points for the adventure in which the PCs developed the NPC as a Contact. For instance, the reward for an adventure in which the party helped solve a bank robbery might be a knowledgeable, reliable police Contact.

Examples of Contacts
The list of all possible Contacts – and their skills – would fill an entire book. Here are just a few examples:

Business. Business owners, executives, secretaries, and even the mailroom flunky can supply information on business dealings. They generally provide a business skill, such as Accounting, Administration, or Finance. A mail boy or typist might have effective skill 12; the president’s secretary has skill 15; a senior executive or accountant has skill 18; and the CEO, president, or chairman of the board has skill 21.

Military. This could be anyone from an enlisted grunt to a general. Such Contacts might provide information on troop movements, details on secret weapons or tactics, or top-level strategy. This could take the form of Savoir-Faire (Military), Strategy, or Tactics skill – or perhaps a technical skill, such as Engineer. A Rank 0 soldier would have effective skill 12, a Rank 1-2 NCO would have skill 15, a Rank 3-5 officer would have skill 18, and a Rank 6 or higher officer would have skill 21.

Police. Anyone connected with law enforcement and criminal investigations: beat cops, corporate security, government agents, forensics specialists, coroners, etc. Typical skills are Criminology, Forensics, Intelligence Analysis, and Law. Beat cops and regular private security officers have effective skill 12; detectives, federal agents, and records clerks are skill 15; administrators (lieutenants, captains, Special Agents in Charge, etc.) are skill 18; and senior officers (sheriffs, chiefs of police, District Superintendents, Security Chiefs, etc.) are skill 21.

Street. Thugs, fences, gang members, mobsters, and the like can provide information on illicit activities, local criminal gossip, upcoming crimes, etc. Most provide Streetwise skill. “Unconnected” crooks (those who are not part of the local criminal organization) have effective skill 12; “connected” ones are skill 15; mob lieutenants and other powerful criminals are skill 18; and an actual crime lord (e.g., the Don, clan chief, or Master of the Thieves’ Guild) has skill 21.

for +4. Favors should be of equivalent worth, and should always be something that you actually play out in the game.

The bribe must also be appropriate to the Contact. A diplomat would be insulted by a cash bribe, but might welcome an introduction into the right social circle. A criminal might ask for cash but settle for favors that could get you in trouble. A police detective or wealthy executive might simply want you to “owe him one” for later . . . which could set off a whole new adventure, somewhere down the road.
**Courtesy Rank**

see Rank, p. 29

**Cultural Adaptability** ♦

10 or 20 points

You are familiar with a broad spectrum of cultures. When dealing with those cultures, you never suffer the -3 “cultural unfamiliarity” penalty given under Culture (p. 23). This is definitely a cinematic ability! Point cost depends on the scope of your familiarity:

Cultural Adaptability: You are familiar with all cultures of your race. 10 points.

Xeno-Adaptability: You are familiar with all cultures in your game world, regardless of race. 20 points.

**Cultural Familiarity**

see p. 23

**Cybernetics** ♦

Variable

Treat most cybernetic implants as equivalent advantages: Infravision for a bionic eye, Damage Resistance for dermal armor, etc. Some implants may qualify for the Temporary Disadvantage limitation (p. 115); suitable temporary disadvantages include Electrical (p. 134) and Maintenance (p. 143). These apply to the implant, not to your overall capabilities.

**Damage Resistance** ♦ ♦

5 points/level

Your body itself has a Damage Resistance score. Subtract this from the damage done by any physical or energy attack after the DR of artificial armor (you can normally wear armor over natural DR) but before multiplying the injury for damage type. By default, natural DR does not protect your eyes (or windows, if you are a vehicle) or help against purely mental attacks, such as telepathy.

Normal humans cannot purchase DR at all. Creatures with natural armor can buy DR 1 to 5. Thick skin or a pelt would be DR 1; pig hide, armadillo shell, a heavy pelt, or scales like those of a lizard would be DR 2; rhinoceros hide or a pangolin’s armor plates would be DR 3; alligator scales or elephant hide would be DR 4; and a giant tortoise would have DR 5. Robots, supers, supernatural entities, etc. can purchase any amount of DR, subject to GM approval.

Many special modifiers are available to change the basic assumptions of this advantage.

**Special Enhancements**

Absorption: You can absorb damage and use it to enhance your abilities. Each point of DR stops one point of damage and turns it into one character point that you can use to improve traits (anything but skills) temporarily. You store these points in a “battery” with capacity equal to DR (e.g., DR 10 gives a 10-point battery). Once this battery is full, each point of DR will still stop one point of damage, but will not convert it into a character point. You do not have to use stored points immediately, but you cannot reallocate points once used. You lose absorbed points – unused ones first – at the rate of one

---

**Limited Defenses**

When you buy Damage Resistance – or any advantage that protects against damage (as opposed to non-damaging effects) – you may specify that it is only effective against certain damage types. This is a limitation that reduces the cost of the advantage. Attacks fall into four rarity classes for this purpose:

**Very Common:** An extremely broad category of damage that you are likely to encounter in almost any setting. Examples: ranged attacks, melee attacks, physical attacks (from any material substance), energy attacks (e.g., beam weapons, electricity, fire, heat and cold, and sound), or all damage with a specified advantage origin (chi, magic, psionics, etc.). -20%.

**Common:** A broad category of damage. Examples: a standard damage type (one of burning, corrosion, crushing, cutting, impaling, piercing, or toxic), a commonly encountered class of substances (e.g., metal, stone, water, wood, or flesh), a threat encountered in nature and produced by exotic powers or technology (e.g., acid, cold, electricity, or heat/fire), or a refinement of a “Very Common” category (e.g., magical energy). -40%.

**Occasional:** A fairly specific category of damage. Examples: a common substance (e.g., steel or lead), any one specific class of damage that is usually produced only by exotic abilities or technology (e.g., particle beams, lasers, disintegrators, or shaped charges), or a refinement of a “Common” category (e.g., magical electricity, piercing metal). -60%.

**Rare:** An extremely narrow category of damage. Examples: charged particle beams, dragon’s fire, piercing lead, ultraviolet lasers, or an uncommon substance (e.g., silver or blessed weapons). -80%.

Unless specified otherwise, limited DR works only against direct effects. If you are levitated using magic and then dropped, the damage is from the fall; “DR vs. magic” would not protect. If a magic sword struck you, “DR vs. magic” would only protect against the magical component of its damage. Similarly, “DR vs. trolls” would not help against a boulder hurled by a troll – the damage is from a boulder, not a troll. Be sure to work out such details with the GM before setting the value of the limitation. If the GM feels that a quality would never directly influence damage, he need not allow it as a limitation!
point per second. You lose enhanced abilities as the points drain away. *(Exception: If you are missing HP or FP, you can heal yourself. Restoring one HP drains 2 stored points immediately; restoring one FP drains 3 points. Such healing is permanent. Only HP or FP in excess of your usual scores drain away.)* You cannot absorb damage from your own ST or attack abilities. +80% if absorbed points can only enhance one trait (determined when you create your character) or can only heal; +100% if you can raise any trait.

**Force Field:** Your DR takes the form of a field projected a short distance from your body. This protects your entire body – including your eyes – as well as anything you are carrying, and reduces the damage from attacks before armor DR. Effects that rely on touch (such as many magic spells) only affect you if carried by an attack that does enough damage to pierce your DR. +20%.

**Hardened:** Each level of Hardened reduces the armor divisor of an attack by one step. These steps are, in order: “ignores DR,” 100, 10, 5, 3, 2, and 1 (no divisor). +20% per level.

**Reflection:** Your DR “bounces back” any damage it stops at your attacker. The remaining damage affects you normally. The attacker doesn’t get an active defense against the first attack you reflect back at him, but gets his usual defenses against subsequent reflected attacks. Reflection only works vs. direct hits! It cannot reflect damage from explosions, fragments, poison gas, or anything else that affects an entire area. This enhancement is mutually exclusive with Absorption. +100%.

**Special Limitations**

**Ablative:** Your DR stops damage once. Each point of DR stops one point of basic damage but is destroyed in the process. Lost DR “heals” at the same rate as lost HP (including the effects of Regeneration, p. 80). Use this to represent supers who can absorb massive punishment but who lack the mass to justify a large HP score. -80%.

**Can’t Wear Armor:** Your body is designed in such a way that you cannot or will not wear body armor or clothing. -40%.

**Directional:** Your DR only protects against attacks from one direction. -20% for the front (F); -40% for the back (B), right (R), left (L), top (T), or underside (U). Humanoids may only take this limitation for front and back.

**Flexible:** Your DR is not rigid. This leaves you vulnerable to blunt trauma (see p. 379). -20%.

**Limited:** Your DR applies only to certain attack forms or damage types. See Limited Defenses (box) for details.

**Partial:** Your DR only protects a specific hit location. This is worth -10% per -1 penalty to hit that body part (see p. 398). For instance, an animal with butting horns and a thick skull might have “Skull only,” for -70%. “Torso only” is -10%, and also protects the vital organs. When you take this limitation for arms, legs, hands, or feet, the DR protects all limbs of that type. If it only protects one limb, the limitation value doubles (e.g., arms are -2 to hit, so a single arm would be -40%). If you have arms, legs, etc. with different penalties, use the least severe penalty to calculate limitation value.

**Semi-Ablative:** When an attack strikes semi-ablative DR, every 10 points of basic damage rolled removes one point of DR, regardless of whether the attack penetrates DR. Lost DR “heals” as for Ablative (and you cannot combine the two). -20%.

**Tough Skin:** By default, Damage Resistance is “hard”: armor plate, chitin, etc. With this limitation, your DR is merely tough skin. Any effect that requires a scratch (e.g., poison) or skin contact (e.g., electrical shock or Pressure Points skill) affects you if the attack carrying it penetrates the DR of any armor you are wearing – even if it does exactly 0 damage! Your natural DR, being living tissue, provides no protection at all against such attacks. This limitation includes all the effects of the Flexible limitation (see above); you cannot take both. It is mutually incompatible with Force Field. -40%.

**“Layered” Defenses**

You may have multiple “layers” of DR with different combinations of modifiers. You must specify the order of the layers – from outermost to innermost – when you create your character. You may not change this order once set.

**Danger Sense**

15 points

You can’t depend on it, but sometimes you get this prickly feeling right at the back of your neck, and you know something’s wrong . . . If you have Danger Sense, the GM rolls once against your Perception, secretly, in any situation involving an ambush, impending disaster, or similar hazard. On a success, you get enough of a warning that you can take action. A roll of 3 or 4 means you get a little detail as to the nature of the danger.

Danger Sense is included in Precognition (p. 77); if you have the latter trait, you cannot also have Danger Sense.

**Special Limitations**

ESP: Your ability is part of the ESP psi power (see p. 255). -10%.

**Daredevil**

15 points

Fortune seems to smile on you when you take risks! Any time you take an unnecessary risk (in the GM’s opinion), you get a +1 to all skill rolls. Furthermore, you may reroll any critical failure that occurs during such high-risk behavior.

**Example:** A gang of thugs opens fire on you with automatic weapons. If you crouch down behind a wall and return fire from cover, Daredevil gives you no bonuses. If you vault over the wall and charge the gunmen, screaming, it provides all of its benefits!

**Dark Vision**

25 points

You can see in absolute darkness using some means other than light, radar, or sonar. You suffer no skill penalties for darkness, no matter what its origin. However, you cannot see colors in the dark.

**Special Enhancements**

Color Vision: You can see colors in the dark. +20%.
**Destiny ★★★ Variable**

Your fate is preordained. This is considered an advantage if you are destined for great things – although this might not always be clear, and might even be inconvenient at times. For a disadvantageous Destiny, see p. 131.

When you choose this advantage, you may only specify its point value. The GM will secretly determine the nature of your Destiny, according to its point value and the dictates of the campaign. You might discover some clues about your Destiny via magical divination or similar techniques, but you are highly unlikely to learn its full extent until it is fulfilled. Note also that a Destiny may change as the campaign develops.

Be aware that this advantage gives the GM absolute license to meddle with your life – the GM must make the Destiny work out! Working out a good Destiny and making sure it comes to pass require considerable ingenuity on the part of the GM. The GM may wish to forbid this advantage if he feels it would send the campaign off the rails.

The point value of the Destiny determines its impact:

*Great Advantage:* You are fated to achieve greatness within your lifetime. In the end, everyone will know and praise your name! Sooner or later, something will happen to bring this Destiny to fruition. Note that this does not guarantee “success.” If you choose to jump in front of an assassin’s knife during your first game session, the GM might just decide the Destiny is fulfilled . . . you died a hero! 15 points.

*Major Advantage:* As above, but to a lesser extent. Alternatively, you might be doomed to die in a particular place or in a particular fashion: at sea, by the hand of an emperor, underground, or whatever. You can be grievously wounded – even maimed – under other circumstances, but you will not die. If you avoid the circumstances that would fulfill your Destiny, knowingly or otherwise, you might find that Fate has a few surprises. The sea might flood your home while you sleep, the general against whom you march might be the future emperor; or Mt. Vesuvius might bury you under tons of ash. 10 points.

*Minor Advantage:* You are fated to play a small part in a larger story, but this part will reflect to your credit. In game terms, you are guaranteed one significant victory. 5 points.

If you fulfill your Destiny and survive, it’s over – but you might feel its repercussions for years to come. In general, the GM should let you put the character points spent on an advantageous Destiny toward a positive Reputation. A Destiny that goes unnoticed once fulfilled is not much of a Destiny!

**Detect ★★★ Variable**

You can detect a specific substance or condition, even when it is shielded from the five human senses. This requires one second of concentration, after which the GM will secretly make a Sense roll for you (see Sense Rolls, p. 358). The range modifiers from the Size and Speed/Range Table (p. 550) apply. You may buy a special Acute Sense (p. 35) to improve the roll, thereby increasing your effective range.

On a success, the GM tells you the direction to the nearest significant source of the substance, and give you a clue as to the quantity present. On a failure, you sense nothing.

Detect also includes the ability to analyze what you detect. This requires an IQ roll; the better the roll, the more precise the details. For instance, if you had Detect (Metal), you could tell gold from iron on a successful IQ roll, and might learn details – such as whether the gold is in the form of ore or bars, and its precise purity – on a critical success.

The base cost of Detect is as follows:

- *Rare* (sorceresses, fire magic, zombies, gold, radar, radio): 5 points.
- *Occasional* (spellcasters, magic, undead, precious metal, electric fields, magnetic fields, radar and radio): 10 points.
- *Common* (humans, supernatural phenomena, supernatural beings, metal, electric and magnetic fields): 20 points.

*Very Common* (all life, all supernatural phenomena and beings, all minerals, all energy): 30 points.

Note that the ability to detect certain phenomena can often justify other advantages. For instance, Detect (Magnetic Fields) could explain Absolute Direction.

**Special Enhancements**

*Precise:* On a successful Sense roll, you also learn the distance to whatever you detect. +100%.

*Signal Detection:* You can detect an active transmission of some sort, such as a radio, radar, or laser; see Scanning Sense (p. 81) and Telecommunication (p. 91). You suffer no range penalties, but must be within twice the signal’s own range and (if the signal is directional) within its path. +40%.

**Special Limitations**

*Vague:* You can only detect the presence or absence of the target substance. Direction and quantity are revealed only on a critical success, and you cannot analyze what you detect. This limitation is mutually exclusive with Precise. -50%.

**Digital Mind ★★★**

5 points

You are a sentient computer program – possibly an artificial intelligence or an “upload” of a living mind. By default, you inhabit a body that includes a computer with Complexity equal to at least half your IQ; see Computers (p. 472).

You are completely immune to any power defined as “Telepathic,” and to magic spells that specifically affect living minds. However, computer viruses and abilities that affect Digital Minds can affect you; you can be taken offline (or even stored, unconscious, as data); and those with Computer Hacking or Computer Programming skill can gain access to your data . . . and possibly read or alter your consciousness!

You are likely to have the Machine meta-trait (p. 263), but this is not mandatory, as you could be a computer-like mind inside an organic body (e.g., a bio-computer or a brain implant). The Reprogrammable disadvantage (p. 150) is also common for Digital Minds, as is the Automaton meta-trait (p. 263), but you do not
have to possess either trait. Many advantages are also possible but not automatic:

Computing Power: If you operate faster than a human mind, buy Enhanced Time Sense (p. 52). If you can add advantages or skills temporarily by running programs, buy Modular Abilities (p. 71).

Copies: If you can run multiple copies of your mind on a single computer system, buy Compartmentalized Mind (p. 43). If you can create loyal copies that run on other systems, buy Duplication (p. 50) with the Digital limitation. If you have copies backed up offline, buy Extra Life (p. 55).

Uploading: If you can actively “upload” yourself into other computers, buy Possession (p. 75) with the Digital limitation. If you can do this easily, buy extra bodies as Puppets (p. 78).

**Discriminatory Hearing**

15 points

You have a superhuman ability to distinguish between sounds. You can always identify people by voice, and can recognize individual machines by their “sound signature.” You may memorize a sound by listening to it for at least one minute and making a successful IQ roll. On a failure, you must wait at least one full day before making a repeated attempt.

You get +4 (in addition to any Acute Hearing bonuses) on any task that utilizes hearing, and receive +4 to Shadowing skill when following a noisy target.

To simulate the passive sonar used by submarines, add a -30% Accessibility limitation, “Only underwater.”

**Discriminatory Smell**

15 points

Your sense of smell is far beyond the human norm, and can register distinctive odors for practically everything you may encounter. This allows you to recognize people, places, and things by scent. You may memorize a scent by sniffing it for at least one minute and making a successful IQ roll. On a failure, you must wait at least one full day before making a repeated attempt.

You get +4 (in addition to any Acute Taste and Smell bonuses) on any task that utilizes the sense of smell, and receive +4 to Tracking skill.

**Destiny is considered an advantage if you are destined for great things – although this might not always be clear, and might even be inconvenient at times.**

If you actually become ill when exposed to the odor of a particular substance, take the Temporary Disadvantage limitation (p. 115). The most common effect is Revulsion (p. 151), but the GM may choose to allow other temporary disadvantages.

**Special Enhancements**

Emotion Sense: You can detect a person or animal’s emotional state by odor. This functions as the Empathy advantage (p. 51), but you must be within 2 yards of the subject. +50%.

**Discriminatory Taste**

10 points

This talent functions in most ways like Discriminatory Smell (above), but enhances the sense of taste instead, so tracking is not possible. You must ingest a small quantity of the material to be examined; for a living subject, this means bodily fluids. This gives you an IQ roll to recognize the taste, identify whether a substance is safe to eat, etc. You can perform a detailed “analysis” with a roll against a suitable skill (Chemistry, Cooking, Pharmacy, Poisons . . .). You get +4 (in addition to any Acute Taste and Smell bonuses) on any task that utilizes the sense of taste.

**Doesn’t Breathe**

20 points

You do not breathe or require oxygen. Choking and strangulation attempts cannot harm (or silence!) you, and you are immune to inhaled toxins. You are still affected by contact poisons, pressure, and vacuum; take Sealed (p. 82), Pressure Support (p. 77), and Vacuum Support (p. 96), respectively, to resist those threats.

**Special Limitations**

Gills: You can extract oxygen from water, allowing you to remain submerged indefinitely. You suffocate if the water contains no dissolved oxygen. You are immune to strangulation and “the bends.” If you can only survive underwater, and suffocate in air as quickly as a normal human would drown underwater, Doesn’t Breathe (Gills) is a 0-point feature; otherwise, -50%.

Oxygen Absorption: As Gills, but you can absorb oxygen through the surface of your body whether it is in the air, a liquid, or another medium. Your body does not absorb poisonous gases, but you will suffocate if there is no oxygen available. You can use breathing equipment in space (your lungs are capable of working normally). You may not have the Sealed advantage. -25%.

Oxygen Combustion: As Oxygen Absorption, but you cannot breathe underwater or anywhere else fire cannot burn. -50%.

Oxygen Storage: You need to breathe, but you can go for extended periods of time without doing so; perhaps you store oxygen (like a whale) or have superior blood oxygenation. This differs from Breath-Holding in that you are completely immune to “the bends” while your oxygen supply holds out. If you can effectively “hold your breath” for 25 times as long as usual, this is -50%; 50 times, -40%; 100 times, -30%; 200 times, -20%; 300 times, -10%.
**Doesn’t Eat or Drink 🍼 ☕**

10 points

You do not require food, water, or fuel. Your body is powered in some other manner: solar power, ambient magical energy, etc. A sufficiently rare energy source might qualify you for Dependency (p. 130).

**Doesn’t Sleep 🛌 ☽**

20 points

You do not have to sleep at all. You can ignore all ill effects from missed nights of rest.

**Dominance 🌋 ☽**

20 points

You can “infect” others with a supernatural condition – vampirism, lycanthropy, etc. – and exert absolute control over them. This trait is only appropriate for supernatural beings that spread their “curse” through infection, and only affects members of susceptible races (typically your original race and very similar races). The GM is the judge of which curses are spread this way and who is susceptible.

When you buy Dominance, you must specify one natural attack – Claws, Innate Attack, Vampiric Bite, etc. – that delivers the infection. Anyone you damage this way must roll 3d vs. the HP of injury he received (maximum one roll per day). If he rolls under the damage amount, he becomes infected, and will change into the same kind of creature as you in 2d days, or at the GM’s discretion, without suitable supernatural intervention. The GM is free to impose additional conditions for infection; for instance, the victim might have to suffer three attacks, or share your blood, or even die before making the roll above.

Once the transition is complete, the victim acquires your supernatural racial template (Vampire, Werewolf, etc.) plus Slave Mentality (p. 154). He becomes your subordinate. If he goes on to infect others, his victims will acquire the same traits and serve you as well.

Dominance itself costs 20 points, but to control a new victim, you must have sufficient unspent points to buy him as an Ally (p. 36) with the enhancements “Minion” (due to his Slave Mentality) and “Special Abilities” (because he can create new servitors for you). You can choose any frequency of appearance, and may improve this later on with earned points. If you lack the points to buy you victim as an Ally – even at a frequency of “6 or less” – he will still be infected but he will not become your slave.

Dominance persists until you die (truly die, for undead), or your slave grows in power and you cannot (or choose not to) spend the points to keep him as an Ally, or the GM rules the curse is broken via supernatural means. If any of these things occur, your victim will lose Slave Mentality and become free-willed. You may use the points spent on your former Ally to dominate new victims.

See *Infectious Attack* (p. 140) for the disadvantageous form of Dominance.

**Double-Jointed**

see *Flexibility*, p. 56

**Duplication 🌋/レストUpperCase**

35 points/copy

You can split into two or more bodies (“Dupes”), each possessing your full knowledge and powers (but not copies of your equipment, unless you buy a special enhancement). It takes one second and a Concentrate maneuver to separate or merge. When your Dupes
merge, your FP and HP are the average of all your copies' FP and HP at that time. Your combined self remembers everything experienced by any Dupe.

Dupes have no special ability to coordinate with one another. For that, buy Telesend (see Telecommunication, p. 91). If your Telesend works only with your Dupes, you may take the Racial limitation. You may combine Telesend with a Mindlink (p. 70) with your Dupes, in which case you are in constant telepathic contact – no die rolls required.

If one of your Dupes dies, all the others immediately take 2d damage and are stunned. This is mental stun if you define Duplication as a mental trait, physical stun if you define it as a physical trait. The IQ or HT roll to recover is at -6. You also lose the points you spent for that Dupe. The GM may allow you to buy back a dead Dupe with unspent points. Alternatively, an Extra Life (p. 55) will let you bring back any one dead Dupe. Your point value drops by the price of buying back a Dupe.

Special Enhancements

**Duplicated Gear:** Your Dupes appear with copies of Signature Gear (p. 85) that you are carrying or wearing. Duplicated equipment vanishes when you merge, even if it becomes separated from you. Treat your equipment's HP, ammunition, energy supply, etc. just like your own HP and FP when you merge. +100%.

**No Sympathetic Injury:** If one of your Dupes is killed, the others are not stunned or hurt. +20%.

Special Limitations

**Digital:** Your Dupes are software copies of your mind, not physical copies of your body. They can possess other computers or occupy spare Puppets (p. 78). You may only take this limitation if you have both Digital Mind (p. 48) and Possession (Digital) (p. 75). +60%.

**Shared Resources:** Your Dupes do not share your full FP and HP; instead, you must distribute your FP and HP among them. For instance, if you had 15 HP and one Dupe, you could split your HP 7 and 8, 2 and 13, or in any other combination that totaled 15. You need not distribute FP and HP proportionally; with 15 HP and 15 FP, you could give one copy 3 FP and 9 HP and the other 12 FP and 6 HP. When your bodies re-combine, add their FP and HP instead of averaging. -40%.

### Eidetic Memory 📝

5 or 10 points

You have an exceptionally good memory. Anyone may attempt an IQ roll to recall the general sense of past events – the better the roll, the truer the memory, but the details are sketchy. With this talent, you automatically succeed at these “memory rolls,” and you often recall precise details. This trait comes in two levels:

**Eidetic Memory:** You automatically remember the general sense of everything you concentrate on, and can recall specific details by making an IQ roll. It is possible to “learn” this advantage in play (bards and skalds often acquire it to recall poems and songs). 5 points.

**Photographic Memory:** As above, but you automatically recall specific details, too. Any time you, the player forget a detail your character has seen or heard, the GM or other players must remind you – truthfully! 10 points.

This trait affects recall, not comprehension, and so does not benefit skills. However, it gives a bonus whenever the GM requires an IQ roll for anything you concentrate on, and can recall specific details by making an IQ roll. Learning: +5 for Eidetic Memory, +10 for Photographic Memory.

### Elastic Skin 🦍

20 points

You can alter your skin and facial features (but not clothing or makeup) to duplicate those of another member of your race or a very similar race. This takes 10 seconds, and requires a Disguise roll if you try to duplicate a particular individual. It takes three seconds to return to your original form. This ability gives +4 to all Disguise rolls.

### Empathy 🎯

5 or 15 points

You have a “feeling” for people. When you first meet someone – or are reunited after an absence – you may ask the GM to roll against your IQ. He will tell you what you “feel” about that person. On a failed IQ roll, he will lie!

This talent is excellent for spotting impostors, possession, etc., and for determining the true loyalties of NPCs. You can also use it to determine whether someone is lying . . . not what the truth is, but just whether they are being truthful with you.

This advantage comes in two levels:

**Sensitive:** Your ability is not entirely reliable; the IQ roll is at -3. You get +1 to your Detect Lies and Fortune-Telling skills, and to Psychology rolls to analyze a subject you can converse with. 5 points.

**Empathy:** Your ability works at full IQ, and the bonus to Detect Lies, Fortune-Telling, and Psychology is +3. 15 points.

This advantage works only on sapient (IQ 6+), natural beings. The equivalent talents for animals, plants, and supernatural entities are Animal Empathy (p. 40), Plant Empathy (p. 75), and Spirit Empathy (p. 88), respectively.

### Enhanced Defenses 🦌

Variable

You are unusually adept at evading attacks! This may be due to careful observation of your foe, focusing chi, or anything else that fits your background. There are three versions:

**Enhanced Block:** You have +1 to your Block score with either Cloak or Shield skill. You must specialize in one particular Block defense. 5 points.

**Enhanced Dodge:** You have +1 to your Dodge score. 15 points.

**Enhanced Parry:** You have +1 to your Parry score. You may take this advantage for bare hands (5 points), for any one Melee Weapon skill (5 points), or for all parries (10 points). 5 or 10 points.

This talent is definitely cinematic! The GM might require Trained By A Master (p. 93) or Weapon Master (p. 99) as a prerequisite. He may choose to allow warriors to buy this trait with earned points. He might even permit multiple levels of each Enhanced Defense, in which case the point cost is per +1 bonus. Note that bonuses larger than +3 are almost certainly unbalanced, even in “over-the-top” games!
Enhanced Move  🦃  🦃  
**20 points/level**

You can really move! Each level of Enhanced Move doubles your top speed in one environment: Air, Ground, Space, or Water. You may also take a half-level of Enhanced Move, either alone or with any whole number of levels; this costs 10 points and multiplies Move by 1.5.

**Example 1:** A super buys Enhanced Move 4 (Ground), for 80 points. He multiplies his Move by \(2 \times 2 \times 2 \times 2 = 16\). If his Basic Move were 8, he could run at 128 yards/second (262 mph).

**Example 2:** An avian race has Enhanced Move 2.5 (Air), for 50 points. All members of the race multiply their top airspeed by \(2 \times 2 \times 1.5 = 6\).

---

Extra Attack: The “default” assumption in GURPS is that you can make one attack per turn, no matter how many limbs you have.

---

Your multiplied Move is your top speed. Record it in parentheses after your Enhanced Move trait; for instance, the super in the example above would write “Enhanced Move 4 (Ground Speed 128).” You can always choose to accept a slightly lower top speed if you want your speed to match that of a real-world or fictional creature or vehicle with a known top speed. This does not give you back any points.

Enhanced Move does not affect Basic Speed, Basic Move, or Dodge. Its benefits apply only when moving along a relatively straight, smooth course (see Sprinting, p. 354). It does have some defensive value, however: those who attack you with ranged attacks must take your speed into account when calculating speed/range modifiers (see p. 550).

Most forms of Enhanced Move have prerequisites. Enhanced Move (Water) requires Amphibious (p. 40) or Aquatic (p. 145). Enhanced Move (Air) requires Flight (p. 56). Enhanced Move (Space) requires Flight with the Space Flight or Newtonian Space Flight enhancement, and affects movement in space — not airspeed. To move faster in air and in space, buy both Enhanced Move (Air) and Enhanced Move (Space).

**Special Enhancements**

**Handling Bonus:** You get a bonus to DX or vehicle operation skill (e.g., Driving) for the sole purpose of maintaining control at speeds above your Basic Move. +5% per +1, to a maximum of +5.

**Special Limitations**

**Handling Penalty:** You have a penalty to DX or vehicle operation skill at high speeds. -5% per -1, to a maximum of -5.

Newtonian: This is a limitation for Enhanced Move (Space). Your space “top speed” is actually your “delta-v”: the total velocity change you can manage before running out of reaction mass. Once you have made velocity changes equal to your top speed, you must refuel before you can change velocity again. -50%.

Road-Bound: This is a limitation for Enhanced Move (Ground). Your Enhanced Move is effective only on a smooth, flat surface, such as a road or building floor. This is often taken in conjunction with the Wheeled disadvantage (p. 145). -50%.

Enhanced Time Sense  🦃  🦃  
**45 points**

You can receive and process information dramatically faster than the human norm. This improves your mental speed – notably your reaction time – but not how fast you physically move once you react. This has several game benefits.

First, Enhanced Time Sense (ETS) includes Combat Reflexes (p. 43), and provides all the benefits of that advantage. You cannot buy Combat Reflexes if you have ETS; the two advantages are not cumulative.

In combat, you automatically act before those without ETS, regardless of Basic Speed. If more than one combatant has ETS, they act in order of Basic Speed, and they all get to act before those who lack ETS.

You can perceive things that happen too fast for most people to discern. For example, you cannot be fooled by a projected image, because you can see the individual frames of the film. If secret information is being sent as a high-speed “burst,” you can detect it if you’re monitoring the transmission (you cannot necessarily decipher it, but you know it’s there). At the GM’s discretion, you get a Sense roll to spot objects moving so fast that they are effectively invisible; for instance, bullets in flight. ETS is extremely valuable if you possess magical or psionic defenses that work at the speed of thought.

If you have ETS, your rapid thought processes always allow you to ponder a problem thoroughly and respond in the manner you think best. You never suffer skill penalties for being mentally “rushed” – although you still need the usual amount of time to complete a physical task, and suffer the usual penalties for hasty work. The GM can almost never tell you to make up your mind right now. (But don’t abuse this privilege by taking half an hour to decide what to do in each turn in combat!)

The exception is when something happens so fast that most people can’t perceive it at all. In that case, the GM is justified in asking you for an immediate response, since those without ETS get no response.

ETS does not “slow down” the world from your viewpoint. You can still enjoy a movie by simply ignoring the frames, much as a literate person can choose whether or not to notice the individual letters in the words he’s reading. ETS also does not let you violate the laws of physics. Some things (e.g., laser beams) simply travel too fast for you to react.
**Enhanced Tracking** 📈  5 points/level

You can “track” more than one target – whether with a built-in sensor array or eyes that can swivel independently, like those of a chameleon. An Aim (p. 364) or Evaluate (p. 364) maneuver normally applies to a single target. Each level of Enhanced Tracking allows your maneuver to apply to one additional target. You can only track targets that you can detect, and you cannot Aim at more targets than you have ready weapons to Aim with.

**Extended Lifespan** 📈  2 points/level

An average life cycle is defined as maturity at age 18, with aging effects (see p. 444) starting at age 50 and accelerating at ages 70 and 90. Each level of Extended Lifespan doubles all these values. Note that if you need to take more than seven levels of this trait (giving maturity at age 2,304 and the onset of aging at age 6,400), it is more efficient to take Unaging (p. 95).

**Extra Arms** 📈 variable

In GURPS, a limb with which you can manipulate objects is an arm, regardless of where it grows or what it looks like. A normal arm can strike a blow that inflicts thrust-1 crushing damage based on ST. The human norm is two arms for 0 points. Extra arms have a base cost of 10 points apiece.

**Coordination**

You can use extra arms freely for multiple noncombat tasks. For instance, with three arms, you could perform a one-handed task (e.g., use a computer mouse) and a two-handed task (e.g., type) simultaneously. You need Enhanced Tracking (p. 53) to perform tasks that require attention to events in more than one place at a time, however.

You can also use all of your arms in concert for a single combat maneuver where extra arms would be helpful; e.g., grappling in close combat. And if you have at least three arms, you can use a shield normally with one arm and still wield a two-handed weapon, just as a normal human fighter can use a shield and one-handed weapon at the same time.

No matter how many arms you have, though, you do not get additional attacks (or other extra maneuvers) in combat unless you buy Extra Attacks (see below).

**Close Combat With Extra Arms**

Extra arms give a huge advantage in close combat. You cannot punch with more than one arm at a time unless you have Extra Attack, but you may grapple with all of your arms at once. Each extra arm of regular length or longer, over and above the generic set of two, gives +2 to any attempt to grapple or break free from a grapple. Having more arms than your opponent also gives +3 on any attempt to pin or resist a pin.

**Special Enhancements**

Extra-Flexible: Limbs with this enhancement are more flexible than human arms, like tentacles or an elephant’s trunk. These limbs can always reach and work with other limbs, regardless of body positioning, general layout, or “right” and “left.” +50%.

Long: Your arm is longer in proportion to your body than a human arm relative to the human body. This increases your effective SM for the purpose of calculating reach with that arm (see Size Modifier and Reach, p. 402). This does affect the reach of melee weapons wielded in that hand. Each +1 to SM also adds +1 per die to swinging damage. +100% per +1 to SM.

**Special Limitations**

**Foot Manipulators:** Your “arm” is really an unusually dextrous leg. You cannot walk while you are manipulating objects with it (although you can sit, float, or fly). This is a Temporary Disadvantage limitation, the disadvantage being Legless (p. 141). This kind of arm is usually – but not always – Short (see below) -30%.

**No Physical Attack:** The limb can manipulate but cannot punch or wield melee weapons, and gives no bonus in close combat. It can still wield a firearm or similar ranged weapon. -50%.

**Short:** The arm has reach “C” (close combat only), and lacks the leverage to use any weapon that must be swung. Subtract one yard from the reach of any melee weapon wielded by that limb. If all of your arms are short, you are at -2 on any attempt to grapple. -50%.

**Weak:** The arm has less than your full body ST for lifting, striking, and grappling. -25% if the arm has half your body ST, or -50% if it has 1/4 your body ST (round down in both cases).

**Weapon Mount:** Instead of an arm, you have a “hardpoint” where you can mount a weapon. This may be biological, mechanical, or a hybrid of the two, depending on whether you are a living being, a machine, or a cyborg. You cannot use this mount for any purpose other than bearing a weapon. This limitation is incompatible with Feet Manipulator, No Physical Attack, Short, and Weak -80%.

**Modifying Beings With One or Two Arms**

Beings with one or two arms can use the special modifiers above. Point cost is equal to 1/10 the percentile modifier per affected arm. Thus, enhancements become advantages and limitations become disadvantages. For instance, Short is -50%, so it is worth -5 points per arm. Someone with two short arms would have a -10-point disadvantage.

Those with one arm can only apply these modifiers once, but also get the -20 points for One Arm (p. 147). For instance, an elephant’s trunk would be Extra-Flexible (+50%), Long (+100%), and Weak (-50%). These modifiers total +100%, for a 10-point advantage. The -20 points for One Arm would make the net cost -10 points.

**Extra Attack** 📈 25 points/attack

You can attack more than once per turn. The “default” assumption in GURPS is that you can make one attack per turn, no matter how many limbs you have. Each Extra Attack allows one additional attack per turn. You may not have more attacks than you have limbs (arms, legs, etc.), natural weapons (Strikers, Teeth, etc.), and attack powers (Afflictions, Bindings, and Innate Attacks) with which to attack. The GM’s word on what constitutes an “attack” is final.

A normal human can purchase one Extra Attack. This lets him attack with
both hands at once, and represents unusually good coordination. Supers and nonhumans have no such limitation. A super-powered cop could buy two Extra Attacks, enabling him to shoot rays from his eyes, fire his pistol, and swing his nightstick all at once. A dragon might take four Extra Attacks and attack five times with any combination of his four clawed limbs, teeth, horns, tail, and fiery breath!

Extra Attack is exactly that: an extra Attack maneuver on your turn in combat. It does not eliminate the -4 penalty for an “off” hand (see Ambidexterity, p. 39) or let you take multiple Aim maneuvers (see Enhanced Tracking, p. 53). You may use some of your attacks for Feint maneuvers, but you may not take multiple actions of other kinds – that requires Altered Time Rate (p. 38).

**Extra Attacks and All-Out Attack**

When an individual with Extra Attacks makes an All-Out Attack, he must select one type of bonus for all his attacks that turn. He could not, for instance, take All-Out Attack (Determined) with one attack and All-Out Attack (Strong) with another. If he chooses All-Out Attack (Double) to increase his number of attacks, he gets one additional attack.

**Extra Attacks and Rapid Strike**

You may use one of your melee attacks to make a Rapid Strike (see p. 370) on your turn, at the usual penalty. Your remaining attacks are in addition to this Rapid Strike, and receive no penalty. You may not use Rapid Strike with two or more attacks in one turn.

**Extra Head 🦄 ⭐️**

15 points/head

You have more than one head, each with fully functional ears, eyes, mouth, etc. Each Extra Head gives you one Extra Mouth (p. 55) and one level of Enhanced Tracking (p. 53) at no extra charge. Each head also contains an extra brain with a complete copy of your memories, personality, and skills. These extra brains are “backups,” however, and do not grant additional mental actions – for that, take Compartmentalized Mind (p. 43).

You cannot suffer more than 2 × (your HP/number of heads) points of injury from any single attack to your head or neck. Any head blow that causes unconsciousness only knocks out that one head; the others continue to function! A critical head blow that would normally kill you simply destroys that head, inflicting the maximum injury noted above and crushing, severing, or exploding the head (GM’s option).

**Special Limitations**

*Extraneous:* Your Extra Head grants Extra Mouth and Enhanced Tracking, but does not contain a backup brain. A single blow to an Extraneous head can do no more than HP/(1.5 × number of heads) points of injury, but blows to your real head can cause stun, knockout, or death even if your other heads are unharmed. -20%.

**Extra Legs 🦄 ⭐️**

Variable

If you can walk on a limb but cannot use it to manipulate objects, it is a leg in GURPS (for legs that double as arms, see Extra Arms, p. 53). A normal leg can kick for thrust/crushing damage at your usual reach (1 yard for a human). The human norm is two legs, which costs 0 points. It costs points to have more than two legs:

*Three or four legs:* If you lose a leg, you can continue to move at half
Move (round down). Loss of a second leg causes you to fall. 5 points.

Five or six legs: Each leg lost reduces Move by 20% until only three legs are left. At that point, your Move is 40% normal. Loss of another leg causes you to fall. 10 points.

Seven or more legs: Each leg lost reduces Move by 10% until only three legs are left. At that point, your Move is 40% normal. Loss of another leg causes you to fall. 15 points.

You can apply the following modifiers to all your legs:

Special Enhancements

Long: Your legs are longer in proportion to your body than human legs relative to the human body. This increases your effective SM for the purpose of calculating reach when kicking (see Size Modifier and Reach, p. 402) and when clambering over obstacles. +100% per +1 to SM.

Special Limitations

Cannot Kick: You cannot use your legs to kick for damage. -50%.

Modifying Beings

With Two Legs

The modifiers above can be applied to creatures with only two legs. Point cost is equal to 1/10 the percentile modifier. For instance, a human with Cannot Kick (-50%) would have a -5-point disadvantage.

Extra Life 🎀.Errorf 25 points/life

You can come back from the dead! No matter how sure your foes were that they killed you, you didn’t really die. Work out the details with the GM. Every time you come back from the dead, you use up one Extra Life – remove it from your character sheet and reduce your point total by 25 points. The GM may wish to let players spend earned points to buy Extra Lives in play.

Special Limitations

Copy: When you die, you revert to a “backup copy.” To create this copy takes minutes or hours, possibly at a special facility. Details are up to the GM. Make a copy of your character sheet whenever you update your backup. If you die, you revert to those statistics, losing any traits or character points acquired since then. Note that a copy exists before you die. You must tell the GM where you store it. You will return to life at that location . . . and if your enemies discover where you store your copy, they may tamper with it! -20%.

Requires Body: You come back in disembodied state – for instance, as a spirit or a digital copy on a computer. All your experiences and abilities are intact (unless you took Copy), but you cannot interact with the physical world at all until you acquire a new body. This might be a clone, an undead corpse, or even a robot “shell.” -20%, or -40% if the required body is illegal, rare, or expensive (GM’s decision).

Extra Mouth 🎀制造商 5 points/month

You have more than one functional mouth, which can be anywhere on your body. All of your mouths are capable of breathing, eating, and speaking. An Extra Mouth lets you bite more than once if you have Extra Attacks (p. 53). If you have Compartmentalized Mind (p. 43), you can carry on multiple conversations, or cast two spells that require spoken words. Other benefits include being hard to silence or suffocate, and being able to sing in harmony with yourself!

Fashion Sense

see p. 21

Favor 🎀 Variable

You saved someone’s life, kept silent at the right time, or otherwise did someone a good turn. Now he owes you one. A Favor is a one-shot Ally, Contact, Contact Group, or Patron. Work out the point cost of the parent advantage, and then divide it by 5 (round up) to get the cost of the Favor. The catch is that the NPC(s) in question will help you out once . . . and only once.

When you wish to “collect” on your Favor, the GM rolls against your Fearlessness level from all Intimidation rolls made against you.

Filter Lungs 🎀 5 points

Your respiratory system can filter out ordinary contaminants; e.g., dust, pollen, smoke, and even tear gas (but not nerve gas or other contact agents). You suffer no ill effects from such things. This is especially useful in polluted cities and on alien worlds. Note that if you have Doesn’t Breathe (p. 49), you do not need this advantage!

Fit 🎀 5 or 15 points

You have better cardiovascular health than your HT alone would indicate. This comes in two levels:

Fit: You get +1 to all HT rolls (to stay conscious, avoid death, resist disease or poison, etc.). This does not improve your HT attribute or HT-based skills! You also recover FP at twice the normal rate. 5 points.

Very Fit: As above, but the bonus to HT rolls is +2. In addition, you lose FP at only half the normal rate. 15 points.

In both cases, this advantage applies only to FP lost to exertion, heat, etc. It has no effect on FP spent to power psi or magic spells.
**Flexibility .flex**

Your body is unusually flexible. This advantage comes in two levels:

*Flexibility:* You get +3 on Climbing rolls; on Escape rolls to get free of ropes, handcuffs, and similar restraints; on Erotic Art skill; and on all attempts to break free in close combat (see p. 391). You may ignore up to -3 in penalties for working in close quarters (including many Explosives and Mechanic rolls). 5 points.

*Double-Jointed:* As above, but more so. You cannot stretch or squeeze yourself abnormally, but any part of your body may bend any way. You get +5 on Climbing, Erotic Art, and Escape rolls, and on attempts to break free. You may ignore up to -5 in penalties for close quarters. 15 points.

**Flight  ⚽️  40 points**

You can fly. The "default" is full-fledged, self-powered flight without wings or gliding surfaces. This works at any altitude where there is still significant atmosphere – but in the upper atmosphere, you'll need a way to survive in very thin, cold air (e.g., Doesn't Breathe and Temperature Tolerance). You cannot fly in a trace atmosphere or vacuum.

Your flight Move is Basic Speed × 2 (drop all fractions). As explained in Move in Other Environments (p. 18), you can adjust this for ±2 points per ±1 yard/second. For very high speeds, take Enhanced Move (Air). If you do not have any of the Controlled Gliding, Gliding, Lighter Than Air, Small Wings, Space Flight Only, or Winged Flight limitations, you can also “fly” at half-speed underwater. Flight includes the ability to hover at Move 0 as well.

Flight does not confer the ability to do complex acrobatics and tight turns; for that, buy Aerobatics skill (p. 174). Flight skill (p. 195) improves endurance.

You can alter most of the above assumptions through special modifiers.

**Special Enhancements**

*Newtonian Space Flight:* As Space Flight (below), except that your space Move – or your space top speed, if you have Enhanced Move (Space) – is actually your "delta-v": the total velocity change you can manage in space before running out of reaction mass. For instance, you could accelerate up to your delta-v and stay there (like a missile), or to half your delta-v and then decelerate to a stop at the end of your trip (like a conventional spacecraft). Once you have made velocity changes equal to your delta-v, you must refuel before you can change your velocity in space again. +25%.

*Space Flight:* You can fly in space or a vacuum (such as on the moon). Your space Move is Basic Speed × 2. If you want to be able to accelerate constantly to reach a higher top speed, like a rocket, buy Enhanced Move (Space) (p. 52). This will let you accelerate or decelerate each turn by an amount equal to your space Move, up to your enhanced top speed. For a “realistic” space move that lets you accelerate indefinitely in a vacuum (up to the speed of light), you’ll want Enhanced Move 25-27 (Space). This is incompatible with all other special modifiers except Space Flight Only. +50%.

**Special Limitations**

*Cannot Hover:* You must always move at least 1/4 your top airspeed (round up) when flying. This is incompatible with Controlled Gliding and Gliding. -15%.

*Controlled Gliding:* Like Gliding (below) in most respects, but you can gain altitude by riding updrafts or “thermals.” A typical ascent rate is one yard per second. You can locate thermals, if any are present, on a successful IQ or Meteorology roll (one attempt per minute). -45%.

*Gliding:* You cannot gain altitude. With a running leap, you can launch yourself with an air Move equal to Basic Move. Each turn, you can change velocity by up to 10 yards/second × local gravity in Gs (Earth’s gravity is 1G). To accelerate, you must descend by 1 yard for each 1 yard/second added to velocity; top speed is Basic Move × 4 (but you can go faster if towed). To decelerate, you must fly level. If you do not descend at least 1 yard, you automatically decelerate by 1 yard/second per turn. When working out turning radius, your basic air Move is 10 × local gravity in Gs. Each level of Enhanced Move (Air) either doubles top speed or halves deceleration in level flight (e.g., one level means you only lose 0.5 yard/second in level flight); specify which when you buy it. -50%.

*Lighter Than Air:* You fly by becoming lighter than air (or gaseous). A wind moves you 1 yard/second, in the direction it is blowing, per 5 mph of wind speed. If the wind happens to be blowing in the direction you wish to travel, this adds to your Move; otherwise, your Move goes down as you fight against the breeze. -10%.

*Low Ceiling:* You cannot fly very high. This does not limit speed in any way, but the GM may require Aerobatics rolls to dodge obstacles near the ground. A 30-foot ceiling is -10%; a 10-foot ceiling is -20%; and a 5-foot ceiling is -25%.

*Small Wings:* As Winged (below), except that your wingspan is no more than half your height. You use your wings to steer and to stabilize your flight – not to lift. If your wings are crippled in flight, roll against Aerobatics skill (or default) to land safely. -10%.

*Space Flight Only:* You can only take this in conjunction with Space Flight or Newtonian Space Flight. You can fly only in space; you have air Move 0 in atmosphere. You require a boost to reach space from any planet with an atmosphere, and are incapable of atmospheric reentry. -75%.

*Winged:* Use large wings or skin flaps to fly. Wingspan is at least twice your height. In order to take off, land, or maneuver, you must have an open area with a radius equal to your wingspan in all directions. If your wings are bound, or if a wing is crippled (more than 1/3 of your wings, if you have more than two), you cannot fly. Treat wings as arms for the purpose of targeting and crippling. If you wish to strike blows or manipulate objects with your wings, you must pay for them as Strikers or Extra Arms in addition to the cost of Flight. -25%.

**Gadgeteer  ⚽️  25 or 50 points**

You are a natural inventor. You can modify existing equipment and – given sufficient time and money – invent entirely new gadgets as described under Gadgeteering (p. 475).
This lets you design gadgets quickly, and makes it easy to realize higher-TL innovations. This advantage comes in two levels:

**Gadgeteer:** You are a “cinematic” gadgeteer, but your work still takes days or months, and requires a good deal of money and expensive equipment. **25 points.**

**Quick Gadgeteer:** You can throw together wondrous gadgets in minutes or hours, and can get by with scrounged-together spare parts that cost a few percent of what a “realistic” inventor would have to spend. This level is definitely unsuitable for realistic campaigns! **50 points.**

**G-Experience 🦹 1 to 10 points**

You have experience working in one or more gravitational fields other than your native one, and your reflexes adapt quickly to the way objects move and fall in those fields. You suffer only half the usual DX penalty for different gravity (see Different Gravity, p. 350). In situations where low gravity would make a task easier, you roll at full DX, plus the bonus for low gravity, plus an extra +1. For instance, if a normal person would get +2 to catch a ball in low gravity, you would get +3.

This trait costs 1 point per gravity field with which you have experience. For instance, an Earth native who works on the moon might have G-Experience (0.16G). To enjoy the benefits of G-Experience in all gravity fields, buy G-Experience (All) for 10 points.

**Gifted Artist**

see Talent, p. 89

**Gizmos 🎨 5 points/gizmo**

You always seem to have just the piece of gear you need. Once per game session per level of this advantage, you may pull out one small item of equipment that you could have been carrying. This “Gizmo” remains undefined until you reveal it. It does not even “enter play” until you take it out; thus, it cannot be damaged, lost, stolen, or found in a search.

A Gizmo must be small enough to fit in an ordinary coat pocket, and must meet one of three criteria:

1. An item you own but did not specifically state you were carrying. For instance, if you own a handgun, and get ambushed while driving to church, you could pull out your pistol – even if the police searched your vehicle five minutes ago and found no weapons!

2. An item that you probably own, and that is in keeping with your character concept, but that is minor or ignorable enough to leave unspecified. For instance, a policeman might happen to be carrying a spare handcuff key, while a wizard might have some eye of newt. The GM has the final say, but should be lenient if the item you wish to have is consistent with your character story.

3. An inexpensive device widely available at your tech level. For instance, if you need to light the fuse on some dynamite, you could pull out a box of matches – and they would work, even if you just took an involuntary swim in the creek.

Each Gizmo you can use per game session (maximum of three) costs 5 points. Note that this ability is not realistic! The GM may wish to limit it further, or forbid it, in a realistic campaign.
Gadgeteers and Gizmos

Those with the Gadgeteer advantage (p. 56) have more latitude. In addition to the usual items available, a Gadgeteer may specify that his Gizmo is one of his inventions (which must still be small). Instead of pulling an existing gadget “out of his pocket,” a Gadgeteer can use his Gizmo to let him build what he needs on the spot. He must still possess or find the appropriate materials, and know any required skills. The GM should roll secretly against the relevant skill, at -2 or worse. A failed roll means the device doesn’t work (this still “uses up” the Gizmo). A critical failure means the device backfires spectacularly!

**Gizmos: You may pull out one small item of equipment that you could have been carrying. This “Gizmo” remains undefined until you reveal it. It cannot be lost, stolen, or found in a search.**

**Green Thumb** see Talent, p. 89

---

**Growth** 10 points/level

You can grow – really grow! As your size increases, so must your ST (or you would collapse under your own weight). Your equipment doesn’t change size!

Each level of Growth lets you increase your Size Modifier by +1. Find your final height from the Size Modifier Table (p. 19). Increases in SM affect your arm and leg length when calculating reach and determining whether you can negotiate obstacles; see Size Modifier and Reach (p. 402). It takes one second to modify your SM by +1 (or by -1 as you return to normal size).

If you attempt to grow in a room, vehicle, container, etc. that isn’t large enough to hold you, your growth normally stops. However, if maximum thrust damage for your current ST is greater than the wall or ceiling’s DR, you burst through it. This takes one second per point of DR.

You must buy the ST necessary to support your form separately. This is 5 \times final height in yards. If your ST increases with height and is only available when you grow, you may buy it with the Size limitation (see Strength, p. 14). Use your maximum SM to determine the limitation value. At intermediate SMs, find your height as a fraction of your maximum height. This is the fraction of your extra ST available to you at that SM (round down).

Example: A 6’-tall character (SM 0) has Growth 4. He can grow to SM +4, giving him a maximum height of 10 yards. He must buy ST 50 to support himself. If he has ST 15 and gains +35 ST only at full height, he may buy his +35 ST with a -40% Size limitation. At SM +1, he will be 3 yards tall. This is 30% of his final height, so he will have 30% of +35 ST, or +10 ST, for ST 25. Similarly, he’ll be 5 yards tall with ST 32 at SM +2, 7 yards tall with ST 39 at SM +3, and 10 yards tall with ST 50 at SM +4.

**Special Modifiers**

Maximum Size Only: You can only assume normal or maximum size. Instead of growing at +1 SM per second, you grow to your maximum SM or revert back to your usual SM – in one second. The limitation of no intermediate SMs (restricting your use of this ability in close quarters) cancels out the enhancement of rapid growth (a useful benefit in combat). +0%.

**Gunslinger** 25 points

You can make uncannily precise shots without aiming. This ability works with any weapon that uses Beam Weapons, Gunner, Gun, or Liquid Projector skill. It gives no bonuses when using muscle-powered missile weapons (but the GM is free to introduce a low-tech version that works with Blowpipe, Bow, Crossbow, Sling, etc.).

When firing single shots (RoF 1-3) from a one-handed weapon, you get the Accuracy bonus of your weapon without the need for an Aim maneuver. When using a two-handed weapon or automatic fire, you get half the Accuracy bonus (round up) without the need to Aim. If you do Aim, you always get full Acc, and bracing, scopes, and additional seconds of Aim provide the usual benefits.

This ability is intended for cinematic games with an “action movie” ambience. The GM may wish to forbid it in a completely realistic campaign.

**Hard to Kill** 2 points/level

You are incredibly difficult to kill. Each level of Hard to Kill gives +1 to HT rolls made for survival at -HP or below, and on any HT roll where failure means instant death (due to heart failure, poison, etc.). If this bonus makes the difference between success and failure, you collapse, apparently dead (or disabled), but come to in the usual amount of time – see Recovering from Unconsciousness (p. 423). A successful Diagnosis roll (or a Mechanic roll, for machines) reveals the truth.

Example: Bruno has HT 12, 15 HP, and Hard to Kill 4. He takes 45 points of damage, which reduces him to -30 HP. He must make two HT rolls to survive: one at -15 HP, one at -30 HP. He rolls an 11 for the first one, but on the second roll, he gets a 14. This is above his HT (12), but below his modified
HT (12 + 4 = 16). He passes out, and his foes leave him for dead. Roughly a day later, he'll regain consciousness – injured, but not dead!

In a realistic campaign, the GM may wish to limit characters to Hard to Subdue 1 or 2.

**Hard to Subdue**

2 points/level

You are hard to knock out. Each level of Hard to Subdue gives +1 to any HT roll to avoid unconsciousness – whether as a result of injury, drugs, or ultra-tech weapons – and to resist supernatural abilities that cause unconsciousness. In a realistic campaign, the GM may wish to limit characters to Hard to Subdue 1 or 2.

**Healer**

see Talent, p. 89

30 points

You have the ability to heal others. You must be in physical contact with the subject. To activate your power, concentrate for one second and make an IQ roll. Roll at -2 if the subject is unconscious.

You can use Healing in two ways:

**Heal Injuries:** On a success, you can heal any number of HP. This costs you 1 FP per 2 HP healed (round up). Failure costs 1d FP, but you can try again; critical failure also causes the recipient 1d damage. Even 1 HP of healing will stop bleeding. By rolling a -6, you can repair a crippled but whole limb if you completely heal the HP lost to the crippling injury. For instance, to heal a hand crippled by 4 points of damage, make an IQ-6 roll and spend 2 FP. Each healer gets only one attempt per crippled limb. Healing cannot restore lost limbs or bring back the dead.

**Cure Disease:** This requires an IQ roll at a modifier determined by the GM – from +1 for the common cold to -15 for AIDS. The FP cost is equal to twice the penalty, minimum 1 FP. For instance, it would cost 6 FP to cure a disease that calls for an IQ-3 roll.

If used more than once per day on a given subject, apply a cumulative -3 per successful healing of the same type (injury or disease) on that subject. This penalty accumulates until a full day has passed since the most recent healing.

Healing works on your own race and on all “similar” races. In a fantasy campaign, for instance, all warm-blooded humanoid races (elves, dwarves, orcs, halflings, etc.) would be “similar.”

**Special Enhancements**

**Faith Healing:** Your power works by channeling spiritual energy. This lets you cure anyone the spirits or gods deem worthy of healing, regardless of race. However, you (and possibly your subject) must behave in a manner consistent with the interests and moral codes of your supernatural allies, or this ability will not work. You may not combine Faith Healing with Own Race Only or Xenohelming. +20%.

**Xenohelming:** You can heal beings quite dissimilar from yourself. Examples, assuming you are human: All Mammals, +20%; All Earthly Life, +40%; All Carbon-Based Life, +60%; Anything Alive, +80%; Anything Animate (including undead, golems, etc.), +100%.

**Special Limitations**

**Disease Only:** You can only cure disease, -40%.

**Injuries Only:** You can only heal injuries, -20%.

**Own Race Only:** This is only available in campaigns with multiple sapient races, -20%.

**Psychic Healing:** Your ability is part of the Psychic Healing psi power (see p. 256), -10%.

**Hermaphromorph**

5 points

You can switch among fully functional neuter, male, and female forms. The process takes 10 seconds (Preparation Required, Takes Extra Time, and Takes Recharge are common limitations).

**High Manual Dexterity**

5 points/level

You have remarkably fine motor skills. Each level (to a maximum of four) gives +1 to DX for tasks that require a delicate touch. This includes all DX-based rolls against Artist, Jeweler, Knot-Tying, Leatherworking, Lockpicking, Pickpocket, Sewing, Sleight of Hand, and Surgery, as well as DX-based rolls to do fine work with Machinist or Mechanic (e.g., on clockwork). This bonus doesn’t apply to IQ-based tasks or large-scale DX-based tasks, nor does it apply to combat-related die rolls of any kind.

**High Pain Threshold**

10 points

You are as susceptible to injury as anyone else, but you don’t feel it as much. You never suffer a shock penalty when you are injured. In addition, you get +3 on all HT rolls to avoid knockdown and stunning – and if you are tortured physically, you get +3 to resist. The GM may let you roll at Will +3 to ignore pain in other situations.

High Pain Threshold is included in Supernatural Durability (p. 89); if you have the latter advantage, you cannot take this one.

**Higher Purpose**

5 points

You are driven to exceed your normal limits in one specific pursuit. You must state this exactly as if it were a Code of Honor disadvantage (p. 127): “Defend all women,” “Slay all demons,” etc. If, in the GM’s judgment, you are unfaltering in your pursuit of your Higher Purpose, you get +1 to all die rolls that pertain directly to the pursuit of your cause. If you deviate from your Higher Purpose, you lose this bonus . . . and the GM is free to penalize you for bad roleplaying just as if you had ignored a Code of Honor.

A Higher Purpose must be specific. Higher Purposes such as “Fight evil” or “Oppose authority figures” are too broad to be balanced. In addition, a Higher Purpose must entail genuine risk and inconvenience. The GM should not allow pragmatic Higher Purposes like “Faithfully serve my superiors.” All Higher Purposes are subject to GM approval.
Hyperspectral Vision ✯

25 points

Your vision extends across the infrared, visible, and ultraviolet portions of the spectrum. This integrated picture often reveals details that are invisible to those who merely possess normal vision, Infravision (p. 60), or Ultravision (p. 74).

Hyperspectral Vision grants near-perfect night vision: you suffer no vision or combat penalties if there is any light at all. In total darkness, it functions exactly like Infravision. This trait also gives +3 on all Vision rolls; on all rolls to spot hidden clues or objects with Forensics, Observation, or Search skill; and on all Tracking rolls.

If you possess Hyperspectral Vision, you cannot also have Infravision or Ultravision. This trait is essentially a higher level of both those advantages. Its game effects replace the specific effects of those traits.

As described, this trait emulates realistic TL7+ sensors. The GM may permit superiors to take the two special enhancements below. Neither is appropriate for real-world sensors!

Special Enhancements

Extended Low-Band: You perceive radiation below the infrared, allowing you to “see” microwave, radar, and radio sources. This gives you no special ability to understand radio signals! +30%.

Extended High-Band: You sense radiation above the ultraviolet, allowing you to “see” X-ray and gamma ray sources. +30%.

Illuminated ✯✯

15 points

You are an “Illuminatus” in the original sense of the word – you are enlightened. You know what’s going on, and you know it intuitively.

You can discern other Illuminati on sight, with no possibility of error. Furthermore, whenever the GM requires a roll against a skill such as Current Affairs, Hidden Lore, or Intelligence Analysis to tell whether a certain strange occurrence is truly a coincidence or the result of a conspiracy, you may roll against the higher of your IQ and the specific skill in question. Finally, you can perceive and communicate with supernatural beings who are tied to Illuminated conspiracies in your game world (GM’s decision). This gives you no special ability to control them, but they recognize you and treat you with a certain respect: +3 on reaction rolls.

The only drawback is that other Illuminati and spiritual beings are able to perceive your Illuminated nature, and there’s nothing you can do about it except stay out of sight.

This advantage is best suited to mystical or fantastic campaigns. It is rarely appropriate in “mundane” conspiracy campaigns. The GM is the final judge of who may possess this trait.

Improved G-Tolerance ✯

5 to 25 points

You can function under a wide range of gravities. For a normal human, the penalties for non-native gravity accrue in increments of 0.2G; see Different Gravity (p. 350). A larger increment costs points: 5 points for 0.3G, 10 points for 0.5G, 15 points for 1G, 20 points for 5G, and 25 points for 10G. Normal humans are limited to 10 points in this trait.

Independent Income see p. 26

Indomitable ✯

15 points

You are impossible to influence through ordinary words or actions. Those who wish to use Influence skills on you (see Influence Rolls, p. 359) must possess a suitable advantage: Empathy (p. 51) if you are a human or similar being, Animal Empathy (p. 40) if you’re a beast, Plant Empathy (p. 75) if you’re a plant, or Spirit Empathy (p. 88) if you’re a demon, ghost, etc. Everyone else – however convincing – fails automatically. This trait often accompanies Unfazeable (p. 95).

Infravision ✯✯

0 or 10 points

You can see into the infrared portion of the spectrum, allowing you to detect varying degrees of heat. This lets you fight at no penalty even in absolute darkness, if your target emits heat (this includes all living beings and most machines). It also gives you +2 on all Vision rolls to spot such targets, since their heat stands out from the background. You can follow a heat trail when tracking: add +3 to Tracking rolls if the trail is no more than an hour old.

Infravision does not let you distinguish colors, and only allows you to judge the general size and shape of heat-emitting objects, including living beings (for instance, you might have trouble telling two people of the same size apart). Roll at -4 to distinguish objects of similar size and shape. The GM may also require a Vision-4 roll to read by reflected heat. Sudden flashes of heat (e.g., a flare, fiery explosion, or infrared laser) can blind you, just as a flash of light can blind ordinary vision.

Cost depends on your capabilities:

- You can only see using Infravision, and are subject to its limitations at all times: 0 points.
- You can switch freely between normal vision and Infravision: 10 points.

Injury Tolerance ✯✯

Variable

You have fewer physiological weaknesses than ordinary living beings. The cost of this advantage depends on the precise frailties eliminated. Note that some forms of Injury Tolerance include others, and that Diffuse, Homogenous, and Unliving are mutually incompatible.

Diffuse: Your body is fluid or particulate, composed of a swarm of smaller entities, or perhaps made of pure energy. This makes you immune to crippling injuries and reduces the damage you suffer from most physical blows; see Injury to Unliving, Homogenous, and Diffuse Targets (p. 380). Most foes (GM’s decision) cannot slam or grapple you! Diffuse includes all the benefits of No Blood, No Brain, and No Vitals: 100 points.

Homogenous: Your body has no vulnerable internal organs, bones, muscles, or other mechanisms. As a result, you are less susceptible to piercing and impaling attacks; see Injury to Unliving, Homogenous, and Diffuse Targets (p. 380). Homogenous includes the benefits of No Brain and No Vitals. This trait is intended for
entities such as iron golems, trees, and slimes. 40 points.

No Blood: You do not rely upon a vital bodily fluid (like blood) for survival. You do not bleed (see Bleeding, p. 420), are unaffected by blood-borne toxins, and are immune to attacks that rely on cutting off blood to part of your body. 5 points.

No Brain: Your brain – if you have one – is distributed throughout your body, or isn’t your true seat of consciousness. Your opponents cannot target it for extra damage. You may have a head, but a blow to the skull or eye is treated no differently than a blow to the face (except that an eye injury can still cripple that eye). 5 points.

No Eyes: You lack eyes or other vulnerable optics, but can somehow see despite this (unless of course you suffer from Blindness, p. 124). As you have no eyes, they cannot be attacked. You are also immune to blinding attacks. 5 points.

No Head: You have no head at all. This includes the benefits of No Brain. As well, you lack “skull” and “face” hit locations, and have no head for head armor. You can still see, speak, hear, smell, taste, etc. unless you take the appropriate disadvantages. Specify how you do this (supernaturally, technologically, via organs on your torso, etc.). It is common – but not mandatory – for those with No Head to have No Neck, No Eyes, or both. 7 points.

No Neck: You have no neck. As a result, you have no “neck” hit location, and cannot be decapitated, choked, or strangled. 5 points.

No Vitals: You have no vital organs (such as a heart or engine) that attackers can target for extra damage. Treat hits to the “vitals” or “groin” as torso hits. 5 points.

Unliving: Your body is not composed of living flesh. You take reduced damage from piercing and impaling attacks, but are not quite as resilient as if you were Homogenous; see Injury to Unliving, Homogenous, and Diffuse Targets (p. 380). This trait is intended mainly for machines and corporeal undead. 20 points.

**Innate Attack**  
Variable

You have a natural or built-in attack with which you can inflict physical damage (for nondamaging attacks, see Affliction, p. 35, and Binding, p. 40). Examples include a dragon’s fiery breath, a robot’s built-in blaster, and a god’s ability to hurl lightning bolts.

By default, this is a ranged attack with 1/2D 10, Max 100, Acc 3, RoF 1, Shots N/A, and Recoil 1, although you can apply modifiers to change these statistics (see pp. 101-116).

An Innate Attack inflicts 1d damage per level. Its cost per level depends on the type of damage it inflicts:

**Burning (burn)**
Your attack inflicts damage using flame, an energy beam, or localized electrical burns. It may ignite fires! 5 points/level.

**Corrosion (cor)**
Your attack involves acid, disintegration, or something similar. For every 5 points of basic damage you inflict, reduce the target’s DR by 1, in addition to regular damage. (Living beings heal natural DR at the same rate as HP.) 10 points/level.

**Crushing (cr)**
Your attack inflicts damage through blunt impact, like a bludgeoning weapon or an explosive blast. It is likely to cause knockback (p. 378), and is more effective at inflicting blunt trauma (p. 379) than other types of damage. 5 points/level.

**Cutting (cut)**
Your attack inflicts lacerations, like those caused by an axe or broken glass. Multiply penetrating damage by 1.5. Cutting attacks can inflict blunt trauma and cause knockback. 7 points/level.

**Fatigue (fat)**
Your attack is nonlethal. It might involve a low-amperage electric shock or a “mind blast,” or even inflict a weakening effect such as hypothermia or starvation. It reduces FP, not HP, and cannot affect machines. 10 points/level.

**Alternative Attacks**

If you have multiple Innate Attacks, you may define them as being the same basic attack, but with different settings, ammo types, etc. Determine the cost of these “alternative attacks” as usual, but only pay full price for the most expensive attack. Buy additional attacks at 1/5 cost (round up).

This can save a lot of points, but there are drawbacks. First, since the attacks represent a single ability, you cannot use them simultaneously, even if you are capable of multiple attacks. This also prevents you from combining them with the Link enhancement (p. 106). As well, any critical failure or malfunction that disables one of your attacks disables all of them. Finally, if your most expensive attack is somehow drained or neutralized, none of the cheaper attacks will work.

You may also apply this rule to multiple Afflictions (p. 35) or Bindings (p. 40), or any combination of these with Innate Attacks that you cannot use simultaneously. With the GM’s permission, you can apply this rule to multipurpose Strikers (p. 88) as well.

**Impaling (imp)**
Your attack inflicts stab wounds, like a spear or an arrow. Double penetrating damage in flesh! Impaling attacks can target the eyes and vital organs, can inflict blunt trauma, and may slip through high-tech flexible armor. 8 points/level.

**Piercing**
Your attack involves a fast, blunt projectile, such as a bullet, or is sharp but too small to qualify as impaling, like a dart or a stinger. It may inflict blunt trauma, and can target the eyes and vital organs. There are four sub-classes of piercing attack:
Small Piercing (pi-): Use this for very low-energy projectiles (e.g., blowgun darts), or for attacks that tend to punch through the target and leave a small wound channel (e.g., armor-piercing bullets). Against flesh, half damage that penetrates DR. 3 points/level.

Piercing (pi): Use this for most rifle and pistol bullets. 5 points/level.

Large Piercing (pi+): Use this for attacks similar to large-caliber solid bullets, or for smaller projectiles that create large wound channels (e.g., hollow-point bullets). Multiply penetrating damage in flesh by 1.5. 6 points/level.

Huge Piercing (pi++): Use this for attacks that leave an even larger wound channel than large piercing. Double penetrating damage in flesh! 8 points/level.

Toxic (tox): Your attack inflicts cellular damage, in the manner of disease, poison, or radiation. It cannot normally affect machines. The modifiers Cyclic (p. 103), Onset (p. 113), and Resistible (p. 115) are usual, but not required. 4 points/level.

Partial Dice: You do not have to buy whole-numbered dice of damage. Each ±1 to damage counts as ±0.3 dice. Round the final cost up. For instance, an Innate Attack that does 1d+2 damage counts as 1.6 dice. If it were crushing (5 points/die), it would cost 1.6 × 5 = 8 points.

Some attacks do only 1 point of damage. This counts as 0.25 dice. Once again, round cost up. Such attacks can still be deadly – especially if they involve the Follow-Up (p. 105) or Cyclic (p. 103) enhancement!

Special Modifiers: Many special modifiers for Innate Attack appear under Attack Enhancements and Limitations (p. 102). You can use these to create almost any attack – built-in guns, lasers, jets of liquid fire, gale-force winds, etc. – and to duplicate the capabilities of weapons listed in GURPS books.

Fatigue and toxic attacks intended to simulate poison or disease require modifiers. Noxious agents on Claws (p. 42), Teeth (p. 91), darts, etc. use Follow-Up (p. 105). Gases and sprays use Respiratory Agent (p. 108) or Contact Agent (p. 103), often with Area Effect (p. 102), Cone (p. 103), or Jet (p. 106). Attacks that depend on touch or on skin contact use Blood Agent (p. 102) or Contact Agent, plus one of Aura (p. 102) or Melee Attack (p. 112).

Regardless of other modifiers, Innate Attacks are treated as ranged attacks unless given the Melee Attack limitation; then they’re considered melee weapons.

Description: After applying all relevant modifiers, name and describe the attack. You can be as general as “dragon fire” or as specific as “9mm machine pistol cybernetically implanted in right arm.” At the GM’s discretion, the description can imply additional noncombat abilities; for instance, a jet of high-pressure water could put out fires. The GM has the final say as to whether your description fits the campaign setting, and may modify the attack if necessary.

Insubstantiality 🎨/🔧 80 points

You can become intangible, passing through solid objects as though they weren’t there. In this state, gravity does not affect you – you can move in any direction at full Move (and make no noise when you move). You can perceive the tangible world, and speak normally to those within it, but you cannot pick up normal objects or affect them in any way.

Physical and energy attacks cannot harm you, but you’re still vulnerable...
to psionic and (nonmaterial) magical attacks. Likewise, your physical and energy attacks cannot affect physical opponents. Your psi abilities and magic spells can affect the physical world, but at -3 to all skill rolls.

Although you can pass through solids, you must still breathe. When moving through a solid object, treat this as if you were swimming underwater for purposes of suffocation. You cannot materialize inside a solid object.

Your “natural” form (physical or insubstantial) is considered a special effect. You must take this advantage if you can change between a physical and an insubstantial form.

This trait can represent any number of abilities from folklore and fiction. You should work out its origins (see p. 33) and special effects with the GM – perhaps you “vibrate” out of synch with reality, phase into a different dimension, or become a spirit. This determines your appearance, which may be transparent, misty . . . or completely normal (but you can’t be invisible without the Invisibility advantage). Your physical and energy attacks affect other beings using the same form of Insubstantiality, and their attacks affect you. The GM may rule that certain materials, energy barriers, magic spells, etc. are impenetrable to your particular form of Insubstantiality.

Special Enhancements
Affect Substantial: If you have any abilities that can affect the substantial world when you are insubstantial – including magic, psionics, or powers with the Affects Substantial enhancement (p. 102) – this advantage costs more. +100%.

Can Carry Objects: Normally, you cannot carry anything while insubstantial. This enhancement lets you carry objects, including clothing and armor. They become physical if dropped. You cannot materialize these objects inside other objects or characters. No encumbrance is +10%; Light, +20%; Medium, +50%; Heavy, +100%.

Partial Change: You can turn part of your body substantial while other parts remain insubstantial, or vice versa. Thus, you could reach through a wall and tap someone on the shoulder. If you also have Can Carry Objects, you can materialize your hand, pick up material objects, and carry them while insubstantial. +20%, or +100% if you can turn an item you are carrying substantial without dropping it (this requires turning your hand substantial, too).

Special Limitations
Always On: You are always insubstantial and cannot materialize. If you have this limitation, there is no -3 to use magic or psionics. -50%.

Usually On: Similar to Always On, but you can materialize for short periods with great effort. Materialization costs 1 FP per second. -40%.

Intuition

15 points

You usually guess right. When faced with a number of alternatives, and no logical way to choose among them, you can ask the GM to let you use your Intuition. The GM makes a secret IQ roll, with a bonus equal to the number of “good” choices and a penalty equal to the number of “bad” choices. On a success, he steers you to a good choice; on a critical success, he tells you the best choice. On a failure, he gives you no information; on a critical failure, he steers you toward a bad choice. The GM can modify this as he sees fit for other situations where Intuition might logically help. Only one roll per question is allowed.

The GM should never allow Intuition to short-circuit an adventure – for instance, by letting the intuitive detective walk into a room, slap the cuffs on the guilty party, and close the case. At the most, Intuition would point the detective in the direction of a good clue. GMS who don’t think they can control Intuition should not allow it in their games.

Intuitive Mathematician

see Lightning Calculator, p. 66

40 points

You are invisible. Unlike most advantages, this one is “always on” unless you take a special enhancement. You still make noise, leave footprints, and have a scent – and by default, anything you carry remains visible. If you are carrying nothing, you get a +9 to Stealth in any situation where being seen would matter.

Individuals using paranormal remote viewing (crystal balls, Clairvoyance, etc.) cannot see you if you would be invisible to their normal vision. Devices with these powers can still sense you, as can paranormal abilities that detect enemies, life, and so on nonvisually.

Invisibility only works against one sort of vision. Types include electromagnetic vision (which encompasses ordinary vision, Infravision, Ultravision, and radar), sonar, magnetic fields, and anything else the GM comes up with. If you are invisible to electromagnetic vision, you do not cast a shadow and don’t show up in mirrors.

Special Enhancements
Affects Machines: You are invisible even to machines. You cannot be photographed, and you don’t show up on cameras or other detectors. Devices such as pressure plates still notice you, but you could walk past a robot sentry undetected. Electronically targeted weapons get no bonuses to hit you. +50%.

Can Carry Objects: The objects you carry, including clothing and armor, become invisible. They regain visibility when put down. No encumbrance is +10%; Light, +20%; Medium, +50%; Heavy, +100%.

Extended: You are invisible to more than one type of vision (for instance, electromagnetic vision and magnetic fields). +20% per additional type of vision.

Switchable: You are normally visible, but can become invisible at will. +10%.

Usually On: You are normally invisible, but can become visible for short periods with great effort. Turning visible costs 1 FP per second. +5%.

Special Limitations
Machines Only: Similar to Affects Machines, but you are only invisible to machines. Living beings can see you normally. -50%.

Substantial Only: Your invisibility only hides you in the material world. Insubstantial beings (ghosts, etc.) can see you normally. -10%.

Visible Reflection: You can be seen in mirrors! -10%.

Visible Shadow: You cast a shadow! -10%.
**Jumper**

100 points

You can travel through time or to parallel worlds (sometimes known as “timelines”) merely by willing the “jump.” Decide whether you are a time-jumper or a world-jumper. To do both, you must buy Jumper (Time) and Jumper (World) separately, at full cost.

To initiate a jump, you must visualize your destination, concentrate for 10 seconds, and make an IQ roll. You may hurry the jump, but your roll will be at -1 per second of concentration omitted (-10 to jump with no preparation at all). Regardless of IQ, a roll of 14 or more always fails. On a success, you appear at your target destination. On a failure, you go nowhere. On a critical failure, you arrive at the wrong destination, which can be any time or world the GM wishes!

You appear at your destination at exactly the same place you left your previous time or world – or as close as possible. When jumping through time, this means the same place at a different time. When jumping between worlds, this means the same place at the same time, but on a parallel world.

If there is no corresponding “safe” location within 100 yards of your destination – for instance, if you jump while on an airplane to a destination with no plane at your location, or from a half-mile deep mine to a destination with no corresponding mine – the jump will fail and you will know why it failed. This does not prevent you from jumping into other types of danger, such as radiation, gunfire, or wild animals. If you have Danger Sense, the GM should roll before you make a hazardous jump; on a success, you get a warning.

This ability always costs at least 1 FP to use, whether it succeeds or fails. Particularly “distant” times or worlds might cost more, perhaps up to 10 FP, at the GM’s discretion. If you are a machine, this ability does not cost you FP – but if you have passengers, each of them must pay the FP cost.

For an example of how Jumper might work in a particular game world, see World-Jumpers (p. 544).

**Carrying Things**

You can carry up to Basic Lift when you travel, plus any Payload (see p. 74). Take the Extra Carrying Capacity enhancement (below) if you wish to carry more weight, or bring along other people.

However, if multiple Jumpers of the same kind are in physical contact, when one jumps, the others can “hitch a ride” if they wish – even if the Jumper who initiates the jump does not want company. Only the person initiating the jump makes a die roll; wherever he ends up, the others do, too.

If you are a world-jumper, “hitching a ride” is the only way to visit a new parallel world (save for a critical failure!). However, once you reach a world, you can memorize its “feel” by concentrating and spending character points to “learn” that world as an IQ/Easy skill. This takes one hour per point you wish to spend. Use this skill in place of IQ when you travel to that world in the future. You never have to memorize a world, but if you do not, you roll at IQ-3 to attempt to return.

Time-jumpers have no similar restriction.

You can improve this ability with practice, spending points to add enhancements or remove limitations. GMs who do not want the PCs jumping multiple times per adventure are free to impose mandatory limitations (e.g., Limited Use) that cannot be bought off.

**Special Enhancements**

- **Extra Carrying Capacity:** You can carry more than your Basic Lift. If your carrying capacity is high enough, you may transport one person with you. Light encumbrance is +10%; Medium, +20%; Heavy, +30%; Extra-Heavy, +50%.

- **New Worlds:** This is only available for world-jumpers. You can deliberately aim for worlds you haven’t visited. The IQ roll is always at -3 or worse (GM’s decision). Of course, it is always possible that the desired destination does not exist, in which case the attempt automatically fails – although the GM will not tell you why. All FP costs are doubled when using this enhancement. +50%.

- **Omni-Jump:** This is only available if you are both a world-jumper and a time-jumper! You must apply it to both Jumper advantages. This lets you move between times and timelines on a single IQ roll – for instance, from the present day in our timeline to 1066 A.D. in a parallel timeline where the Norman invasion of England failed. +10%.

- **Tracking:** You can travel to the “home” time or world of any man-made artifact you can hold or touch. Time-jumpers will arrive shortly after the item was created; world-jumpers will arrive at the current date on the item’s home timeline. Any such attempt is at IQ-2, and each Jumper only gets one try per artifact. +20%.

- **Tunnel:** You always create a portal (of about your size) when you jump. Others may pass through it, even if they can’t jump. The portal lingers for 3d seconds, which can be good or bad – it means enemies can follow you! +40%.

**Warp Jump:** This enhancement is only available if you have the Warp advantage (p. 97). You must apply it to both Jumper and Warp. When you jump, you can simultaneously use Warp to appear anywhere at your destination. Two die rolls are necessary – one per ability – and it is possible for one to succeed while the other fails, or for both to fail. +10%.

**Special Limitations**

- **Cannot Escort:** This is only available for world-jumpers. Other Jumpers cannot “hitch a ride,” even if you want to bring them along. -10%.

- **Cannot Follow:** This is only available for world-jumpers. You cannot “hitch a ride” with another Jumper. -20%.

- **Drift:** You do not arrive in exactly the location you left from. You won’t arrive in thin air or underground, but you may show up anywhere within 10 miles of your planned destination. The better your IQ roll when you jump, the closer you will be to where you wanted to arrive, but it’s the GMs call as to exactly where you appear. -15%.

- **Limited Jump:** You can only travel a certain distance through time, or a certain number of “removes” between parallel worlds, per jump. To go further, you must make multiple hops. The GM must set the value of this limitation for his campaign; it will be more of a handicap in some settings than in others. A suggested value is -10%.
Maximum Range: You can only jump a certain total distance through time, or a certain number of “removes” between parallel worlds, no matter how many hops you make. Like Limited Jump, the GM must set the value of this limitation.

Naked: You can carry nothing when you jump! You always arrive naked. -30%.

Stunning: You are always mentally stunned after a jump. -10%.

Language Talent

You have a knack for languages. When you learn a language at a comprehension level above None, you automatically function at the next-highest level; thus, you can purchase a language at Accented level for 2 points or at Native level for 4 points. For full language rules, see Language (p. 23).

Legal Enforcement Powers

5, 10, or 15 points

You are a law enforcer, with the accompanying powers and restrictions. In some times and places, this amounts to a license to kill. In others, it’s little more than the right to carry a badge and write parking tickets.

The point cost depends on the kinds of laws you enforce, the size of your jurisdiction, how answerable you are for your actions, and the degree of respect you must show for the civil rights of others:

- You have local jurisdiction, the ability to arrest suspected criminals, the power to perform searches with an appropriate warrant, and possibly the right to carry a concealed weapon. Examples: a Victorian bobby or a modern policeman. 5 points.
- You have three or more of the above abilities. Examples: a Gestapo, KGB, or Stasi agent. 15 points.

Legal Enforcement Powers almost always require an appropriate Duty (p. 133). In some cases, a Reputation (positive, negative, or mixed) is also appropriate. All levels of Legal Enforcement Powers include Police Rank 0 (see p. 30). To become a senior law enforcer, buy more Rank.

Legal Immunity

5 to 20 points

You are exempt from some or all of the laws of your society. Should you break the law, ordinary law enforcers do not have the power to charge you. Only one particular authority – your own church or social class, a special court, perhaps even your ruler – can judge or punish you.

The point cost depends on how sweeping the immunity is (GM’s judgment):

- You are not subject to ordinary laws, but the rules that govern your behavior are just as strict. Examples: a medieval abbot or a modern UN observer. 5 points.
- You have three or more of the above abilities. Examples: a medieval duke or an international diplomat (see below). 10 points.
- As above, but the laws that apply to you are less strict than those that apply to most people. Example: a medieval bard (see below). 10 points.
- You can do nearly anything you please provided you don’t injure the nation, church, or other power that granted you Legal Immunity in the first place. Examples: a medieval duke or an international diplomat (see below). 15 points.
- For an extra 5 points, you may add “diplomatic pouch” privileges: you can send and receive mail or objects that the ordinary authorities cannot legally stop or examine.

Two classes of Legal Immunity are possible. Both apply to you are less strict than those that apply to most people. Example: a medieval bard (see below). 10 points.

- You have the right to sing what you please without fear of serious consequences. You may even sing a grossly insulting song to the king – you might get banished for it, but you can’t be whipped, imprisoned, or killed. Anyone who violates your immunity risks damage to his name and reputation. Other bards will compose and distribute vicious satires about him, giving him a bad Reputation. They might even expose a Secret, if he has one! This advantage applies to the content of your performances and nothing else. It is only available to true bards, in fantasy/medieval settings. To qualify for this advantage, you must spend at least 1 point apiece on the Performance, Poetry, and Singing skills. 10 points.

Diplomatic Immunity: You are an international diplomat. You may ignore the laws of all countries except your own. While abroad, you cannot be prosecuted for any crime, no matter how grave; the local police may arrest you, but they cannot press charges. The only recourse for a foreign government is to declare you persona non grata. This means you must leave the country at once, ending your current assignment – and possibly your career. Foreign powers may request your extradition for normal prosecution, but your government is unlikely to comply. This trait always comes with a Duty (p. 133) to a government agency, and often has some level of Administrative Rank (p. 30) as a prerequisite. 20 points.

Less Sleep

2 points/level

You need less sleep than most people. A normal human requires 8 hours of sleep per night. Each level of this advantage – to a maximum of four levels – lets you get by with one hour less than this, giving you a few extra hours each day in which to study or work on other projects.

Lifting ST

3 points per +1 ST

You have lifting capacity out of proportion to your mass. This is common for vehicles and supers. Add your Lifting ST to your ordinary ST when you determine Basic Lift (p. 15) for the purposes of carrying, lifting, pushing, and pulling. Lifting ST also adds to ST in situations where you can apply slow, steady pressure (grappling, choking,
etc.). Lifting ST does not boost ST (or Basic Lift) for the purpose of determining HP, throwing distance, or damage inflicted by melee attacks or thrown weapons.

If you bought your ST with the Size limitation, apply the same limitation to Lifting ST. The No Fine Manipulators limitation does not give a discount, however.

**Lightning Calculator ⚡** 2 or 5 points

You have the ability to do math in your head, instantly. This talent comes in two levels:

*Lightning Calculator:* You, the player, may use a calculator at any time, to figure anything you want— even if your character is fleeing for his life! For simple math problems, the GM may just say that your character knows the answer: 2 points.

*Intuitive Mathematician:* As above, but your ability is not limited to arithmetic. You can perform astrogation without a computer, do any level of engineering design in your head, and solve differential equations almost instantaneously. You never need a calculator; you yourself are far faster than that, and even faster than many computers. 5 points.

True mathematical geniuses will have one of the above traits and one or more levels of Mathematical Ability (see Talent, p. 89).

**Longevity ⚛** 2 points

Your lifespan is naturally very long. You fail aging rolls (see p. 444) only on a 17 or 18—or only on an 18, if your modified HT is 17 or better!

**Luck ⚡** Variable

You were born lucky! There are three progressively more "cinematic" levels of Luck:

* Luck: Once per hour of play, you may reroll a single bad die roll twice and take the best of the three rolls! You must declare that you are using your Luck immediately after you roll the dice. Once you or anyone else has made another die roll, it is too late to use Luck. If the GM is rolling in secret (e.g., to see if you notice something), you may tell him you are using your Luck ahead of time, and he must roll three times and give you the best result. 15 points.

  * Extraordinary Luck: As above, but usable every 30 minutes. 30 points.

  * Ridiculous Luck: As above, but usable every 10 minutes! 60 points.

  Your Luck only applies to your own success, damage, or reaction rolls, or on outside events that affect you or your whole party, or when you are being attacked (in which case you may make the attacker roll three times and take the worst roll!).

  You cannot share Luck. If Strong Sam is trying to kick open a door, Lucky Lou can’t stand behind him and transfer his Luck. He’ll have to kick that door himself.

  Once you use Luck, you must wait an hour of real time (30 minutes for Extraordinary Luck, 10 minutes for Ridiculous Luck) before using it again. You cannot use Luck at 11:58 and then again at 12:01. And you cannot save up Luck. You cannot play for hours without using Luck and then use it several times in a row!

**Special Limitations**

*Active:* Your Luck is a conscious supernatural power. You must declare that you are using it before you roll the dice. It cannot be used “after the fact” to reroll a bad result. -40%.

*Aspected:* Your Luck applies only to one specific class of related tasks, such as athletics, social interactions, or skills you use at your job. “Combat” is a valid choice, but it only affects weapon skill rolls, active defenses, and ST or DX rolls for close combat—not DX rolls to avoid tripping, HT rolls to survive, etc. -20%.

*Defensive:* You can only use your Luck to reroll failed active defense rolls, resistance rolls, or HT rolls to resist the effects of injury, or to make an opponent reroll a critical hit against you. -20%.

**Magery ⚡** 5 points for Magery 0, +10 points/level

You are magically adept. This advantage comes in levels. You must purchase Magery 0 before buying higher levels of Magery.

*Magery 0:* This is basic “magical awareness,” a prerequisite for learning magic in most worlds. The GM makes a Sense roll (p. 358) when you first see a magic item, and again when you first touch it. On a success, you intuitively know that the item is magical. A roll of 3 or 4 also tells you whether the magic is helpful or dangerous, and about how strong it is. Those without Magery do not get this roll! 5 points.

*Magery 1+:* Higher levels of Magery make it much easier to learn and use magic. Add your Magery to IQ when you learn spells. For instance, if you have IQ 14, Magery 3 lets you learn spells as if you had IQ 17. Add your Magery level to Perception when you roll to sense magic items, and to IQ when you learn Thaumatology skill (p. 225).

Reduce the time required to learn new spells in play (but not the point cost) by 10% per Magery level, to a minimum of 60% of the usual time at Magery 4. For instance, with Magery 3, you would learn spells in 70% the usual time.

Powerful spells require a minimum level of Magery as a prerequisite, so be sure to skim the Spell List (pp. 242-253) when deciding how much Magery you need. Note that high Magery lets you produce powerful results with even the most basic spells; see Magery and Effect (p. 237). The GM sets the maximum Magery allowed to PCs. Magery 3 is about right for “classic fantasy.” 10 points/level (on top of the 5 points for Magery 0).

**Mages in Nonmagical Settings**

The use of Magery becomes tricky in nonmagical backgrounds. You still have the ability to sense magic, but until you gain experience with magic, the GM should not say, “That idol is magical,” but “That idol looks very strange to you, very sinister: You sense there is something special about it.”

If you are from a nonmagical culture, you do not start with any spells, but you can still learn magic if you find an opportunity. When you enter a magical world, those who can detect your aura recognize you as a potential magic-user: How they react depends on the setting.

Magery 0 costs 5 points for all mages, but you may apply one of the
limitations below to the 10 points/level for Magery 1+. Limited Magery is sometimes known as “aspected Magery.”

Special Limitations

Dance: You must be free to use bodily motions in order to cast spells. You are not freed from rituals requiring movement as your spell level increases (see Magic Rituals, p. 237). However, you need not speak at all to cast your spells. -40%.

Dark-Aspected: You can only use your powers in darkness. Regardless of the time of day or night, any light greater than candlelight or starlight deprives you of your abilities, though your aura reveals that you are a mage. -50%.

Day-Aspected: You can only use your powers only when the sun is in the sky – on average, from 6 a.m. to 6 p.m. During solar eclipses, you have no powers! The effects of other astronomical events are up to the GM. When the sun is down, you have none of your magical abilities, although a look at your aura reveals that you are a mage. You are not affected by being in buildings, underground, and so on; only the sun’s position matters. You know automatically (if you are awake) when it is one minute to sunrise and one minute to sunset. -40%.

One College Only: Your Magery only benefits the spells of a single college and the Recover Energy spell (p. 248). You learn other spells as though you were a nonmage, and can only cast them in high-mana areas. You may still count such spells as prerequisites for spells in your own college. You cannot detect magic items unless they contain at least one spell of your college, in which case you roll normally for detection on first sight and first touch. -40%.

Solitary: Your magical abilities are at -3 for every sapient being within five yards of you, and -6 for anyone touching you. As partial compensation, you get a roll vs. IQ to notice any time a sapient creature enters or leaves the five-yard area around you – but this only works on a single person. If there is already someone standing next to you, you won’t notice if someone else approaches. -40%.

Song: You must be able to sing in order to cast your spells. You are not freed from the ritual of speaking to cast spells as your spell level increases (see Magic Rituals, p. 237). -40%.

Magic Resistance, and its precise level, can be recognized by any mage who looks at your aura, or by anyone who casts a spell on you. If you have even one level of Magic Resistance, you can’t cast spells at all.

Musical: You must use a musical instrument in order to cast spells. You can never cast spells silently. -50%.

Night-Aspected: You can only use your powers when the sun is not in the sky – on average, from 6 p.m. to 6 a.m. When the sun is up, you have none of your magical abilities, although a look at your aura reveals that you are a mage. You are not affected by being in buildings, underground, and so on; only the sun’s position matters. You know automatically (if you are awake) when it is one minute to sunrise and one minute to sunset. -40%.

Magic Resistance:

2 points/level

You are less likely to be affected by magic. Subtract your Magic Resistance from the skill of anyone casting a spell on you, and add it to your roll to resist any spell that offers a resistance roll. For instance, if you have Magic Resistance 3, wizards have -3 to cast spells on you and you get +3 to resist. In addition, you may roll against HT + Magic Resistance to resist the effects of magical elixirs. You cannot “turn off” this advantage to let friendly wizards cast spells on you (e.g., to heal you) or to benefit from helpful elixirs!

Magic Resistance only interferes with spells cast directly on you. It provides no benefit against Missile spells (which are cast on the wizard’s hand and hurled at you), attacks by magic weapons, or information-gathering spells that aren’t cast directly on you. It also has no effect on supernatural powers other than magic; e.g., divine miracles, psionics, or the innate powers of spirits.

Magic Resistance, and its precise level, can be recognized by any mage who looks at your aura, or by anyone who casts a spell on you.

You cannot combine Magic Resistance with Magery. If you have even one level of Magic Resistance, you can’t cast spells at all (although you can still use magic weapons).

Special Enhancements

Improved: You Magic Resistance does not interfere with your own ability to cast spells. This allows you to possess both Magery and Magic Resistance. +150%.

Mana Damper

10 points/level

You negate magical energy (“mana”) in your vicinity, making it difficult or impossible for others to cast spells. You can never cast spells yourself, nor can you have any level of Magery.

Each level of Mana Damper (to a maximum of three) reduces the local mana level by one step, but only for you and people or things that you’re carrying. For instance, a wizard could throw a fireball at you unhindered, but he would find it difficult to use magic to turn you to stone or read your mind. For details, see Mana (p. 235).

Special Enhancements

Area Effect: Your ability affects everything in an area centered on you. The first level of Area Effect gives you a radius of one yard. Each level after the first doubles this radius as usual; see Area Effect (p. 102). +50% level.

Switchable: You can switch this power off – for instance, to let a friendly wizard affect you or operate within your area of effect. +100%.
**Mana Enhancer** 🌐 50 points/level

You radiate magical energy, or “mana.” Each level of Mana Enhancer (to a maximum of two) increases the local mana level by one step, but only for you and people or things that you’re carrying. If more than one character with Mana Enhancer could increase the mana level, apply only the highest increase; do not add the effects together.

This ability does not directly confer the ability to cast spells; for that, take Magery (p. 66). However, if you can raise the mana level to “high” or better, you can cast many spells without Magery! For details, see *Mana* (p. 235).

This ability has its drawbacks: you cannot have Magic Resistance, and mages get an IQ + Magery roll to sense that you possess this trait. In some game worlds, this combination may force you to hide from unethical wizards!

The GM should keep this trait under strict control, as it is powerful and easily abused in fantasy settings.

**Special Enhancements**

*Area Effect:* Your ability affects everything in an area centered on you. The first level of Area Effect gives you a radius of one yard. Each level after the first doubles this radius as usual; see *Area Effect* (p. 102). +50% level.

*Switchable:* You can switch this power off in order to deprive enemy wizards its benefits (or simply to hide from them!). +100%.

**Mathematical Ability**  see *Talent*, p. 89

**Medium** 🌐 10 points

You can perceive and communicate with spirits – particularly spirits of the dead. You don’t see them visually, but you know when they’re nearby. You can speak with any spirit in your presence, provided you share a language. You can also call spirits to you; there is no guarantee that they will answer your summons, but they will hear it. Note that this trait does not give you a reaction bonus with spirits, or any power to control their behavior.

**Merchant Rank**  see *Rank*, p. 29

**Metabolism Control** 🌐 5 points/level

You can control normally involuntary biological functions such as pulse, blood flow, digestion, and respiration. Each level of Metabolism Control gives +1 on any HT roll that would benefit from such control (GM’s decision), including bleeding rolls (see *Bleeding*, p. 420) and rolls to recover from (not resist) disease and poison.

You can also enter a deathlike trance. Anyone unfamiliar with your metabolism must win a Quick Contest of Diagnosis vs. your HT + Metabolism Control to discover that you aren’t dead. In this state, each level of Metabolism Control reduces by 10% the amount of oxygen you need to stay alive (at level 10 or higher, you don’t breathe at all), and doubles the amount of time you can safely go without food or water. You are unaware of your surroundings while in your trance, but awaken automatically if injured. You may also set a mental “alarm clock” to awaken you after a certain amount of time has passed.

This ability is incompatible with the Machine meta-trait (see p. 263).

**Special Limitations**

*Hibernation:* You can only use the trance ability, and get no bonus to HT rolls. Furthermore, you automatically enter a trance when exposed to certain environmental conditions – great cold, drought, etc. Work this out with the GM. In such conditions, you must make a Will roll to avoid hibernation. You can induce hibernation voluntarily. To do so, roll vs. Will-4 hourly until you succeed. You cannot set a precise “wake up” time. Set a duration, then multiply by (2d+3)/10. -60%.

**Microscopic Vision** 🌐 5 points/level

You can see details that would normally be invisible without a magnifying glass or a microscope. Each level increases magnification by a factor of 10: 5 points gives 10x, 10 points gives 100x, and so on. This magnification only applies to objects within 1 foot.

Level 1 suffices for ordinary forensic investigation. Level 3 (1,000x) is equivalent to the best optical microscopes. Level 5 (100,000x) is comparable to an electron microscope, capable of imaging viruses. Level 6 (1,000,000x) is on par with a scanning-tunneling or atomic force microscope, and can study an object’s atomic structure.

**Military Rank**  see *Rank*, p. 29

**Mimicry** 🌐 10 points

You can duplicate any simple sound (alarm, gunshot, etc.) by listening to it for one second and making a successful IQ roll. You can also imitate voices by spending at least 10 seconds listening to them – live, recorded, or remotely – and making an IQ roll.

This trait gives you no special ability to stunt or deafen others with loud sounds, or to speak unpronounceable magic words. Buy any such capabilities separately.

**Mind Control** 🌐 50 points

You can mentally dominate those you can see or touch. To use this ability, concentrate for one second and then roll a Quick Contest: your IQ vs. your subject’s Will.

*Modifiers:* Range penalties to the subject (see p. 550); -1 per slave already under your control; +2 if you concentrate for a full minute, or +4 if you concentrate for a full hour.

If you win, your victim will obey your every command until you free him. In effect, he temporarily gains the Reprogrammable disadvantage (p. 150), with you as his master. Your control persists for as long as you take uninterrupted Concentrate maneuvers. Once you stop, your control lingers for one minute per point by which you won the Quick Contest. (To increase this, add Extended Duration, p. 105.) If you are incapacitated (stunned, knocked out, etc.), or attempt to force the subject to act against his principles (e.g., commit suicide or harm a loved one), roll
Mind Control often has limitations: Accessibility (Only on opposite sex), Sense-Based (for hypnotic voices, eyes, scents, etc.), and so on. It may also have attack modifiers, subject to the restrictions that apply to attacks with Malediction (p. 106). Finally, you may apply the Cybernetic and Cybernetic Only modifiers from Mind Reading (see below).

Special Enhancements

Conditioning: You can reconstruct the subject’s psyche and implant suggestions. In effect, you can add or remove any mundane mental disadvantage. Add Delusions for false memories, or Amnesia to wipe memories. Your victim must be under your control, cooperative, and conscious. Roll a second Quick Contest. You are at -1 per full -5 points of disadvantages changed, but you may substitute Brainwashing skill (p. 182) for IQ. Duration in days is equal to your margin of victory. If you win and roll a critical success, the conditioning is permanent! A conditioned subject who is no longer under your direct control imposes no penalty on the use of Mind Control on others. Note that another person with this ability can use it to undo your work. +50%.

No Memory: Your victims have no memory of anything that occurred while under your control. +10%.

Special Limitations

Conditioning Only: You cannot use regular Mind Control – only Conditioning (above). Uncooperative victims must be restrained before you can use your ability. -50%.

Puppet: Your victims have no initiative while under your control, and temporarily acquire Slave Mentality (p. 154). -40%.

Telepathic: Your ability is part of the Telepathy psi power (see p. 257). -10%.

**You can “hear” everything the subject says, subvocalizes, or actively thinks about.**

Special Modifiers

The special enhancements and limitations given for Mind Reading (below) are also available for Mind Probe.

Mind Reading 30 points

You can eavesdrop on others’ surface thoughts. You must be able to see or touch the subject to affect him. Concentrate for one second and roll a Quick Contest of IQ vs. the subject’s Will. Modify the roll for range penalties to the subject (see p. 550).

If you win, you can “hear” everything the subject says, subvocalizes, or actively thinks about as a voice in your head. Received thought comes at the speed of speech. If you do not understand the language, or if your subject isn’t sapient, you only pick up feelings, images, and general intent. You can maintain Mind Reading for as long as you wish without further concentration. If you switch to another person, you must stop reading your current subject and roll a Quick Contest with the new subject. To read multiple subjects at once, take Compartmentalized Mind (p. 43).

If you lose, you may try again, at a cumulative -2 per repeated attempt on that subject in the past hour. Should you critically fail, you cannot read that person again for 24 hours.

Mind Reading is often psionic in origin, but it is just as likely to be a magical, divine, or even technological ability.

The Sense-Based limitation (p. 115) – especially Touch-Based – is common. If you take Hearing-Based, you can only read the thoughts of someone whose words you can hear, but can function as a “truthreader” or (with Universal) a “universal translator.”

**Special Enhancements**

Cybernetic: You can affect entities with the Digital Mind trait (p. 48), including all ordinary computers. Your IQ roll has a penalty equal to the system’s Complexity. A nonsentient system does not resist; just roll vs. IQ Complexity to succeed. +50%.

Sensory: You can also tap into your subject’s senses. This lets you experience everything he experiences. If he is tortured, knocked out, or killed, the GM may require a Will roll to avoid stunning – or perhaps even a Fright Check! +20%.

Universal: You automatically understand thoughts, even those of nonsapient subjects and those with whom you do not share a language. +50%.
Special Limitations

**Cybernetic Only:** As for Cybernetic, but you can only read Digital Minds. -50%.

**Racial:** Your ability only works on those of your own race or a very similar race (for instance, humans are similar to elves, but not to dogs or trolls). Combine this with the Sense-Based limitation (Touch or Scent) to represent a race that can share thoughts through biochemical means. -20%.

**Sensory Only:** As for Sensory, but you can't read thoughts at all. -20%.

**Telecommunication:** Your ability only works on those with whom you are presently in contact via Telecommunication (p. 91). -20%.

**Telepathic:** Your ability is part of the Telepathy psi power (see p. 257). -10%.

---

**Mind Shield 🎉🎉**

4 points/level

You have a “shield” that warns you of and defends against mental attacks. Add your Mind Shield level to IQ or Will whenever you resist an advantage with the Telepathic limitation (see Chapter 6) and whenever you resist a spell listed under Communication and Empathy Spells (p. 245) or Mind Control Spells (p. 250).

Your shield also resists attempts to locate your mind using magic or psionics. Such abilities must win a Quick Contest against your Will + Mind Shield level to find you.

You may voluntarily lower your Mind Shield if you wish – for instance, to let a friend read your mind. Lowering or raising your shield is a free action, but it must take place at the start of your turn. Mind Shield does protect you while you are asleep or unconscious, unless you fell asleep or were knocked out while your shield was voluntarily lowered.

**Special Limitations**

**Cybernetic:** Your shield protects against computer-related attacks – e.g., the “Digital” form of Possession and the “Cybernetic” form of Mind Probe or Mind Reading – instead of magic and psi. This limitation is only available to those with Digital Mind (p. 48). -50%.

**Telepathic:** Your ability is part of the Telepathy psi power (see p. 257). -10%.

---

**Mindlink 🎉🎉**

Variable

You have a permanent telepathic rapport with someone – often a twin, loved one, hive member, etc. You automatically succeed at all attempts to contact him with Telesend (see Telecommunication, p. 91) and Mind Reading (p. 69), provided he chooses not to resist or has Slave Mentality. Mindlink does not allow automatic contact across interstellar distances (more than 0.1 light-year), nor can it reach other dimensions, parallel worlds, etc.

Mindlink costs 5 points for a single person, 10 points for 2-9 people, 20 points for 10-99 people, 30 points for 100-999 people, and so on – add 10 points per tenfold increase in the number of people.
Modular Abilities

You have a pool of character points that you can reallocate under certain conditions. You may rearrange these points to add a skill (spell, technique, etc.) or mental advantage temporarily – or to improve such a trait, if you already have it. When you do, you lose any abilities to which those points were previously assigned.

This advantage comes in “slots.” A slot can hold one skill or mental advantage at a time. Each slot has a fixed base cost, plus a cost per point in the pool for that slot. Both costs depend on the type of Modular Abilities you have.

Computer Brain: Your abilities are actually computer programs. The GM decides whether a program exists for a given ability. If you have Telecommunication (p. 91), you may download programs, usually from a network. How long this takes depends on the speed of data transfer in the setting – a second per character point works well. In some worlds, you must pay for such programs; $100 per character point is typical. Cost per slot: 5 points base + 3 points per point of abilities.

Chip Slots: As above, but the programs come on physical chips that you must plug into a socket – usually in your skull. It takes three seconds to insert or remove a chip. Chips typically have negligible weight, but cost $100 to $1,000 per point of abilities. Cost per slot: 6 points base + 4 points per point of abilities.

Super-Memorization: You gain new abilities through rapid study. This takes a second per character point. You can “forget” a memorized ability instantly. You can only memorize abilities if you have a suitable reference work (book, film, tape, etc.). The GM determines the cash cost of such works. Cost per slot: 5 points base + 3 points per point of abilities.

Cosmic Power: You simply wish new abilities into being. This takes one second per ability. Unlike other Modular Abilities, you only ever have one “slot,” and can rearrange your points into as many or as few abilities as you wish, to the limit of your advantage. 10 points per point of abilities.

Example: Alex buys two Chip Slots at a base cost of 5 points/slot. This costs 10 points. One slot can hold a chip with a single ability worth up to 2 points, and costs 6 points. The other can hold up to 5 points, and costs 15 points. Total cost is 31 points. This appears on Alex’s character sheet as “Chip Slots 2 (2, 5).” Alex will have to buy, borrow, or steal chips he uses – but he need not pay character points for them.

Use Preparation Required (p. 114) to increase the time needed to rearrange your points, and Limited Use (p. 112) to represent an ability that you forget immediately after using it.

Special Enhancements

Physical: Your ability is not limited to skills and mental advantages. +50% for physical advantages only, or +100% for any mental or physical ability.

Special Limitations

Spells Only: Your ability only works with magic spells, which must usually be “memorized” from a grimoire. This is mutually exclusive with Physical. -20%.

Virtual: The abilities gained only apply in virtual reality, astral space, or another limited realm. -50%.

Musical Ability

see Talent, p. 89

Neutralize

50 points

You can neutralize the psi powers of a single psionic individual. This is an active ability with an ongoing effect on the subject. It does not have to be psionic – it might represent a magical or high-tech way to drain psi abilities.

To use Neutralize, you must touch the subject (requires an Attack maneuver) and win a Quick Contest of Will. If you succeed, you successfully neutralize all your victim’s psionic powers (see Chapter 6) for a number of minutes equal to your margin of victory. This has no effect on the subject's psionic Talents. Once you have neutralized someone, you cannot affect him again until his power recovers. A critical failure with this ability cripples it for 1d hours.

Special Enhancements

Power Theft: When you successfully neutralize a psi, you acquire his powers! You gain all the psionic abilities you neutralized – including their enhancements and limitations – for the duration. You can’t use Neutralize again until these powers wear off.

+200%

Special Limitations

One Power: You can only neutralize a specific psi power; e.g., ESP or Telepathy. See Chapter 6 for a list of standard psi powers.

Nictitating Membrane

1 point/level

You have a transparent lens over your eyes that you can open and close like an eyelid. This lets you see normally underwater, and protects your eyes from sand, irritants, etc. Each level of Nictitating Membrane provides your eyes (only) with DR 1 and adds +1 to all HT rolls concerned with eye damage.

Night Vision

1 point/level

Your eyes adapt rapidly to darkness. Each level of this ability (maximum nine levels) allows you to ignore -1 in combat or vision penalties due to darkness, provided there is at least some light.

Example: Night Vision 4 would completely eliminate darkness penalties up to -4, and would reduce a penalty of -7 to only -3.

Regardless of level, Night Vision only works in partial darkness. It has no effect on the -10 for total darkness (for that, get Dark Vision, p. 47).
**Obscure 🕳️ 🕳️**

2 points/level

You produce an effect that actively “jams” one particular sense, making it difficult to detect you and everything in your vicinity. You must specify the affected sense. This can be one of the five human senses or a sensory advantage such as Infravision, Radar, or one particular Detect. Examples include Obscure (Vision) for fog, Obscure (Hearing) for white noise, and Obscure (Radar) for electronic jamming.

Obscure affects a two-yard radius centered on you. Add the Area Effect enhancement (p. 102) to increase this radius. The affected sense is at -1 per level of Obscure to detect anything within your radius. Ten levels will block the sense completely. The boundaries of the zone are easily detected by the affected sense, however; roll at +1 per level.

**Special Enhancements**

- **Defensive:** You are unaffected by your own Obscure ability. +50%.
- **Extended:** Each related sense (Infravision as well as normal vision, Sonar as well as normal hearing, etc.) blocked beyond the first is +20%.
- **Ranged:** You produce your obscuring effect at a distant point rather than around your body. This is a ranged attack with 1/2D –, Max 100, Acc 3, RoF 1, Shots N/A, and Recoil 1. Duration is 10 seconds. You can apply other modifiers to change these statistics. Unlike the usual Ranged enhancement (p. 107), this modifier lets you use your ability again before its duration has expired (e.g., to simulate multiple smoke grenades); thus, it is more expensive. +50%.
- **Stealthy:** Your ability works invisibly, like a magical zone of silence. There is no bonus to detect the boundaries of your area of effect. +100%.

**Special Limitations**

- **Always On:** You cannot turn this ability off. -50%.

**Oracle 🕳️ 🕳️ 🕳️**

15 points

You are sensitive to omens, and see hidden significance in such things as the way plants grow, the behavior of animals, and even changes in the weather and the sky. Once per day, you may check the omens. This normally requires at least an hour; but if the GM has something in particular he wants to communicate, he may arbitrarily put it in your path. The GM rolls twice, in secret, when you use this ability: once to determine whether you discover the omen, once to see if you interpret it correctly.

**Discovery:** To detect an omen requires a Sense roll. On a success, you discover the omen; on a critical success, you get +5 on the subsequent interpretation roll. On a failure, you find nothing of oracular significance. On a critical failure, the GM lies – he tells you that you have found an omen, but this is, in reality, a product of your own fears or wishes.

**Interpretation:** To interpret an omen requires an IQ roll. On a success, the omen is very general; e.g., “an enemy approaches” or “a great power, long dormant, is stirring.” On a critical success, the information is more specific: “you risk the wrath of the king,” “seek out the mage in the tower,” etc. On a failure, the omen is simply too vague to be useful. On a critical failure, you blatantly misinterpret the omen – possibly in a dangerous manner.

This ability differs from Precognition (p. 77), which requires no interpretation.

**Outdoorsman**

see Talent, p. 89

**Parabolic Hearing 🕳️ 🕳️ 🕳️**

4 points/level

You can “zoom in” on a particular sound or area, and can filter out background noise from sounds of interest to you. Each level of Parabolic Hearing doubles the distance at which you can clearly hear any given sound (see Hearing, p. 358).

**Patrons 🕳️**

A “Patron” is an NPC – or even an entire organization – that serves as your advisor, employer, mentor, or protector. An employer must be exceptional to qualify as a Patron, though; a Patron is much more than an ordinary boss!

**Power**

The base point cost of a Patron depends on its power. Use the categories below as a guide, but note that some Patrons won’t fit neatly into any of them. The GM’s word is final.

- A powerful individual (usually built on at least 150% of the PC’s starting points) or a fairly powerful organization (assets of at least 1,000 times starting wealth for the world). **10 points.**
- An extremely powerful individual (built on at least twice the PC’s starting points) or a powerful organization (assets of at least 10,000 times starting wealth). **Examples:** a limited manifestation of a minor god, a billionaire, or a big-city police department. **15 points.**
- An ultra-powerful individual (built on as many points as the GM wants!) or a very powerful organization (assets of at least 100,000 times starting wealth). **Examples:** a super, a limited manifestation of a major god, or a big city. **20 points.**
- A national government or giant multinational organization (net worth basically incalculable), or a true god who appears personally to intervene on your behalf. **30 points.**
Note that the base cost to have a deity as a Patron is comparable to that for a powerful mundane Patron, but divine power requires the Special Abilities enhancement (see below), which will greatly increase the final cost of a divine Patron!

**Frequency of Appearance**

Choose a frequency of appearance, as explained under Frequency of Appearance (p. 36). If the GM determines that your Patron appears at the start of an adventure, he may design the adventure to include an assignment or aid from the Patron. He may also choose to leave out your Patron, if its appearance would make no sense or disrupt the adventure.

However, if the GM determined that your Patron could have appeared, and you try to contact your Patron during the adventure (for help, advice, etc.), then the contact is likely to be successful and you may receive aid. (Within reason – if you’re locked in a dungeon without any means of communication, you won’t be contacting anybody.) You will not know whether your Patron is “available” on a given adventure until you attempt to request aid. As a rule, you should only be able to reach your Patron for help once per adventure.

Remember that a powerful Patron could be helpful without actually intervening! A Chicago hood who can say, “I’m from Big Eddie,” or a crimefighter who can flash a Q-clearance card, may carry some extra weight in a tough spot.

**Party Patrons**

Often, several PCs – perhaps the entire party – share a Patron (they are all agents of the same government, servants of the same cult, etc.). No matter how many characters share a Patron, the cost is not shared; each character must pay full price for the Patron. On the other hand, the GM will make an appearance roll for each character at the start of each adventure – and if the Patron appears for any of them, then it is usually available for all of them. The GM should scale the quality and quantity of the aid provided in proportion to the number of successful appearance rolls.

**Drawbacks of Patrons**

If your Patron is an army, corporation, feudal lord, etc., you may owe it a Duty (p. 133). A god or similar Patron may require a stringent code of behavior in return for its aid; see Self-Imposed Mental Disadvantages (p. 121).

A Patron might also have powerful foes that are now your foes; this can give you an Enemy (p. 135). Such factors can cut the effective cost of a Patron significantly, and turn it from a benefit to a considerable liability!

**Employers and Patrons**

Not every employer is a Patron. If you can depend on your employer to get you out of trouble (at least sometimes), it might really be a Patron. Otherwise, it’s just a job. For example, a small police department is a 10-point Patron if, as most do, it takes care of its own. But the U.S. Army, though powerful, is not a likely Patron – at least for an ordinary trooper. You could say, “The Colonel takes care of his men.” But you could just as easily say, “I’m on my own if I get in trouble,” and play a soldier who does not have a Patron.

**Examples of Patrons**

- A powerful wizard as Patron to warriors (or young wizards) whom he sends to find magical items or slay foes.
- A crime lord as Patron to freelance thieves or assassins.
- A minor deity as Patron to a traveling Righter of Wrongs.
- A local police department as Patron to a private detective. (They might find him annoying at times, but he helps them out, and vice versa.)
- A local ruler (in any world) as Patron to an adventurer.
- A large company as Patron to a troubleshooter or spy.
- A super-crimefighter or politician as Patron to a news reporter.
- Any intelligence organization as occasional Patron to a freelance operative, or full-time Patron to its own agents. (The difference between this and ordinary jobs is that you can’t quit . . . )

You can apply the following modifiers after multiplying for frequency of appearance.

**Special Enhancements**

**Equipment:** Your Patron supplies useful equipment that you can use for your own purposes, and that you would otherwise have to buy. This enhancement only applies if the equipment is yours once given. A soldier with a military Patron would not pay extra for his weapons, since when he goes off duty, he can’t take them along. An adventurer in the employ of a generous noble who hands out useful “gifts” would pay extra. +50% if the equipment is worth no more than the average starting wealth in the campaign, or +100% if it is worth more than that.

**Highly Accessible:** You can attempt to contact your Patron at any time – even when you are locked in a dungeon, lost in the desert, etc. This is most appropriate if your Patron is a spirit, a god you can petition via prayer, etc. +50%.

**Special Abilities:** Your Patron wields power out of proportion to its wealth or point value. +50% if your Patron has extensive social or political power (e.g., the Governor of New York or the Pope), or +100% if your Patron has magical powers in a nonmagical world, possesses equipment from a TL greater than yours, grants you special powers, or has unusual reach in time or space (e.g., a super, spirit, or god).

**Special Limitations**

**Minimal Intervention:** Your Patron is less useful than its power level would suggest. On a successful appearance roll, the GM makes a reaction roll for your Patron to determine whether it actually provides aid; see Requests for Aid (p. 562). On a Neutral or better reaction, you receive the aid your Patron thinks you need – which may or may not be what you want. This is the classic modifier for gods who have many other minions to aid, and frequently accompanies the Pact limitation (see p. 113). -50%.

**Secret:** Your Patron works behind the scenes. You do not know who it is and you cannot request aid directly. You might be able to call for help in such a way that the Patron gets the message (GM’s decision), but there is no guarantee that the Patron will take action. The only evidence of this kind of Patron is minor incidents and “lucky breaks.” This may take the form of information, equipment, or even direct aid . . . but only when it suits the Patron, and always in an untraceable way. A Patron like this often regards its
aid as an investment on which it expects some return; therefore, it might not have your best interests at heart! Only the GM knows any of these details. You know nothing other than the fact that you have a Patron. -50%.

Unwilling: You obtained your Patron through coercion (e.g., blackmail). It provides aid only because there is no other choice, and it definitely does not have your best interests at heart! You will eventually make one request too many (GM's judgment – perhaps if the appearance roll comes up 18) and lose the Patron: remove the Patron from your character sheet and lower your point value accordingly. Since a Patron is by definition more powerful than you are, taking an Unwilling Patron is risky. If the Patron can find a way to break your “hold,” it will, and may well become an Enemy! -50%.

Payload ✡ ✡ 1 point/level

You can carry cargo or occupants inside your body! This might be a superficial feature (e.g., a surgically implanted “flesh pocket” or a natural pouch like that of a kangaroo) or an actual internal compartment. The latter is not just for machines – a zombie might have a colony of spiders or snakes living in its body, for example.

Each level of Payload lets you carry up to Basic Lift/10 lbs. inside you. Those without Injury Tolerance (Homogenous) (p. 60) or the Machine meta-trait (p. 263) should ask the GM's permission before taking more than five levels of Payload. You must allocate your Payload between cargo and occupants when you buy the advantage:

Cargo: 20 lbs. of cargo space is roughly equal to one cubic foot of capacity. A typical car has about 10-20 cubic feet of storage space; a semi-trailer has about 2,400 cf.

Occupants: A human-sized being requires about 200 lbs. of capacity. For others, take average racial weight and increase it by 1/3. An actual cabin requires 10 times that weight. Your defensive advantages (DR, Sealed, etc.) also protect your occupants. If your occupants can control you, buy Controls separately – see Compartmentalized Mind (p. 43).

Penetrating Vision ✡ ✡ 10 points/level

Penetrating Vision (sometimes called “X-ray vision”) lets you see through solid objects. Each level of this advantage allows you to see through up to six inches of normal matter. You can just barely see the outline of the substance you are looking through – not enough to impair vision in any way. Penetrating Vision automatically works in conjunction with all your other vision advantages (Infravision, Ultravision, etc.).

Special Limitations

Exposed: Your Payload cannot be concealed and is not protected by your defensive advantages. You can apply this to any portion of your Payload. The main use of this limitation is to create motorcycles and similar unenclosed vehicles. -50%.

Payload ✡ ✡ 1 point/level

You can carry cargo or occupants inside your body! This might be a superficial feature (e.g., a surgically implanted “flesh pocket” or a natural pouch like that of a kangaroo) or an actual internal compartment. The latter is not just for machines – a zombie might have a colony of spiders or snakes living in its body, for example.

Each level of Payload lets you carry up to Basic Lift/10 lbs. inside you. Those without Injury Tolerance (Homogenous) (p. 60) or the Machine meta-trait (p. 263) should ask the GM's permission before taking more than five levels of Payload. You must allocate your Payload between cargo and occupants when you buy the advantage:

Cargo: 20 lbs. of cargo space is roughly equal to one cubic foot of capacity. A typical car has about 10-20 cubic feet of storage space; a semi-trailer has about 2,400 cf.

Occupants: A human-sized being requires about 200 lbs. of capacity. For others, take average racial weight and increase it by 1/3. An actual cabin requires 10 times that weight. Your defensive advantages (DR, Sealed, etc.) also protect your occupants. If your occupants can control you, buy Controls separately – see Compartmentalized Mind (p. 43).

Peripheral Vision ✡ 15 points

You have an unusually wide field of vision. You can see a 180° arc in front of you without turning your head, and have 30° of peripheral vision to either side of that. This gives you a 240° “arc of vision” for observation and ranged
attacks. The figure above shows the arc of vision for a normal character (white) and for someone with Peripheral Vision (gray plus white).

If you are playing with a battle map, you can make melee attacks into “side” (“right” and “left”) hexes as well as “front” hexes — although a one-handed attack to the opposite side (e.g., attacking your left hex with your right hand) is clumsy and considered a Wild Swing (see p. 388). You still cannot attack a foe directly behind you except with a Wild Swing.

This also helps on defense! If you are attacked from a “side” hex, you defend at no penalty. Even against attacks from the rear, your active defense is only at -2.

Out of combat, you get +3 to all rolls to detect Shadowing attempts or ambushes from behind, and the GM will always make a Vision roll for you to spot dangers “behind your back.”

Special Limitations

Easy to Hit: Your eyes are on stalks, unusually large, or otherwise more vulnerable to attack. Others can target your eyes from within their arc of vision at only -6 to hit -20%.

Permeation 🦄

Variable

You can move through a particular solid material as if it didn’t exist. You do not open a passage behind you; observers just see you “melt” into the surface and disappear. You need Penetrating Vision (p. 74) to see where you’re going. You must still breathe (unless you have Doesn’t Breathe), which limits trips to the length of time you can hold your breath (see Holding Your Breath, p. 351).

Permeation differs from Insubstantiality. You are affected by gravity, and you are limited to normal movement; if you lack Flight or another movement advantage, you must walk at your Basic Move. Furthermore, you can be affected by any attack that can reach you within a solid object. You also remain vulnerable to attacks with the material you can pass through, unless you purchase Damage Resistance to such attacks.

Cost depends on how often you are likely to encounter the material you can permeate in the form of a barrier. For instance, paper might be a “Common” substance, but since walls of paper are uncommon, it is treated as “Rare” for the purpose of Permeation.

Very Common: Earth (including clay, mud, and sand), metal, stone (including brick, concrete, and plaster), wood, and other ubiquitous structural materials. 40 points.

Common: Concrete, plastic, steel, and other specific, common structural materials. 20 points.

Occasional: Glass, ice (including snow), sand, and anything else that a normal person could eventually break or tunnel through using muscle power; as well as somewhat unusual structural materials, such as aluminum and copper. 10 points.

Rare: Bone, flesh, paper, and other materials rarely encountered in large quantities or as barriers. 5 points.

Special Enhancements

Can Carry Objects: Normally, you cannot carry anything while moving through matter. This enhancement lets you carry objects, including clothing and armor. If dropped, they “pop” into open space at the point where you entered the material. You cannot leave things inside solid matter! No encumbrance is +10%; Light, +20%; Medium, +50%; Heavy, +100%.

Tunnel: You can leave a tunnel (of about your size) behind you, if you choose. This rearranges the object you are moving through without inflicting damage, and does not work at all on living targets. For an ability that can rip holes in objects and people, see Innate Attack (p. 61), +40%.

Photographic Memory

see Eidetic Memory, p. 51

Pitiable

see p. 22

Plant Empathy 🌿

5 points

You have an unusual rapport with growing things. On encountering a plant, the GM will roll against your IQ. On a success, he will give you a general sense of its health and whether it is natural or supernatural in origin. Furthermore, this advantage functions as Empathy (p. 51) with respect to sentient plants, and allows you to use your Influence skills (see p. 359) on such entities, which will usually ensure a positive reaction.

This ability frequently accompanies some level of Green Thumb (see Talent, p. 89) and often Sense of Duty (Plants) or Vow (Use plant material only if gathered without severe injury to the plant).

Police Rank

see Rank, p. 29

Possession 🕵️

100 points

You can move your consciousness from body to body. In theory, you could live forever this way, moving from dying bodies to healthy ones. However, you cannot survive outside a living host. Should your current body die, you will die! Thus, you must keep your current host alive . . . at least until you can find a replacement.

To possess a new host, you must concentrate for one second and physically touch him. Attempts to possess your own Puppet (p. 78) succeed automatically. In all other cases, roll a Quick Contest: your IQ vs. the subject’s Will. Your victim resists at +5 if he is in combat with you or otherwise wary of you, so it is best to be subtle.

If you lose or tie, you are mentally stunned for 1d seconds. In addition, you may never attempt to possess that subject again — he is “immune” to you.

If you win, you take over your victim’s body, completely suppressing his personality. Your previous host regains control of his body (if sentient) after 1d seconds of mental stun, and “comes to” with no memory of the possession.

You gain your new host’s ST, DX, and HT (and secondary characteristics calculated from these scores), as well as his physical advantages and disadvantages. You keep your own IQ, Perception, and Will, and all of your mental traits. Your social traits may apply, depending on the laws and values of your society.

Skills are a special case. Your IQ-, Perception-, and Will-based skills are unchanged. Other skills remain at the same relative skill level. For instance, if you have Acrobatics at DX+3, then you would have Acrobatics-12 in a DX 9 body and Acrobatics-14 in a DX 11 body.
If you occupy a sentient host, you have sufficient access to his memories for the first few hours of the takeover to learn his name and daily routine, but not enough to learn IQ-based skills. To recall a specific fact from the host's memories, you must roll vs. IQ, at -1 per hour since the takeover. Only one attempt is allowed for any given memory!

**Telecontrol:** You remotely control your new host as if he were a puppet, leaving your original body in a trance. You may choose to return to your body at any time, and must do so if your host falls unconscious or dies (but not if he sleeps). As a result, you do not die if your host dies. +50%.

**Precognition:** You cannot control the content of these flashes — you just know that something interesting or important might happen, at some unspecified future date.

If you occupy a host for a long time, or hop between multiple bodies, the GM is free to adjust your point value to reflect the most expensive body you regularly occupy. For more on this subject, see Chapter 9.

With suitable modifiers, Possession can represent diverse abilities seen in speculative fiction. Note that the Digital, Magical, Parasitic, Spiritual, and Telepathic limitations are mutually exclusive.

**Special Enhancements**

**Assimilation:** When you enter a new body, you may choose to “forget” any of your current skills and use the points this frees up — and any unspent points — to learn ST+, DX-, or HT-based skills known by the host, at up to (host's level)-1. For instance, if you do not know Acrobatics, but your host knows it at DX+3, you can pick it up at DX+2... if you have enough points. Skills forgotten in order to learn new skills are gone. Skills learned from your host will move from body to body with you. +10%.

**Chronic:** When you exit a host, you can leave a “back door” that lets you possess him again without a Quick Contest. This lets you buy your former host as a Puppet. You can only use this enhancement if you have enough unspent points to buy a Puppet at the time you leave your host. +20%.

**Mind Swap:** Your host’s mind moves into your previous body instead of being suppressed — in effect, you “trade places.” +10%.

**Special Limitations**

**Digital:** This limitation is only available to Digital Minds (p. 48). You take over computers, not living bodies. The target system must be connected to your current host computer via a network, and you must have complete access to it — voluntary or otherwise (see Computer Hacking, p. 184). The target computer's hardware must be complex enough to run your computer program; in general, its Complexity must be at least half your IQ (round up). You can also take over a computer using a copy of yourself while leaving the original intact! However, unless you have the Digital version of Duplication (p. 50), any system you take over this way becomes an independent NPC that thinks it is you. This can be good or bad — the duplicate could become any type of Associated NPC (see p. 31). -40%.

**Magical:** Your advantage is an innate magic talent. If the subject is protected by a spell that repels hostile magic, you must win a Quick Contest of your IQ vs. that spell before you can make a possession attempt. If your victim has Magic Resistance, it subtracts from your IQ and adds to his Will during the actual possession attempt. -10%.

**Mindlink Required:** You can only possess someone with whom you have a Mindlink. If the link is ever jammed, out of range, etc., the possession ends. If the Mindlink has the Telecommunication limitation, Mindlink Required can represent control via an implant, telepresence, or similar technology. -40%.

**No Memory Access:** You have no access to your host’s memories. -10%.

**Parasitic:** You enter your host’s body physically. You must have Permeation (Flesh) (p. 75) to do this, unless your host has sufficient Payload (p. 74) to contain you — and your victim must have a higher Size Modifier than you. After entering your victim’s body, you may attempt to possess him. He resists with the higher of HT or Will. You aren’t forced out if you lose, but he is “immune” to you, so you need to find another host soon. While you are in someone else’s body, he (if he is still uncontrolled) or his friends might be able to use technological means to detect you — and possibly remove you. Attacks that penetrate or ignore your host’s DR can injure you, but his HP act as extra DR for this purpose. If you are microbial, you should purchase Injury Tolerance (Diffuse) (p. 60), which will protect you. The host nourishes you, and may have to eat extra food as a result. You can choose to leave at any time, the same way you entered. You may also temporarily release your host while continuing occupation. If you do, you will have to win a new Quick Contest to regain control. -60%.

**Puppet Only:** You may possess your own Puppets automatically, but you cannot possess anyone else. -30%.

**Spiritual:** You must have the Spirit meta-trait (p. 263) to take this limitation. Your spirit body merges with and occupies the body of your host. It remains insubstantial during the possession, traveling inside the host but otherwise inaccessible to you and effectively mindless. It can be injured as detailed under Parasitic, but only by attacks that affect insubstantial things. A genuine exorcist can cast you out by winning a Quick Contest of his exorcism ability vs. your Will. You cannot return to a body you have been cast out of for at least 24 hours. You may choose to release your host at any time. If you are exorcised or leave voluntarily, the host recovers after 1d seconds of mental stun. -20%.

**Telepathic:** Your ability is part of the Telepathy psi power (see p. 257). -10%.
**Power Investiture**

10 points/level

A deity – god, demon lord, great spirit, cosmic power, etc. – has empowered you to cast “clerical” spells. Add your Power Investiture to your IQ when you learn spells granted by the deity who bestowed this advantage. For instance, IQ 12 and Power Investiture 2 (Thor) would let you learn spells granted by the god Thor (and only Thor) as if you had IQ 14.

You may only learn clerical spells from a fixed list set by your deity, who may even dictate which specific spells you learn. The GM determines this list and takes on the role of your deity when you wish to learn new spells. However, because you are channeling divine will, you may only learn spells granted by your deity. Clerical spells do not have prerequisites.

In general, the more Power Investiture you have, the “holier” you are. The maximum level of Power Investiture depends on your deity, as determined by the GM. Minor deities who have a limited ability to transfer power to their chosen, or a small range of possible spell effects, might grant only one level, while major deities might be more generous.

Note that Power Investiture is a measure of your bond with your deity, while Clerical Investment (p. 43) and Religious Rank (p. 30) measure social power. These need not be related. Power Investiture might be restricted to high-ranking clerics . . . but a deity can grant power to anyone it wants (possibly to the chagrin of the church!).

In some cases, you can add or increase Power Investiture in play. This entails decreasing the level of your deity at your IQ level and adding additional level at your Power Investiture level. For instance, IQ 12 and Power Investiture 2 (Thor) would let you learn spells granted by the god Thor (and only Thor) as if you had IQ 14.

**Advantages**

**25 points**

You receive glimpses of future events. You cannot control the content of these flashes – you just know that something interesting or important might happen, at some unspecified future date. You might learn this through visions, voices, or “sudden knowledge.” A vivid premonition of a terrible event might even require a Fright Check (p. 360).

Precognition only gives information that your “future self” could learn and that would matter to you. For instance, if you’re in New York, you are unlikely to have a premonition about a random murder in Los Angeles. But if the victim was a friend, or if the killing was important enough to make national news, you might “flash” on it.

Nothing about the future is certain, though. Even if the GM has made up his mind, he could reconsider . . . although something related to the premonition should still happen. In most settings, predicted events will occur unless you take specific action to prevent them. (But the GM is free to rule that the future is immutable in his setting!)

**Pressure Support**

5 to 15 points

Every character has a “native pressure.” For ordinary humans, this is the pressure of Earth’s atmosphere (“1 atmosphere”). A native pressure other than 1 atmosphere is a 0-point feature, but if you can survive for a prolonged period of time at a wide range of pressures, you have an advantage. This trait comes in three levels:

**Pressure Support 1**: You can survive at pressures between your native pressure and 10 times that. (This would enable a human to survive on most of Earth’s continental shelves.) 5 points.

**Pressure Support 2**: You can withstand pressures between your native pressure and 100 times that. (This would enable a human to survive anywhere in Earth’s oceans, save the deepest trenches.) 10 points.
Pressure Support 3: You are immune to the effects of high pressure. 15 points.

Pressure Support lets your body stay at a constant internal pressure with respect to a constant and uniform external pressure. This protects against attacks that manipulate ambient pressure or crush the entire body, but provides no defense against localized or transient pressure changes. In particular, Pressure Support does not reduce or prevent damage from crushing attacks or explosions of any kind.

Those with Pressure Support often have the Sealed advantage (p. 82), but this is not required.

Protected Sense 5 points/sense

One of your ranged senses is protected against overload. It rapidly adapts to the most intense of stimuli, allowing you to function normally after a maximum of two seconds of impairment. You will never suffer permanent damage to that sense as a result of excessive sensory input, and you get +5 to rolls to resist temporary damage and Sense-Based attacks targeting that sense.

Protected Senses cost 5 points apiece. Protected Vision resists glare and eye damage from lasers, and lets Dark Vision, Infravision, and Night Vision adjust instantly from bright light to darkness. Protected Hearing protects against loud noises. Protected Taste/Smell filters out strong odors and tastes (but not toxins). The GM may permit other Protected Senses (Detect, Scanning Sense, etc.), with suitable justification.

Psi Static 30 points

You are a psionic “null.” Psionic abilities cannot directly affect you or anything you are carrying or wearing. For instance, a telekinetic could throw a rock at you, but he could not levitate an actual vision. No matter how well you roll, you cannot detect magic, spirits, etc. Still, a magic item, ghostly haunt, or ritual site is likely to have an emotionally charged history, giving strong impressions.

On a failure, you receive no impressions at all, and cannot attempt to read that object or place again for 24 hours.

Special Limitations

ESP: Your ability is part of the ESP psi power (see p. 255). -10%.

Special Limitations

Psychometry 20 points

You can sense the history of a place or inanimate object – its use, its user’s personality, etc. This is usually a supernatural gift of some sort (such as psi), but it could also represent a technological “time-scanning” power that can see the past.

To use Psychometry, you must touch the subject item or location, concentrate for one second, and make an IQ roll. This roll is at no penalty for an event that occurred the same day, -1 if one that occurred up to 10 days ago, -2 if up to 100 days ago, -3 if up to 3 years ago, -4 if up to 30 years ago, -5 if up to 300 years ago, and so on. At the GM’s option, you might notice very strong “vibes” on an IQ-4 roll, even if you aren’t concentrating.

On a success, you receive the general sense of emotions and events tied to the object or place . . . if it is linked to emotionally charged events (an uneventful history might leave no impressions at all). This is not always a good thing – a terrifying impression might require a Fright Check (p. 360)!

On a critical success, you experience an actual vision. No matter how well you roll, you cannot detect magic, spirits, etc. Still, a magic item, ghostly haunt, or ritual site is likely to have an emotionally charged history, giving strong impressions.

On a failure, you receive no impressions at all, and cannot attempt to read that object or place again for 24 hours.

Special Limitations

Psychometry 20 points

Psychometry (Active): You may use this advantage actively. If you want to know something, the GM first determines whether or not your ancestors knew the answer. Then he rolls against your IQ to see if you can gain access to the information. If your ancestors didn’t have the answer and the roll succeeds, you will know that. On a critical failure, you will believe your ancestors didn’t know, even if...
they really did. This requires one turn of absolute concentration (the GM may require more elaborate preparations to recall very ancient memories). 40 points.

**Radiation Tolerance **

Variable

Your cells or circuits are resistant to radiation. The cost of this advantage depends on the divisor of the effective dose of radiation you receive – after dividing by the Protection Factor (PF) of artificial protection such as armor:

<table>
<thead>
<tr>
<th>Divisor</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5 points</td>
</tr>
<tr>
<td>5</td>
<td>10 points</td>
</tr>
<tr>
<td>10</td>
<td>15 points</td>
</tr>
<tr>
<td>20</td>
<td>20 points</td>
</tr>
<tr>
<td>50</td>
<td>25 points</td>
</tr>
<tr>
<td>100</td>
<td>30 points</td>
</tr>
<tr>
<td>200</td>
<td>35 points</td>
</tr>
<tr>
<td>500</td>
<td>40 points</td>
</tr>
<tr>
<td>1,000</td>
<td>45 points</td>
</tr>
</tbody>
</table>

**Rank**

see p. 29

**Rapid Healing**

5 or 15 points

Your wounds heal quickly. This trait comes in two levels:

*Rapid Healing*: Whenever you roll to recover lost HP or to see if you can get over a crippling injury, you get +5 to your effective HT.

*Prerequisite*: HT 10+. 5 points.

*Very Rapid Healing*: As above, but when you roll to recover lost HT, a successful HT roll means you heal two HP, not one. *Prerequisite*: HT 12+. 15 points.

Note that this advantage does not hasten recovery from the short-term effects of injury, such as stunning and knockout; get Recovery (p. 80) for that.

**Rapier Wit**

5 points

You can use witty repartee to stun your foes in combat. This does not require a combat maneuver – talking is a free action (p. 363). Roll a Quick Contest of Public Speaking skill vs. your opponent’s Will.

*Modifiers*: -2 if your target has the Clueless or No Sense of Humor disadvantage; any modifier the GM assigns based on your description of the verbal attack; -1 per opponent beyond the first to affect a group (and you must know something the entire group has in common; e.g., they’re all flunkies of the same household or members of the same military unit). Opponents with the Unfazeable advantage (p. 95) are immune to Rapier Wit.

If you win, your opponent is mentally stunned (see p. 420). A critical success causes one HP of physical damage as well – your victim injures himself accidentally (drops something on his foot, chokes on his own tongue, etc.). If you lose, there is no effect. On a critical failure, you enrage your opponent, possibly triggering such disadvantages as Berserk and Bloodlust!

This advantage is usually only appropriate in a silly campaign!
Reawakened 🌼 10 points

You can “remember” skills (spells, techniques, etc.) learned during previous lives. You must purchase these abilities normally; Reawakened is just a special Unusual Background (p. 96) that explains how you learned them without a teacher. This trait is only available if reincarnation is a fact in the setting (GM’s decision).

Recovery 🌼 10 points

You recover from unconsciousness very quickly. When determining the length of time you remain unconscious for any reason, divide by all times by 60; hours become minutes, minutes become seconds . . . even a month-long coma becomes a mere 12-hour sleep.

Reduced Consumption 🌼 2 points/level

You can go for a long time without food and water, or fuel – although you still require these things. (For indefinite endurance, see Doesn’t Eat or Drink, p. 50.) This advantage comes in four levels:

- **Reduced Consumption 1:** You require 2/3 as much food and water, or fuel, as usual (“two meals a day”). 2 points.
- **Reduced Consumption 2:** You require 1/3 as much food and water, or fuel, as usual (“one meal a day”). 4 points.
- **Reduced Consumption 3:** You require food and water only once per week (“one meal a week,” or about 5% as much). 6 points.
- **Reduced Consumption 4:** You require food and water only once per month (“one meal a month,” or about 1% as much). 8 points.

Note that one or even two levels of this advantage might be appropriate for ascetics in cinematic games!

Special Limitations

- **Cast-Iron Stomach:** You require the standard amount of food and water, but the quality is irrelevant. You can eat rotten vegetables and fuzzy blue-green meat, and drink dishwater and sour milk. Instead of reducing how much you must eat, reduce your demands on life support (and your food costs) by a like amount: to 2/3 normal at level 1, 1/3 normal at level 2, 5% normal at level 3, and 1% normal at level 4. You get a bonus equal to your level (+1 to +4) to resist the effects of food-borne poisons or diseases not tailored expressly for you, but -3 on reactions from anyone watching you eat! -50%.
- **Food Only:** You require less food, but the usual amount of water. -50%.
- **Water Only:** You require less water, but the usual amount of food. -50%.

Regeneration 🌼 Variable

Your wounds heal in mere hours, minutes, or seconds! To regenerate lost limbs, you will also need Regrowth (below) – but Regeneration will greatly accelerate that ability. Regeneration includes Rapid Healing (p. 79) at no extra cost.

You cannot have Regeneration if you have Slow Healing (p. 155) or Unhealing (p. 160). Regeneration is compatible with Draining (p. 132), but it does not restore the daily HP loss due to that disadvantage.

The cost of this trait depends on your regeneration speed:

- **Regeneration (Slow):** You recover 1 HP every 12 hours, in addition to normal healing. 10 points.
- **Regeneration (Regular):** You recover 1 HP per hour. 25 points.
- **Regeneration (Fast):** You recover 1 HP per minute. 50 points.
- **Regeneration (Very Fast):** You recover 1 HP per second. 100 points.
- **Regeneration (Extreme):** You recover 10 HP per second. 150 points.

Special Enhancements

- **Heals Radiation:** You shed accumulated rads at 10 times the rate at which you heal missing HP. For instance, Regeneration (Regular) removes 10 rads per hour. This will heal “permanent” radiation damage. +40%.

Special Limitations

- **Radiation Only:** As Heals Radiation, but you only shed rads – you do not heal HP. -60%.

Regrowth 🌼 40 points

You can regrow lost limbs and organs! A lost ear; finger, toe, claw, tentacle tip, etc. regrows in 1d weeks; a lost hand or foot in 1d+1 months; and a lost eye, arm, or leg in 2d+2 months. If you also have Regeneration (above), Regrowth works much faster: all lost body parts regrow in the time it takes you to heal to full HP.

Special Limitations

- **Minor:** You can only regrow ears, fingers, toes, and other small bits – not hands, feet, eyes, etc. -50%.

Religious Rank 🌼 Variable

see Rank, p. 29

Reputation 🌼 Variable

see p. 26

A positive Reputation is an advantage and should be noted as such on your character sheet.

Resistant 🌼 Variable

You are naturally resistant (or even immune) to noxious items or substances that are not direct, physical attacks. This gives you a bonus on all HT rolls to resist incapacitation or injury from such things.

The bonus from Resistant applies to all rolls to resist noxious effects within a particular category – usually some combination of disease, poison, and environmental syndromes (altitude sickness, the bends, space sickness, etc.). It also applies to rolls to resist attacks that use these effects. This includes Afflictions with one of Blood Agent, Contact Agent, Follow-Up, or Respiratory Agent, and Innate Attacks that have such modifiers and inflict toxic or fatigue damage.

Resistant does not protect against effects that Damage Resistance or Protected Sense either stop or provide a HT bonus to resist. This includes Afflictions and Innate Attacks that do not have any of the modifiers given above.

The base cost for Resistant depends on the rarity of the effects it counteracts:
Very Common: A broad category within the noxious items described above. Example: Metabolic Hazards (all threats that only affect the living, including all disease and poison, plus such syndromes as altitude sickness, bends, seasickness, and jet lag). 30 points.

Common: A group of related items encountered as often in nature as in an attack, or some other suitably broad subset of “Very Common.” Example: Poison (all toxins, but not asphyxiants or corrosives) or Sickness (all diseases and environmental syndromes). 15 points.

Occasional: A group of closely related items more often encountered in nature than as a deliberate attack, or a subset of a “Common” group. Examples: Disease (all bacteria, viruses, fungus infections, etc.) or Ingested Poison. 10 points.

Rare: A specific item or environmental syndrome, or a subset of an “Occasional” group. Examples: Acceleration (blackouts due to extreme G-forces), Altitude Sickness, Bends (decompression sickness), Poison (+3) [5]. Anything more would be superhuman. Golems, robots, undead, and other beings that are not truly “alive” must take Immunity to Metabolic Hazards [30]; this is already included in the Machine meta-trait (p. 263). When in doubt, the GM’s word is final.

Mental Resistance: It is possible to be Resistant to a purely mental threat. This works as described above, except that the bonus applies to resistance rolls against IQ and Will instead of HT. “Psionics” is an allowed category, and is considered Very Common.

Scanning Sense 🌋

Resistant does not protect against effects that Damage Resistance or Protected Sense either stop or provide a bonus to resist.

Seasickness, or Space Sickness; Nanomachines. 5 points.

Multiply base cost to reflect your degree of resistance:

You are totally immune to all noxious effects, and never have to make resistance rolls (write this as “Immunity” on your character sheet): x1.

You have +8 to all HT rolls to resist: x1/2.

You have +3 to all HT rolls to resist: x1/3.

Drop all fractions from the final cost.

An ordinary human could believably have any level of resistance to a mundane “Rare” item, such as Seasickness. He might also have Resistant to Disease (+3) [3], Resistant to Disease (+8) [5], or Resistant to bat. Perception is limited to a 120° arc in front of you.

Your sense is “active.” Anyone who can sense the signal you emit can detect you, out to twice your own range. Unlike other sensory advantages, however, you can turn this ability off; see Turning Advantages Off and On (p. 34).

Below are several varieties of Scanning Sense. Each is a separate advantage, with its own special rules. Where these rules contradict the general ones given above, follow the special rules. Each sense also has a base range. To adjust this, take Increased Range (p. 106) or Reduced Range (p. 115).

Radar: Your Scanning Sense uses radio waves. Base range is 2,000 yards. You can only detect large (human-sized or larger), dense objects. On a Sense roll, you get a general idea of the relative size of the object, and whether it is moving, but nothing more precise. You cannot get an actual “image” with Radar, or use it to aim attacks. Radar works best on flying targets; roll at -4 to spot anyone who is not silhouetted against the sky. Radar does not work at all underwater. 20 points.

Imaging Radar: Your Scanning Sense uses millimeter-wave radar. Base range is 200 yards. You can spot small objects and determine their shape, but you must make a Sense roll to distinguish fine relief (e.g., to identify a face). Imaging Radar can see through thin fabric or vegetation. You get +3 to locate objects like concealed weapons, and may ignore penalties for spotting objects hidden behind light brush. Ordinary radar detectors detect Imaging Radar at -4. Imaging Radar does not work underwater. 20 points.

Ladar: Your Scanning Sense uses a laser beam. Base range is 200 yards. Ladar is very similar to Imaging Radar, but the beam is narrower and offers better resolution. This gives -4 on rolls to locate objects of interest, but +4 on rolls to identify them. Only specialized ladar detectors can detect Ladar; and at -4 even then. Ladar cannot penetrate dense smoke or solid objects. It has 10-50% range in falling rain or snow, and 1% range underwater. 20 points.

Para-Radar: Your Scanning Sense uses energy unknown to 21st-century science. Treat Para-Radar as Imaging Radar, except that it functions in any environment! Ordinary radar detectors cannot detect Para-Radar, although some ultra-tech sensors might be able to do so. 40 points.

Sonar: Your Scanning Sense uses ultrasonic sound waves. Base range is 2,000 yards underwater. You can spot small objects and determine their shape, but you must make a Sense roll to distinguish fine relief (e.g., to identify a face). Sonar does not function if you are deafened, and can be “jammed” or fooled by a very loud noise (e.g., an explosion). Individuals with Ultrahearing can detect Sonar. Sonar is much less effective in air: range is only 20 yards multiplied by air pressure in atmospheres (one atmosphere on Earth). Sonar is completely ineffective in vacuum. 20 points.
Special Enhancements

*Extended Arc:* You can scan an arc greater than 120°. A 240° arc (as described for Peripheral Vision, p. 74) is +75%; a 360° arc (as described for 360° Vision, p. 34) is +125%.

*Low-Probability Intercept (LPI):* This is only available for Radar and Sonar. You can switch this enhancement on and off. Turning it on makes your signal difficult to detect. This halves range, but your Scanning Sense can only be detected at 1.5 times the halved range. +10%.

*Multi-Mode:* This is only available for Radar. You can switch between Radar and Imaging Radar. (This is much cheaper than buying the two advantages separately, because they overlap to some extent.) +50%.

*Penetrating:* This is only available for Para-Radar. You can “see” inside any object within range. This functions exactly as Penetrating Vision 2 (p. 74). +50%.

*Targeting:* By taking an Aim maneuver, you can “lock onto” any object within range and determine its precise range and speed – just as if you had a high-tech rangefinder. This gives you +3 to hit that target with an aimed ranged attack. +20%.

Special Limitations

*Targeting Only:* As Targeting, but you can only use your sense to “lock onto” targets already spotted with another sense; you cannot use it to spot things. -40%.

Sealed 🦞 15 points

You are encased in a gas- and liquid-impermeable layer. This makes you waterproof, and grants complete immunity to corrosive or toxic agents that must touch skin or exposed machinery to work. You must still breathe, unless you also have Doesn’t Breathe (p. 49); however, your exterior breathing apparatus (nose, snorkel, etc.) is protected by this trait. Likewise, you are not automatically pressurized; for that, take Pressure Support (p. 77) or Vacuum Support (p. 96).

Security Clearance 💾 Variable

A government agency or corporation trusts you with access to sensitive information that would otherwise be “off limits” to someone of your Rank or Status. For instance, a general “cleared” for military secrets commensurate with his Military Rank would not have to buy Security Clearance separately, but a civilian with exactly the same level of access would have to pay points for the privilege.

Point cost depends on your degree of access:

- You have access to a relatively narrow range of secrets on a “need to know” basis. *Example:* a strategic bomber pilot, who might know secrets about aircraft, weapons, and targets. 5 points.
- You have either free access to a narrow range of secrets or “need to know” access to a broad range of secrets. *Example:* a counterintelligence officer, who would have limited access to *many* secrets, as part of his job is to protect them. 10 points.
- You have free access to a broad range of secrets. *Example:* a cinematic secret agent, who will know almost...
any secret the plot requires him to know. 15 points.

Halve these values (round up) if the organization that grants the Security Clearance is of relatively minor importance (e.g., a small corporation or municipal government).

You cannot receive a security clearance without a thorough background check. The GM is free to forbid this advantage to any PC who has a suspicious past (including such traits as Debt or Secret) or an unstable personality (for instance, Paranoia or Sadism).

**See Invisible** 15 points

You can see objects or individuals that are normally invisible. Buy this advantage separately for each kind of invisibility.

**Sensitive**

see Empathy, p. 51

**Sensitive Touch** 10 points

Your fingertips or equivalent organs are extremely sensitive, allowing you to sense residual heat in a chair; faint vibrations in the floor as someone approaches, etc. You get +4 (in addition to any Acute Touch bonuses) on any task that utilizes the sense of touch; e.g., a Forensics roll to note the similarities or differences between two pieces of fabric, or a Search roll to feel out tiny concealed objects.

**Serendipity** 15 points/level

You have the knack of being in the right place at the right time. Each level of this trait entitles you to one fortuitous but plausible coincidence per game session. The details are up to the GM. For instance, the GM might declare that one of the guards you need to talk your way past just happens to be your cousin, or that there is a sports car idling in front of the bank just as you run outside in pursuit of the fleeing bank robbers.

From time to time, the GM may rule that a single implausible coincidence counts as some or all of your lucky breaks for a given session (e.g., the mechanic at the local garage has all the parts you need to complete your ultra-tech contragrav belt).

You are free to suggest serendipitous occurrences to the GM, but he gets the final say. Should he reject all your suggestions but fail to work Serendipity into the game session, you will get your lucky breaks next game session.

**Shadow Form** 50 points

You can become a two-dimensional shadow. This lets you slip along walls and floors – and through the thinnest cracks (anything wide enough to fit your shoulders through) – at your usual ground Move. You can also defy gravity, creeping up walls and across ceilings at half Move.

Physical attacks do half damage to you in this form. Energy attacks do normal damage, except for light-based attacks, which do 50% extra damage. Magic, psi, and other purely mental abilities affect you normally.

You are subject to a few major restrictions while in this form. You cannot walk through three-dimensional space; you must slide along an object. Furthermore, you cannot perform any purely physical attacks or actions, and you cannot carry ordinary items or affect them in any way. You can use magic, psi, and similar abilities, however.

If you cannot switch out of Shadow Form, Shadow Form is a disadvantage worth -20 points. This will make it difficult to interact with others! You may still add enhancements, but they will work like limitations, reducing the value of the disadvantage. For instance, a +50% enhancement would reduce the value of the disadvantage by 50%, to -10 points.

**Special Enhancements**

*Can Carry Objects:* You may carry objects. They take Shadow Form when picked up and return to normal when put down. You still may not affect non-shadow objects. No encumbrance is +10%; Light, +20%; Medium, +50%; Heavy, +100%.

**Shapeshifting** Variable

You can physically change into one or more forms different from your native form. To shift between forms, you must concentrate for 10 seconds. To speed this up, add Reduced Time (p. 108).

Fatigue, injury, crippling, and afflictions carry over between forms – although HP and FP losses scale in proportion to the HP and FP of the form. For instance, if you suffer 10 HP of damage and a broken leg in a form that has 20 HP, you will have 5 HP of damage and a broken leg when you switch to a form that has only 10 HP.

If you are knocked out or killed, you immediately revert to your native form (which will also be unconscious or dead). In addition, you must specify a single, reasonably common external influence that can force you to return to your native form against your will. This should suit the advantage’s origin: a Dispel Magic spell if your ability is magical, exorcism if a spirit power, strong magnetic fields if technological, etc.

Shapeshifting comprises two different traits: Alternate Form and Morph.

**Alternate Form** Variable

Like the werewolf of folklore, you can assume a specific form other than your own. This can be anything built with points: humanoid, animal, robot, etc. Create your alternate form as a racial template (p. 260); however, you can switch it “on” and “off.” This template need not be a “stock” template. For instance, if you wish to retain human intelligence in beast form, you could shift into a template that lacks the beast’s low IQ (although this increases the template cost and hence the cost of Alternate Form). The GM is the final judge of what templates are allowed as Alternate Forms.

While it is turned on, your Alternate Form’s racial template replaces your native racial template. Apply its racial traits – attribute modifiers, racial advantages and disadvantages, etc. – instead of those of your native race. Personal traits (including all attribute levels, advantages, disadvantages, and skills bought over and above racial norms) remain intact, although your skill levels are affected by changes to the controlling attribute scores.
If the Alternate Form’s racial template has traits that conflict with your personal traits, the traits of your Alternate Form take precedence. For instance, if you become a dolphin with No Manipulators, you will temporarily lose personal advantages that affect your hands, such as High Manual Dexterity, while you are in dolphin form – and some skills (for instance, Lockpicking) will be relatively useless, although you do remember them.

If you have a single Alternate Form, it costs 15 points for a racial template worth no more than your native racial template. A more powerful form costs 15 points plus 90% of the difference in cost between your native template and that of your Alternate Form.

If you have multiple forms, pay full cost for the most expensive form. The less powerful Alternate Forms cost a flat 15 points apiece. Minimum cost per form is still 15 points.

**Example:** Consider four racial templates: a -100-point “cuddly critter,” a 0-point human, an 80-point “ravenous beast,” and a 100-point troll. A human who can turn into a cuddly critter pays 15 points, as the cuddly critter template is worth less than his native template. A cuddly critter who can turn into a human pays 15 + (0.9 × 100) = 105 points, since the human racial template is worth 100 points more than his own. A human who can become a troll also pays 15 + (0.9 × 100) = 105 points. A human who can assume any of the other three templates would pay full cost for his most expensive form, the troll: 105 points. The ravenous beast and cuddly critter forms would cost the minimum 15 points apiece. Total cost would be 135 points.

**Were-Creatures:** To create the classic “were-creature,” start by purchasing any trait that applies in both forms – Infectious Attack, Vulnerability (Silver), etc. – as a personal trait. Next, buy an animal template as an Alternate Form. Since most beast templates are worth 0 or fewer points, this will usually cost 15 points, but powerful creatures (e.g., bears and tigers) may cost more. If the beast form is savage, the template should include such traits as Berserk, Bestial, and Bloodlust. Finally, apply limitations such as Emergencies Only (p. 112), Unconscious Only (p. 115), and Uncontrollable (p. 116) to Alternate Form, as applicable. If you can only change during the full moon, add a -40% Trigger limitation (p. 115) as well.

**Shapeshifting Races:** When creating an entire race that has Alternate Form, work out the details of Alternate Form last. Total the cost of all the race’s traits other than Alternate Form, subtract this total from the cost of the template the race transforms into, and use the difference to calculate the cost of Alternate Form for the race. Add the cost of Alternate Form to that of the race’s other abilities to determine final racial cost.

**Example:** Forest Dwarves can turn into sapient bears. Excluding Alternate Form, the racial traits of Forest Dwarves total 25 points. The bear template is worth 125 points. The difference is 125 - 25 = 100 points. Thus, the cost of Alternate Form is 15 + (0.9 × 100) = 105 points. This makes the Forest Dwarves template worth 25 + 105 = 130 points.

**Special Limitations**

**Cosmetic:** You can assume a second, distinct appearance with no change in abilities or racial template. -50%.

**Morph Variable**

This ability is similar to Alternate Form, but not limited to specific racial templates. You can assume any racial template, within certain limits.

First, the racial template must already exist in your game world. The GM might design the template himself or take one from a GURPS worldbook, but you cannot design totally new templates for the purpose of Morph (you can adjust existing ones, though; see below).

Second, you can only turn into a living being, or a formerly living being such as a vampire. To change into a machine requires a special enhancement.

Finally, the template’s point value must be within a limit determined by the number of points you have in Morph.

If you can assume any racial template worth no more than your native one, Morph costs 100 points. This makes many forms available – anything no more powerful than your native form. For a human, this includes cats, insects, owls, and wolves. If you can assume more powerful forms, add the difference between the maximum racial template cost and the cost of your native template to the base 100 points. For instance, a human who can take on any racial template worth up to 75 points would pay 175 points for Morph. You may improve this limit with earned character points.

You can always take on the form of being you can see or touch, provided its racial template cost does not exceed your maximum. Once you have assumed a form, you can opt to memorize it by concentrating for one minute. This allows you to shapeshift into that form at any time. You can memorize a number of forms equal to your IQ. If all your "slots" are full, you must overwrite a previously memorized form (your choice) to add the new form.

As with Alternate Form, the racial template of whatever you turn into replaces your native racial template. You may not add traits to templates, but you may freely omit racial mental disadvantages (e.g., Bestial), and you may always choose to drop the racial IQ modifier from a template and use your own IQ. Such changes raise the cost of animal templates, which are cheap due to limited mental capabilities. If you intend to do this, you should spend more than the minimum 100 points on Morph.

Morph includes the ability to make cosmetic changes. This lets you impersonate a specific member of any race you can turn into. You can always impersonate someone who is present – but to assume his form later on, you must commit a memory "slot" to that form. With enough points in Morph, you can use this function to improve appearance. For instance, 115 points in Morph would let you give yourself any appearance from Horrific to Handsome. Cosmetic changes still take the usual 10 seconds.

**Shapeshifting Races:** Members of a race with the Morph ability must subtract the point cost of Morph from racial cost when determining what forms they can assume.
Example: Blue Blobs have a racial Morph ability worth 125 points – the basic ability, plus 25 points of extra capacity. This lets them assume forms worth 25 points more than their native one. With their other traits, their total racial cost is 175 points. However, for the purpose of Morph, they are considered to have a racial cost of 175 - 125 = 50 points. With their 25 points of additional capacity, Blue Blobs can turn into creatures worth up to 75 points.

Special Enhancements

**Unlimited**: You can become anything the GM has defined with a racial template. This lets you turn into robots, vehicles, etc. as well as living beings. Most ordinary inanimate objects – such as bricks and toasters – are worth 0 points or less. With the GM’s permission, you can become a typical example of an object like this without the need for a specific racial template. +50%.

**Special Limitations**

**Cosmetic**: You can only change your outward appearance. Your abilities and racial template are unaffected. -50%. This limitation includes Mass Conservation, but not Retains Shape.

**Mass Conservation**: All your forms have the same weight. If the weight of your native form falls outside the normal racial weight range for a race, you simply cannot become a member of that race. The GM should be merciless when enforcing this limitation – no 150-lb. mice or elephants! -20%.

**Retains Shape**: You can only assume forms with the same number of limbs, body layout, posture, etc. as your native form. This would limit a human Morph to humanoids (e.g., elves and giants), a wolf Morph to humanoids (e.g., -3 to SM reduces weight by a factor of 30).

Example: A 5'10"-tall character (SM 0) has Shrinking 12. This lets him shrink until he has SM -12, reducing his height by a factor of 100 (to about 0.7”). However, at that size he has only 1% his usual Move, reach, HP, and DR, and must divide any damage he inflicts by 100. His weight goes down by a factor of 1,000,000!

**Special Enhancements**

**Affects Others**: You can bring your friends with you when you shrink! +50% per person you can affect at the same time.

**Can Carry Objects**: You may carry objects. This is limited to equipment you are actually carrying or wearing when you shrink. Such items regain normal size when put down; at the GM’s option, they might sweep you aside as they grow, or even return to normal size beneath you, stranding you high above the ground! No encumbrance is +10%; Light, +20%; Medium, +50%; Heavy, +100%.

**Full Damage**: You inflict full damage when shrunk. (GMs be warned: this makes for an almost perfect assassin.) +100%.

**Full DR**: You retain full DR when shrunk. +50%.

**Full HP**: You retain full HP when shrunk. +30%.

**Full Move**: You retain full Move when shrunk. +30%.

**Signature Gear**

**Variable**

You have distinctive, valuable possessions unrelated to your wealth level. This gear is as much a part of your personal legend as are your reputation and skills. You must explain where it came from: you won your starship in a card game, inherited your magic sword from your mentor, etc.

For equipment normally bought with money, such as weapons and armor; each point in Signature Gear gives goods worth up to 50% of the average campaign starting wealth (but never cash). For anything built as a character, use the rules under Allies (p. 36) instead. It is up to the GM whether to treat android companions, faithful steeds, custom vehicles, etc. as equipment (with a cash cost) or characters (with a point cost).

If you misplace Signature Gear or sell it unwillingly, or an NPC steals or confiscates it, the GM must give you an opportunity to recover it in the course of the adventure. If it is truly lost forever through no fault of your own, the GM will give you back your points (or replace the item with another of equal value). However, should you sell or give away your Signature Gear of your own free will, it is gone, along with the points spent on it!

**Silence**

5 points/level

You can move and breathe noiselessly. You get +2 per level to Stealth skill when you are perfectly motionless, or +1 if moving (even in armor, etc.). These bonuses help only in the dark, or against listening devices, blind creatures, and others who must rely on hearing to find you.

**Single-Minded**

5 points

You can really concentrate! You get +3 to success rolls for any lengthy mental task you concentrate on to the exclusion of other activities, if the GM feels such focus would be beneficial. You tend to ignore everything else while obsessed (roll vs. Will to avoid this), and have -5 to all rolls to notice interruptions.

The GM may rule that certain complex tasks (e.g., inventing, magic, and social activities) require you to divide your attention. This trait has no effect in such situations.

**Slippery**

2 points/level

You are hard to hold! You might be slimy, molecularly smooth, or surrounded by a force field that negates friction. Each level of this trait (maximum five levels) gives +1 on all ST, DX, and Escape rolls to slip restraints, break free in close combat, or squeeze through narrow openings.

**Smooth Operator**

see Talent, p. 89.
Snatcher & 80 points

You have the power to find almost any small item you desire in an alternate world and "snatch" it across the dimensions to you. The items you snatch do not come from your own world, but from some nameless parallel; therefore, you can never intentionally take something away from a specific other person. Note that this talent does not allow you to visit alternate worlds in person – only to steal from them.

To make a snatch, you must first concentrate for 10 seconds and clearly visualize the item you want. The item must be able to fit in one hand, and cannot weigh more than 5 lbs. You should have a hand free (if your hands are tied, you roll at -3), and others can see you making "reaching" motions with that hand.

Next, make an IQ roll for the snatch attempt. If you are trying for information in any form, the GM makes this roll for you (see below). Regardless of IQ, a roll of 14 or more always fails.

On a success, the desired item appears in your hand – or sitting within arm's reach, if you prefer. On a failure, you obtain nothing. On a critical failure, you snatched the wrong item! This item is not immediately dangerous unless you were trying for something dangerous.

Regardless of success or failure, each snatch attempt costs 2 FP.

Items Available

In theory, you can get anything. In practice, some things are so hard to find that it is little use trying for them. You have a good chance of getting any item that exists, or that ever existed, in your own world – or any reasonably similar item. If the desired item is unusual, the GM may apply a penalty to the IQ roll:

- Item is significantly different from anything that ever appeared in your own world: -1 or more (GM's option). You could visualize "a perfect diamond, bright green, the size of a hen's egg, carved into the shape of a typewriter," but you might be rolling at -20!
- Item is unique or almost unique in any one world (e.g., the Hope Diamond): -3 or worse (GM's option).

You cannot clearly visualize what you want: -4 or worse (GM's option). Even on a "success," you might not get what you were really hoping for.

You cannot get an item that works by natural laws wholly different from those in your world. For instance, if your world is nonmagical (or has no magic that you know of), you cannot snatch a magic item, because you are unable to visualize it properly; you would get a pretty but powerless mundane item. Similarly, if you are from a low-TL world, you could not get a laser pistol; you wouldn't be able to visualize it well, and your best effort would be a broken or toy gun. (A generous GM might bend this rule on a critical success . . . and then let the poor Snatcher try to figure out how to use his amulet or laser pistol without killing himself.)

Information is not available except in the form of "ordinary" textbooks, reports, etc. You can grab a history book, but you can't ask for "The Book of What Happens Next in My Adventure." Note that the GM makes the roll if information is requested. If the roll fails by 5 or more, the information comes from an alternate world with different history, physics, etc., and is wrong – maybe subtly, maybe not subtly at all!

Repeated Attempts

If your snatch attempt is unsuccessful, you can immediately try to snatch the same or a similar object again. These "repeated attempts" are made at a cumulative -1 to the IQ roll. Each repeated attempt costs 4 FP instead of the usual 2 FP. To eliminate these penalties, wait one hour between attempts.

The GM should be strict about attempts to circumvent this. For instance, a ".45 pistol" is not very different from a ".357 pistol" for the purpose of this advantage. Furthermore, ignore critical successes on repeated attempts made in quick succession. If the snatch being attempted is very difficult, there is little choice but to wait an hour between attempts.

Duration

The objects you snatch remain until you voluntarily return them or use your Snatcher ability again. To keep objects indefinitely, take the Permanent enhancement (below).

Special Limitations

Less Weight: Your weight limit is lower than 5 lbs.

<table>
<thead>
<tr>
<th>Limit</th>
<th>Cost Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 lbs.</td>
<td>-5%</td>
</tr>
<tr>
<td>2 lbs.</td>
<td>-10%</td>
</tr>
<tr>
<td>1 lb.</td>
<td>-15%</td>
</tr>
<tr>
<td>4 oz.</td>
<td>-25%</td>
</tr>
<tr>
<td>1 oz.</td>
<td>-30%</td>
</tr>
</tbody>
</table>

Specialized: You can only grab a certain type of object, or cannot touch a certain class of thing. Examples: Only metal, -5%; Only money, -10%; Only weapons, -10%; Only information, -20%; No metal, -20%; Only blue things, -25%. The GM sets the limitation value using the guidelines under Accessibility (p. 110).

Stunning: You are mentally stunned after a successful snatch. -10%.

Unpredictable: On a failed IQ roll, you get something, but it isn't what you wanted. The worse the failure, the more different the item is. If you wanted a loaded pistol, failure by 1 might bring an unloaded pistol. Failure by 2 could mean a water pistol, failure by 3 a book on "How to Shoot," and so on . . . with a critical failure bringing a live hand grenade. Any critical failure is dangerous, regardless of what you were looking for! -25%.

Social Chameleon & 5 points

You have the knack of knowing exactly what to say – and when to say it – around your social "betters." You are exempt from reaction penalties due to differences in Rank or Status. In situations where there would be no such penalty, you get +1 on reactions from those who demand respect (priests, kings, etc.). This is a cinematic advantage!

Social Regard & 5 points

You are a member of a class, race, sex, or other group that your society
holds in high regard. To be an advantage, this must be obvious to anyone who meets you. This is the opposite of Social Stigma (p. 155); membership in a given social group cannot result in both Social Regard and Social Stigma.

Social Regard costs 5 points per +1 to reaction rolls, to a maximum of +4. This is not a Reputation, despite the similarities in cost and effect. You are treated well because of what you are, not because of who you are. Think of it as “privilege by association.”

The way you are treated on a good reaction roll will depend on the type of Regard:

**Feared:** Others will react to you much as if you had successfully used Intimidation skill (p. 202). Those who like you stand aside, while those who dislike you flee rather than risk a confrontation. You are met with silent deference, and perhaps even respect, but never friendly familiarity. *Examples:* a god among men or an Amazon warrior.

**Respected:** You receive polite and obsequious deference, much as if you had high Status (p. 28), regardless of your actual Status. Social interactions other than combat usually go smoothly for you – but there will be times when the kowtowing gets in the way. *Examples:* a member of a priest caste or a ruling race.

**Venerated:** Total strangers react to you in a caring way. They give up seats, let you ahead of them in lines, and receive your every word as pearls of wisdom. They also take great pains to prevent you from putting yourself in danger or even discomfort – even when you need to do so! *Example:* an elderly person in many societies.

### Speak Underwater 🌊 5 points

You can talk normally while submerged, and you can understand what others say while underwater.

### Special Enhancements

**Interface Crossing:** You can talk to those outside of the water while submerged, and can understand people on the surface talking to you. +50%.

### Speak With Animals 🌿 25 points

You can converse with animals. The quality of information you receive depends on the beast’s IQ and the GM’s decision on what the animal has to say. Insects and other tiny creatures might only be able to convey emotions such as hunger and fear, while a chimp or a cat might be able to engage in a reasonably intelligent discussion. It takes one minute to ask one question and get the answer – if the animal decides to speak at all. The GM may require a reaction roll (+2 to reactions if you offer food).

The GM is free to rule that alien, unnatural, or mythical beasts don’t count as “animals” for the purpose of this advantage.

### Special Limitations

**Specialized:** You can only communicate with certain animals. "All land animals" (including birds, insects, and land-dwelling mammals and reptiles) or “All aquatic animals” (including amphibians, fish, mollusks, crustaceans, and cetaceans) is -40%; one class (e.g., “Mammals” or “Birds”), -50%; one family (e.g., “Felines” or “Parrots”), -60%; one species (e.g., “House Cats” or “Macaws”), -80%.

### Speak With Plants 🌿 15 points

You can communicate empathically with plants. All earthly plants are IQ 0, but a large tree might be “wiser” than the average ivy, at the GM’s whim. A plant might know how recently it was watered or walked on, or something else that directly bears on its well-being, but would be unable to relate an overheard phone conversation. Any normal plant will always cooperate, within the limits of its ability. A mutant cabbage from Mars might require a reaction roll!
Special Rapport 5 points

You have a unique bond with another person. This acts as a potent version of Empathy (p. 51) that works only with one person, without regard to distance. You always know when your partner is in trouble, in pain, lying, or in need of help, no matter where he is. This requires no IQ roll. Your partner receives the same benefits with respect to you.

Both partners in a Special Rapport must buy this advantage. Your partner need not be a lover, or even a close friend, but the GM has the final say. In particular, the GM may wish to forbid PCs from buying Special Rapports with powerful NPCs who would otherwise qualify as Patrons (or allow it, with powerful NPCs who would otherwise qualify as Patrons (or allow it, but require an Unusual Background).

Spines 1 or 3 points

You have sharp spines, like those of a porcupine or an echidna, located on strategic parts of your body. This is defensive weaponry, intended to discourage attackers; you cannot use your Spines actively. However, you get a DX-4 roll to hit each foe in close combat with you once per turn, as a free action. Roll at +2 against foes who attacked you from behind. Those who grapple or slam you are hit immediately and automatically – and those who grapple or slam you take maximum damage!

Short Spines: One or two inches long. Do 1d-2 impaling damage. Reach C. 1 point.
Long Spines: One or two feet long. Do 1d impaling damage. Reach C. 3 points.

Spirit Empathy 10 points

You are in tune with spirits, and receive the benefits of Empathy (p. 51) when dealing with them. You can get a feeling for the general intentions of any spirit you encounter by making a successful IQ roll. As well, your Influence skills (Diplomacy, Sex Appeal, etc.) work normally on spirits, which sets you aside from most mortals. Spirit Empathy does not prevent evil or mischievous spirits from seeking to harm you, but at the GM’s option, it might make it easier to detect and counter their plots.

Special Limitations

Specialized: You are naturally in tune with the customs and moods of one specific class of spirits. Possibilities include angels, demons, elementals, faerie, ghosts, and anything else the GM wishes to allow. -50%.

Status see p. 28

High Status is an advantage, and should be noted on your character sheet.

Stretching 6 points/level

You can stretch your body in any direction. Each level of Stretching lets you increase your effective SM by +1 with any body part without increasing your overall SM. You can elongate your arms to increase reach (but not swinging damage, as Stretching gives no extra mass or muscle), your legs to negotiate obstacles, your neck to see over barriers, etc. For more information, see Size Modifier and Reach (p. 402). Your body parts grow or shrink at the rate of ±1 SM per second.

By itself, Stretching is ideal for machines with telescoping manipulators. A super with a “rubber body” should add some combination of Elastic Skin (p. 51), Double-Jointed (p. 56), Morph (p. 84), and Super Jump (p. 89).

Striker 5, 6, 7, or 8 points

You have a body part that you can use to strike an aimed blow, but not to manipulate objects (see Extra Arms, p. 53) or walk on (see Extra Legs, p. 54). This might be a set of horns or protruding tusks, a heavy tail, a stinger, or any number of other natural weapons.

Your Striker can attack at reach C (“close combat only”), inflicting thrust damage at +1 per die; e.g., 2d-1 becomes 2d+1. Damage is crushing or piercing for 5 points, large piercing for 6 points, cutting for 7 points, or impaling for 8 points. See Innate Attack (p. 61) for details.

Roll against DX or Brawling to hit with your Striker. You can also use it to parry as if you had a weapon. Use the higher of (DX/2) + 3 or your Brawling parry.

Special Enhancements

Long: Your Striker is long relative to your body. This increases your effective SM for the purpose of calculating reach (see Size Modifier and Reach, p. 402). +100% per +1 to SM if you can attack at any reach from C to maximum, or +75% per +1 to SM if you can only attack at maximum reach (and never in close combat).

Special Limitations

Cannot Parry: You cannot parry with your Striker. -40%.
Clumsy: Your Striker is unusually inaccurate. This is common for tails and similar Strikers aimed from outside your usual arc of vision. -20% per -1 to hit.
Limited Arc: Your Striker can only attack straight ahead, straight behind, etc. Specify a direction when you buy the Striker. If your target isn’t in the right place, and you cannot maneuver to put him there, you cannot attack him at all. -40%.
Weak: Your Striker is unusually blunt or light, or simply incapable of using your full ST. It inflicts only basic thrust damage, without the +1 per die. -50%.

Striking ST 5 points per +1 ST

You can strike more powerful blows than your ST score would indicate. Add Striking ST to base ST.
solately for the purpose of calculating thrust and swing damage (see Damage Table, p. 16). Striking ST has no effect on HP or Basic Lift. If you bought your ST with the No Fine Manipulators or Size limitation, apply the same limitation(s) to Striking ST.  

Subsonic Hearing 🌹🌹

- **0 or 5 points**

You can hear very low-frequency sounds (under 40 Hz), such as the rumble of distant storms, the vibrations from incipient earthquakes, and the approach of stampeding herd beasts, armored vehicles, or dragons. This gives +1 to Tracking skill if your quarry is moving on the ground. Cost depends on your capabilities:

You can hear very low-frequency sounds only: **0 points.**

You can hear very low-frequency sounds and other sounds: **5 points.**

Note that Subsonic Hearing is included in the cost of Subsonic Speech (below); you cannot take both traits.

Subsonic Speech 🌹🌹

- **0 or 10 points**

You can converse using extremely low-frequency sounds. This trait includes Subsonic Hearing, above. Subsonic speech is slow (half-speed), and even if the frequency is shifted into the normal range, subsonic speakers are at -2 to Fast-Talk and any other skill where versatile speaking is important. However, subsonic speech carries twice as far as normal speech. Cost depends on your capabilities:

You can only communicate via Subsonic Speech: **0 points.**

You can switch between regular speech and Subsonic Speech at will: **10 points.**

Super Climbing 🌹🌹

- **3 points/level**

You can climb very quickly. Each level of Super Climbing gives you +1 Move when climbing or using the Clinging advantage (p. 43).

Super Jump 🌹🌹

- **10 points/level**

You can make superhuman leaps! Each level of Super Jump doubles the distance and height you can achieve when jumping (see Jumping, p. 352). Your Move while jumping is the greater of your normal ground Move and 1/5 of your maximum long jump distance (thus, your maximum jump never takes more than five seconds). For instance, if your long jump were 100 yards, your jumping Move would be the greater of 20 and your normal ground Move.

You can jump at a foe in order to slam him. Figure the slam at your maximum jumping Move! You don't need to make a separate roll to jump accurately.

Finally, if you fall a distance less than or equal to your maximum high jump, you take no damage. You can increase this distance by five yards with a successful Acrobatics roll.

Super Luck 🌹🌹

- **100 points**

You are not just lucky – you have limited control over probability. Once per hour of play, you may dictate the result of any one die roll you make (or the GM makes for you) instead of rolling the dice. Wholly impossible attempts cannot succeed (your effective skill level must be at least 3), but you can choose any result that would be possible – however improbable – on a single normal dice roll.

You can have Super Luck and any degree of “normal” Luck, but no one can take Super Luck more than once!

Supernatural Durability 🌹🌹

- **150 points**

Like a vampire or psycho killer from a horror movie, you can “shake off” most wounds. Injury comes off HP as usual, and you suffer knock-back, but you are completely immune to shock, physical stun, and knockout. You don’t need High Pain Threshold – this ability includes that one, and is far more potent!

As long as you have 0 or more HP, you are also immune to crippling injuries, and have your full Move. Below 0 HP, you are at half Move, and can be crippled, but you won’t die unless you are wounded by an attack to which you are specifically vulnerable (see below). The sole exception to this is a single attack that inflicts an injury of 10xHP or more. That much damage at once will blow you apart, killing you.

To die, you must first be wounded to -HP or worse. After that, one specific item can kill you. You must specify this when you buy Supernatural Durability. Valid categories appear under Limited Defenses (p. 46); the item that can kill you must be of “Occasional” rarity or higher. If wounds from this item ever reduce your HP to the point where a normal human would have to make HT rolls to survive, you must make those HT rolls or die. If this item wounds you to -5xHP, you die automatically. If you are already below -5xHP from other damage, any wound from this item will kill you. Any item to which you have a Vulnerability (p. 161) can also kill you in this way.

Talent 🌹

**Variable**

You have a natural aptitude for a set of closely related skills. “Talents” come in levels, and give the following benefits:

- A bonus of +1 per level with all affected skills, even for default use. This effectively raises your attribute scores for the purpose of those skills only; thus, this is an inexpensive way to be adept at small class of skills. (Generalists will find it more cost-effective to raise attributes.)

- A bonus of +1 per level on all reaction rolls made by anyone in a position to notice your Talent, if he would be impressed by your aptitude (GM’s judgment). To receive this bonus, you must demonstrate your Talent – most often by using the affected skills.

- A reduction in the time required to learn the affected skills in play, regardless of how you learn them. Reduce the time required by 10% per level of Talent; e.g., Animal Friend 2 would let you learn animal-related skills in 80% the usual time. This has no effect on the point cost of your skills.

You may never have more than four levels of a particular Talent. However, overlapping Talents can give skill bonuses (only) in excess of +4.
Cost of Talents

The cost of a Talent depends on the size of the group of skills affected:

- Small (6 or fewer related skills): 5 points/level.
- Medium (7 to 12 related skills): 10 points/level.
- Large (13 or more related skills): 15 points/level.

Skills with multiple specialties are considered to be one skill for this purpose. Once you buy a Talent, the list of affected skills is fixed. (Exception: The GM may rule that a Talent affects new skills appearing in later GURPS supplements, or skills he invents in the course of the campaign, if the Talent would logically be of value to those skills.)

Examples of Talents

The following Talents are considered standard, and exist in most campaigns:

- **Animal Friend:** Animal Handling, Falconry, Packing, Riding, Teamster, and Veterinary. *Reaction bonus:* all animals. 5 points/level.
- **Artificer:** Armoury, Carpentry, Electrician, Electronics Repair, Engineer, Machinist, Masonry, Mechanic, and Smith. *Reaction bonus:* anyone you do work for. 10 points/level.
- **Business Acumen:** Accounting, Administration, Economics, Finance, Gambling, Market Analysis, Merchant, and Propaganda. *Reaction bonus:* anyone you do business with. 10 points/level.
- **Gifted Artist:** Artist, Jeweler, Leatherworking, Photography, and Sewing. *Reaction bonus:* anyone buying or critiquing your work. 5 points/level.
- **Green Thumb:** Biology, Farming, Gardening, Herb Lore, and Naturalist. *Reaction bonus:* gardeners and sentient plants. 5 points/level.
- **Healer:** Diagnosis, Esoteric Medicine, First Aid, Pharmacy, Physician, Physiology, Psychology, Surgery, and Veterinary. *Reaction bonus:* patients, both past and present. 10 points/level.
- **Mathematical Ability:** Accounting, Astronomy, Cryptography, Engineer, Finance, Market Analysis, Mathematics, and Physics. *Reaction bonus:* engineers and scientists. 10 points/level.
Musical Ability: Group Performance (Conducting), Musical Composition, Musical Influence, Musical Instrument, and Singing. Reaction bonus: anyone listening to or critiquing your work. 5 points/level.


Smooth Operator: Acting, Carousing, Detect Lies, Diplomacy, Fast-Talk, Intimidation, Leadership, Panhandling, Politics, Public Speaking, Savoir-Faire, Sex Appeal, and Streetwise. Reaction bonus: con artists, politicians, salesmen, etc. – but only if you are not trying to manipulate them. 15 points/level.

Custom Talents
At the GM’s option, you may create your own Talent with a custom skill list. However, the GM’s word is law when determining which skills are “related” and how many points the Talent is worth. Talents should always be believable inborn aptitudes. For instance, Sports Talent might make sense – some athletes really do seem to have a gift – but the GM ought to forbid Ninja Talent or Weapon Talent (but see Weapon Master, p. 99).

Teeth 🦷

0, 1, or 2 points

Anyone with a mouth has blunt teeth that can bite for thrust-1 crushing damage. This costs 0 points, and is typical of most herbivores. You have a more damaging bite:

Sharp Teeth: Like those of most carnivores. Inflict thrust-1 cutting damage. 1 point.

Sharp Beak: Like that of a bird of prey. Inflicts thrust-1 large piercing damage. 1 point.

Fangs: Like those of a Smilodon. Inflict thrust-1 impaling damage. 2 points.

Telecommunication 📱/ hại

Variable

You can communicate over long distances without speaking aloud. You can send words at the speed of ordinary speech or pictures at the speed at which you could draw them. To establish contact requires one second of concentration and an IQ roll. After that, no concentration is required. You can maintain multiple contacts, but the IQ roll is at a cumulative -1 per contact after the first.

Telecommunication works amid the noisiest of noises, although interference and jamming can disrupt your signal. Those with suitable equipment may attempt to locate, intercept, or jam your transmission. This requires an Electronics Operation (Communications) roll for an electromagnetic signal, an Electronics Operation (Psychotronics) roll for a psionic signal, and so forth.

Each variety of Telecommunication is a separate advantage with its own benefits and drawbacks. Some forms have limited range, which you can adjust using Increased Range (p. 106) or Reduced Range (p. 115).

Infrared Communication: You communicate using a modulated infrared beam. Base range is 500 yards in a direct line of sight. The short range and line-of-sight requirement make jamming and eavesdropping almost impossible under normal circumstances. You can only communicate with those who have this advantage or an infrared communicator. 10 points.

Laser Communication: You communicate using a modulated laser beam. Base range is 50 miles in a direct line of sight. The narrow beam and line-of-sight requirement make it extremely hard to eavesdrop on you. You can only communicate with people who have this advantage or a laser communicator. 15 points.

Radio: You communicate using radio waves. Base range is 10 miles. Your signal is omnidirectional, but because you can shift frequencies, eavesdroppers must still roll vs. Electronics Operation (Communications) to listen in. A side benefit of this ability is that you can receive AM, FM, CB, and other ordinary radio signals on an IQ roll (takes one second). Note that radio-frequency “noise” from lightning and unshielded electronics can interfere with Radio. Radio does not work at all underwater. 10 points.

Telesend: You can transmit thoughts directly to others via magic, psi, or other exotic means (be specific!). Your subject receives your thoughts even if he lacks this ability. Range is theoretically unlimited, but the IQ roll to use this ability takes the range penalties given under Long-Distance Modifiers (p. 241). If you cannot see or otherwise sense your subject, you have an additional penalty: -1 for family, lovers, or close friends; -3 for casual friends and acquaintances; or -5 for someone met only briefly. 30 points.

Special Enhancements

Broadcast: This enhancement is only available for Telesend. It lets you send your thoughts to everyone in a radius around you. This requires an IQ roll at the long-distance modifier for the desired radius, plus an additional -4. +50%.

Short Wave: This is only available for Radio. You can bounce your signal off a planet’s ionosphere (if the planet has one). This lets you transmit to (or receive from) any point on the planet. Note that solar flares, weather, etc. can disrupt short-wave communications. +50%.

Universal: Your messages are automatically translated into your subject’s language. The GM may limit this enhancement to individuals from advanced tech levels, or restrict it to Telesend. +50%.

Video: You are not limited to simple pictures! You can transmit real-time video of anything you can see. +40%.

Special Limitations

Racial: Your ability only works on those of your own race or a very similar race, per Mind Reading (p. 69). -20%.

Receive Only: You can receive but not send. This limitation is not available for Telesend. -50%.

Send Only: You can send but not receive. This limitation is not available for Telesend. -50%.

Telepathic: Your ability is part of the Telepathy psi power (see p. 257). -10%.

Vague: You cannot send speech or pictures. You can only send a simple code (e.g., Morse code) – or general concepts and emotions, in the case of Telesend. -50%.
**Telekinesis  */\*  
5 points/level

You can move objects without touching them. In effect, you manifest an invisible force that acts under your conscious direction at a distant point. Specify how you do this; possibilities include magnetism, psionic psychokinesis, an ultra-tech "tractor beam," or a supernatural "poltergeist effect."

You can manipulate distant objects just as if you were grabbing them in a pair of hands with ST equal to your Telekinesis (TK) level. You can move any object you have strength enough to lift, at a Move equal to your TK level, modified as usual for encumbrance level (see *Encumbrance and Move*, p. 17). Regardless of level, maximum range is 10 yards. To modify range, take Increased Range (p. 106) or Reduced Range (p. 115).

Telekinesis requires constant concentration to use. In combat, this means you must take a Concentrate maneuver on your turn. Your TK may then perform one standard maneuver as if were a disembodied pair of hands at some point within your range: a Ready maneuver to pick up an object; a Move maneuver to lift and carry it; an Attack maneuver to throw it, or to grab or strike directly; and so on.

**Example:** On your turn in combat, you take a Concentrate maneuver and state that your TK is taking an Attack maneuver to grab a gun from a foe. The following turn, you can Concentrate again and specify that your TK is taking an Aim or Wait maneuver to cover your enemy with the gun, an Attack maneuver to shoot him, or a Move maneuver to bring the gun to your hand.

No rolls are necessary for ordinary lifting and movement. For more complex actions, the GM might require you to make a DX or skill roll. In situations where you would roll against ST, roll against your TK level instead.

All of the above assumes that you are using TK to perform a task at a distance. TK can also discreetly assist you with such skills as Gambling (especially to cheat!), Lockpicking, and Surgery. In general, anything that would benefit from High Manual Dexterity (p. 59) gets a +4 bonus if you can successfully make an IQ roll to use your TK properly. On a failure, the GM may assess any penalty he feels is appropriate.

**Grasping and Striking:** You can use TK to attack a foe directly. Roll against DX or an unarmed combat skill to hit. Your foe defends as if attacked by an invisible opponent (see *Visibility*, p. 394). If you grapple, your foe cannot not grab hold of the TK force, but he can try to break free as usual – and if he also has TK, he can take a Concentrate maneuver and use his TK level instead of his ST. The turn after you grapple a foe using TK, your TK can use a Move maneuver to pick him up off the ground, provided you have enough TK to lift his weight. Someone in this position can’t do anything that relies on ground contact (run, retreat, etc.), but can perform any other action that is possible while grappled.

**Magnetic:** Your TK is "super magnetism," and only affects ferrous metals: iron (including steel), nickel, and cobalt. -50%.

**Psychokinetic:** Your ability is part of the Psychokinesis psi power (see p. 256). This makes it mental (⊗) rather than physical (●). -10%.

**Visible:** Your TK is not an invisible force, but a disembodied hand, glowing "tractor beam," or similar. This makes it much easier for others to defend against your TK attacks (do not use the *Visibility* rules). -20%.

**Telescopic Vision  */\*  
5 points/level

You can "zoom in" with your eyes as if using binoculars. Each level lets you ignore -1 in range penalties to Vision rolls at all times, or -2 in range penalties if you take an Aim maneuver to zoom in on a particular target. This ability can also function as a telescopic sight, giving up to +1 Accuracy per level with ranged attacks provided you take an Aim maneuver for seconds equal to the bonus (see *Scopes* under *Firearm Accessories*, p. 411).

The benefits of this trait are not cumulative with those of technological aids such as binoculars or scopes. If you have both, you must opt to use one or the other.

**Special Limitations**

No Targeting: Your field of vision is broad and not "zeroed" to your ranged attacks. You get no Accuracy bonus in combat. -60%.

**Temperature Control  */\*  
5 points/level

You can alter the ambient temperature. Heating or cooling is limited to 20° per level, and occurs at a rate of 2° per level per second of concentration. You can affect a two-yard radius at a distance of up to 10 yards. Use Increased Range (p. 106) or Reduced Range (p. 115) to modify range; add levels of Area Effect (p. 102) to increase radius.

**Telekinesis: Possibilities include magnetism, psionic psychokinesis, an ultra-tech "tractor beam," or a supernatural "poltergeist effect."**
This ability never does damage directly. For that, buy Innate Attack – usually either burning (for flame) or fatigue (for attacks that damage by altering body temperature).

**Special Limitations**
- **Cold:** You can only decrease the temperature, -50%.
- **Heat:** You can only increase the temperature, -50%.
- **Psychokinesis:** Your ability is part of the Psychokinesis psi power (see p. 256), often called “cryokinesis” (for cold) or “pyrokinesis” (for heat). -10%.

**Temperature Tolerance**

- **1 point/level**

Every character has a temperature “comfort zone” within which he suffers no ill effects (such as FP or HP loss) due to heat or cold. For ordinary humans, this zone is 55° wide and falls between 35° and 90°. For nonhumans, the zone can be centered anywhere, but this is a 0-point feature for a zone no larger than 55°. A larger zone is an advantage. Each level of Temperature Tolerance adds HT degrees to your comfort zone, distributed in any way you wish between the “cold” and “hot” ends of the zone.

Temperature Tolerance confers no special resistance to attacks by fire or ice unless the only damage is a result of a rise or fall in the ambient temperature. In particular, it cannot help you if your body temperature is being manipulated.

In a realistic campaign, the GM should limit normal humans to Temperature Tolerance 1 or 2. However, high levels of this trait are likely for nonhumans with fur or a heavy layer of fat.

**Temporal Inertia**

- **15 points**

You are strongly rooted in probability. If history changes, you can remember both versions. If you are involved in a genuine time paradox, you are not erased, even if the rest of your world is! You have a place in the new timeline, whatever it is, and remember all your experiences – even the ones that never happened. (In an extreme case, you have two complete sets of memories, and must make an IQ roll any time you have to distinguish between them under stress . . . you might need Acting skill to stay out of the lunatic asylum.)

There is a drawback: there is a “you” in any parallel or split timeline you encounter, and he is as similar to you as the timeline allows.

This trait is only worthwhile in a campaign in which paradoxes or changes in history – erasing past events or whole timelines – are possible. See **Unique** (p. 160) for the opposite of this advantage.

**Temporary Rank**

- **see Rank, p. 29**

**Tenure**

- **5 points**

You have a job from which you cannot normally be fired. You can only lose your job (and this trait) as the result of extraordinary misbehavior: assault, gross immorality, etc. Otherwise, your employment and salary are guaranteed for life. This is most common among modern-day university professors, but also applies to judges, priests, senators, etc. in many societies.

**Terrain Adaptation**

- **0 or 5 points**

You do not suffer DX or Move penalties for one specific type of unstable terrain: ice, sand, snow, etc. Cost depends on your capabilities:

You can function normally on one specific type of unstable terrain, but suffer the DX and Move penalties that most characters experience on that terrain type when you traverse solid ground: 0 points.

You can function at full DX and Move both on solid ground and on one particular type of unstable terrain: 5 points.

You must buy this ability separately for each terrain type.

**Terror**

- **30 points + 10 points per -1 to Fright Check**

You can unhinge the minds of others. There are many ways this effect can manifest: a chilling howl, mind-warping body geometry, or even divine awe or unbearable beauty. When you activate this ability, anyone who sees you or hears you (choose one when you buy this trait) must roll an immediate Fright Check (see **Fright Checks**, p. 360).

**Modifiers:** All applicable modifiers under **Fright Check Modifiers** (p. 360). You can buy extra penalties to this Fright Check for 10 points per -1 to the roll. Your victims get +1 per Fright Check after the first within 24 hours.

If a victim succeeds at his Fright Check, he will be unaffected by your Terror for one hour.

Add the Melee Weapon limitation (p. 112) if your Terror affects only those you touch.

**Special Limitations**

- **Always On:** You cannot turn off your Terror to engage in normal social activities. This limitation often accompanies the extreme levels of Appearance – usually Hideous or worse, but possibly also Transcendent! -20%.

**Trained By A Master**

- **30 points**

You have been trained by – or are – a true master of the martial arts. Your exceptional talent means you have half the usual penalty to make a Rapid Strike (see *Melee Attack Options*, p. 370), or to parry more than once per turn (see *Parrying*, p. 376). These benefits apply to all your unarmed combat skills (Judo, Karate, etc.) and Melee Weapon skills.

Furthermore, you can focus your inner strength (often called “chi”) to perform amazing feats! This permits you to learn Flying Leap, Invisibility Art, Power Blow, and many other skills – anything that requires this advantage as a prerequisite (see Chapter 4).

The GM is free to set prerequisites for this advantage if he wishes. Common examples from fiction include Judo, Karate, Melee Weapon skills, Philosophy, and Theology.

This ability is definitely “larger than life.” The GM may wish to forbid it in a realistic campaign.
**True Faith** 15 points

You have a profound religious faith that protects you from “evil” supernatural beings such as demons and vampires. To enjoy this protection, you must actively assert your faith by wielding a physical symbol revered by your religion (e.g., crucifix, Torah, or Koran), chanting, dancing, or whatever else is appropriate to your beliefs. If you wish to use this ability in combat – to repel zombies, for instance – then you must choose the Concentrate maneuver each turn, and can do nothing else.

For as long as you assert your faith, no malign supernatural entity (GM’s judgment as to what this covers) may approach within one yard of you. If one is forced into this radius, it must leave by the most direct route possible, as if it suffered from Dread (p. 132). If it cannot leave without coming closer, it must make a Will roll. On a success, it may run past you to escape, pushing you aside if necessary (but using only the minimum force required to escape). On a failure, the monster is cowed. It must cower, helplessly, and cannot move, defend itself, or take any other action.

To keep True Faith, you must behave in a manner consistent with your religion. You will nearly always have to take and adhere to one or more of the traits listed under *Self-Imposed Mental Disadvantages* (p. 121). In effect, True Faith comes with a built-in Pact limitation (p. 113); do not apply this modifier again. You do not have to be kind, loving, or law-abiding, however. A violent bigot or religious terrorist can be just as sincere in his religious devotion as a saintly ascetic.

**Tunneling** 30 points + 5 points per point of Tunneling Move

You can bore through earth and stone, spewing rubble behind you. The passage you dig is wide enough for you to walk through. You move through stone at half normal Tunneling Move. The GM may wish to assess a chance that your tunnel collapses behind you. Roll each minute vs. the highest of Engineer (Mining), Prospecting-3, and IQ-4 to dig a stable tunnel. This can be modified upward for hard rock and downward for soft rock or loose earth. Each halving of your Tunneling Move gives +1 on this roll.

**Ultrahearing** 0 or 5 points

You can hear sounds in the frequencies above the normal range of human hearing (20 kHz). This allows you to hear dog whistles, sonar, motion detectors, etc. You can detect active sonar at twice its effective range. Cost depends on your capabilities:

- You can hear only high-frequency sounds: 0 points.
- You can hear high-frequency sounds and other sounds: 5 points.

This advantage is included in Ultrasonic Speech, below; if you have Ultrasonic Speech, you cannot take this as well (but don’t need to).

**Ultravision** 0 or 10 points

You can see ultraviolet light (UV). Solar UV is present outdoors during the day, even under cloud cover, but is stopped by window glass or any solid barrier (earth, stone, etc.). Fluorescent lamps also emit UV. Provided UV is present, you can make out more colors than those with normal vision. This helps you discern outlines; spot trace quantities of dust, dyes, etc.; and identify minerals and plants. You get +2 to all Vision rolls made in the presence of UV, as well as to all Forensics, Observation, and Search rolls to spot clues or hidden objects.

At night, a small amount of UV reaches the ground from the stars. This doesn’t let you see in the dark, but it does let you ignore -2 in darkness penalties (cumulative with Night Vision). UV penetrates farther underwater than visible light. This lets you halve all vision penalties underwater (but in total darkness, you are as blind as anyone else).

**Ultrasonic Speech** 0 or 10 points

You can converse in the ultrasonic range. This advantage includes Ultrahearing, above. Note that many creatures find it intensely annoying or even painful to be within earshot of sustained ultrasonic pitches! Cost depends on your capabilities:

- You can only communicate via Ultrasonic Speech: 0 points.
- You can switch between regular speech and Ultrasonic Speech at will: 10 points.
You can only see UV, and are blind indoors, underground, or anywhere else there is no UV, even when there are normal light sources present: 0 points.

You can see both visible light and UV: 10 points.

**Unaging 🌕 🌕**

15 points

You never grow old naturally and cannot be aged unnaturally. Your age is fixed at any point you choose and will never change. You never have to make aging rolls.

**Special Enhancements**

*Age Control:* You can “age” in either direction at will, at up to 10 times the normal rate. +20%.

**Unfazeable 🌕**

15 points

Nothing surprises you – at least, nothing that’s not obviously a threat. The world is full of strange things, and as long as they don’t bother you, you don’t bother them.

You are exempt from Fright Checks, and reaction modifiers rarely affect you either way. You treat strangers with distant courtesy, no matter how strange they are, as long as they’re well-behaved. You have the normal reaction penalty toward anyone who does something rude or rowdy, but you remain civil even if forced to violence. Intimidation (p. 202) just does not work on you.

You are not emotionless – you just never display strong feelings. The stereotypical aged kung fu master or English butler has this trait.

You must roleplay this advantage fully, or the GM can declare that it has been lost. In a campaign where Fright Checks are an hourly occurrence, the GM can charge 20 points – or more! – or disallow Unfazeable altogether. This advantage is incompatible with all Phobias.

**Universal Digestion 🌕 🌕**

5 points

You have remarkably adaptable digestive processes that let you derive nutrition from any nontoxic animal or plant protein, no matter how alien or fantastic. This enables you to subsist on things that would normally be harmless but non-nutritious. You have no special resistance to poison, though; for that, buy Resistant (p. 80). One side benefit of this trait is that you can quickly and safely dispose of any nontoxic, organic evidence by eating it!

**Unkillable 🌕 🌕**

50 to 150 points

You cannot be killed! You are subject to all the other effects of injury. You feel pain, your wounds slow you, and you can be stunned or knocked out. You lose the use of any limb that receives a crippling wound, and you might even lose the limb itself. You can even lose attribute levels, advantages, etc. to disease, injury, or poison. However, you will only die if your body is physically destroyed – and sometimes not even then.

This advantage comes in three levels:

*Unkillable 1:* Injury affects you normally, but you need never make a HT roll to stay alive. You can survive (and even function, if you remain conscious) down to -10xHP, at which point your body is physically destroyed and you die. As long as you are alive, you heal at your usual rate – typically 1 HP/day, modified for any Regeneration (p. 80) you may have. Crippled limbs do heal, but severed limbs are gone for good unless you have Regrowth (p. 80). 50 points.

*Unkillable 2:* As Unkillable 1, but you do not die at -10xHP. Once you reach -10xHP, you are reduced to an indestructible skeleton and automatically fall unconscious. You sustain no further damage from any attack. Once the damage stops, you heal normally – even if you’ve been hacked to pieces – and any severed body parts will grow back. You regain consciousness once you have positive HP. Note that your enemies can imprison your remains while you are unconscious, or even expose them to a source of continuous damage (fire is a common choice) to prevent you from healing. 100 points.

*Unkillable 3:* As Unkillable 2, except that at -10xHP, you become a ghost, an energy pattern, or some other incorporeal form that cannot be contained or damaged through normal means. At this stage, you fall unconscious and heal normally. Once you are at full HP, your fully intact body will coalesce in a location of the GM’s choosing. 150 points.

With the GM’s permission, if you have Unkillable 2 or 3 and are taken to -10xHP, you can trade in Unkillable and use the points to buy a spirit or undead racial template (if such things exist in the setting), becoming a ghost, revenant, etc. once you heal all your HP.

By default, you age normally, and will eventually die of old age. To be truly immortal, combine Unaging with Unaging (above) – and possibly one or more of Doesn’t Breathe (p.49), Injury Tolerance (p. 60), Regeneration (p. 80), and Resistant (p. 80).

**Special Limitations**

*Achilles’ Heel:* Damage from one particular source (possibly one to which you have a Vulnerability, p. 161) can kill you normally. You must make normal HT rolls to survive at -1HP below, and die automatically if this damage takes you below -5xHP. The limitation value depends on the rarity of the attack, as defined under Limited Defenses (p. 46): -10% if “Rare,” -30% if “Occasional,” or -50% if “Common” or “Very Common.”

*Hindrance:* A specific substance (e.g., silver or wood) prevents healing – whether by natural means or Regeneration – for as long as it remains in your body. Once you pass out from your injuries, you stay dormant until this substance is removed. The limitation value depends on the rarity of the substance: -5% if “Rare,” -15% if “Occasional,” or -25% if “Common.”

*Reincarnation:* This is only available for Unkillable 2 or 3. When reduced to -10xHP, you recover at your usual rate, but you wake up in an entirely new body with new abilities. The GM creates the new form (or may allow you to do so), but you always retain the Unkillable advantage. -20%.

*Trigger:* This is only available for Unkillable 2 or 3. Once reduced to -10xHP, you require some substance (such as human blood) or condition (such as a ritual) before you will start to heal. Until then, you will remain dormant. The limitation value depends on the rarity of the trigger: -25% if “Rare,” -15% if “Occasional,” or -5% if “Common” or “Very Common.”
Unusual Background

This is a “catch-all” trait that the GM can use to adjust the point total of any character with special abilities that are not widely available in the game world. “Special abilities” might mean cinematic traits, magic spells, exotic advantages (for a human), supernatural advantages (for anyone), or almost anything else – it depends on the setting. Players are free to suggest Unusual Backgrounds to the GM, but the GM decides whether a proposed Unusual Background is acceptable, and if so, what its cost and benefits are.

Example 1: “Raised by wizards” to justify access to magic spells might be a 0-point special effect in a fantasy world where magic is common, a 10-point Unusual Background in a conspiracy campaign where magic is known but kept secret, and a 50-point Unusual Background – or simply forbidden – in a horror game where a PC who wields supernatural power would reduce the suspense.

Example 2: “Daughter of the God of Magic” to justify the Unkillable advantage would be an Unusual Background in any setting, and would be worth as much as the advantage itself – 50 points or more – if the GM allowed it at all.

Not every unusual character concept merits an Unusual Background. The GM should only charge points when the character enjoys a tangible benefit. For instance, it would be unusual for a human to be raised by wolves, but unless this gave him special capabilities (such as Speak with Animals), it would be background color; worth 0 points.

Vacuum Support

You are immune to deleterious effects associated with vacuum and decompression (see Vacuum, p. 437). This advantage does not give you an air supply; buy Doesn’t Breathe (p. 49) for that.

Those with Vacuum Support usually have the Sealed advantage (p. 82), and often have Radiation Tolerance (p. 79) and Temperature Tolerance (p. 93), but none of these traits are required.

Vampiric Bite

30 points + 5 points per extra HP drained
You can bite people and drain their life force, healing your own wounds in the process. You can only feed if your victim is helpless (pinned, stunned, unconscious, etc.), grappled, or willing. If he is wearing armor; your biting damage must penetrate its DR. Once you’ve bitten through your victim’s DR, you can drain 1 HP per second from him. For every 3 HP stolen, you heal 1 HP or 1 FP (your choice). You cannot raise your HP or FP above normal this way.

The basic Vampiric Bite described above costs 30 points. You may buy increased HP drain for 5 points per additional HP drained per second; for instance, to drain 10 HP per second, pay 75 points.

Vampiric Bite also lets you bite in combat without feeding. Treat this as Teeth (Sharp Teeth) or Teeth (Sharp Beak) (p. 91) – your choice. You do not need to purchase that advantage separately.

Versatile

5 points
You are extremely imaginative. You get a +1 bonus on any task that requires creativity or invention, including most rolls against Artist skill, all Engineer rolls for new inventions, and all skill rolls made to use the Gadgeteer advantage.

Very Fit

see Fit, p. 55

Very Rapid Healing

see Rapid Healing, p. 79

Vibration Sense

10 points
You can detect the location and size of objects by sensing vibrations with your skin, whiskers, or antennae. You must specify whether this ability works in the air or in the water.

Vibration Sense is not a substitute for vision. You can locate an opponent in the dark, but you cannot detect details (e.g., whether he is armed). In a perfectly still, dark chamber, you would have only a vague notion of the size of the area, but you would be able to sense a barrier before you ran into it, and could find openings by sensing the flow of air or water.

To use Vibration Sense, make a Sense roll. Consult the Size and Speed/Range Table (p. 550) and apply separate bonuses for the target’s size and speed, and a penalty for the range to the target. Wind (in air) or swift currents (in water) will generate “noise” that interferes with your sense. Find the speed of the wind or current on the table and assess the relevant speed penalty.

A successful roll reveals the rough size, location, speed, and direction of movement of the target. It does not provide any information about the object’s shape, color, etc. Once you have detected something, you may target it with an attack. The modifiers that applied to your Sense roll also apply to your attack roll, but can never give you a bonus to hit.

Note that if you are outside the element (air or water) where your ability functions, or if you are wearing a sealed suit, this ability does not work at all!

Special Enhancements

Universal: Your Vibration Sense works both in the air and in the water: +50%.

Visualization

10 points
You can improve your chances at a task by visualizing yourself successfully performing it. The closer your mental picture is to the actual circumstances, the greater the bonus. The visualization must be detailed and must involve a clear and specific action. This makes it useless in combat, where the situation changes faster than you can visualize it.

To use this talent, you must concentrate for one minute. You, the player, must describe the scene you visualize (which can include senses other than sight) and the results you hope to achieve. Then make an IQ roll.

You get a +1 bonus to the action you visualized for every point by which you succeed – if the circumstances correspond almost exactly to the visualization. If they are not quite
the same, which will almost always be true, halve the bonus (minimum +1). And if something is clearly different, divide the bonus by 3 (no minimum). The GM can assess a further bonus of up to +2, or a penalty of any size, for a good or bad description!

**Voice 🎤**

10 points

You have a naturally clear, resonant, and attractive voice. This gives you +2 with the following skills: Diplomacy, Fast-Talk, Mimicry, Performance, Politics, Public Speaking, Sex Appeal, and Singing. You also get +2 on any reaction roll made by someone who can hear your voice.

**Walk on Air 🎤 🎤**

20 points

Air, smoke, and other gases are like solid ground beneath your feet, allowing you to walk up and down “invisible stairs” at your ground Move. This won’t work in a vacuum – there has to be some kind of air present. If you get knocked down or slip, you fall! You may attempt one DX roll per second of falling. If you succeed, you stop in thin air, unharmed. Otherwise, you hit the ground for normal falling damage (see *Falling*, p. 431).

**Walk on Liquid 🎤 🎤**

15 points

You can walk on the surface of any liquid as if it were solid ground. You move at your usual ground Move. This doesn’t protect you from any damage that you would take from coming into contact with the liquid, however. You can’t traverse volcanic lava or boiling acid without taking damage!

**Warp 🎤 🎤 🎤**

100 points

You have the ability to teleport, traveling from point to point without moving through the intervening space. To do so, you must be able to see your destination with your own eyes, or view it remotely (via closed-circuit TV, someone else’s eyes using Mind Reading with the Sensory enhancement, etc.), or visualize it clearly (which is only possible if you have visited it previously in person).
You can carry up to Basic Lift when you travel, plus any Payload (p. 74). To carry more, or to bring along other people, take the Extra Carrying Capacity enhancement (below).

Make an IQ roll to activate your ability, modified as follows:

**Distance:** Distance penalties appear on the table below. If actual distance falls between two values, use the higher.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 yards</td>
<td>0</td>
</tr>
<tr>
<td>20 yards</td>
<td>-1</td>
</tr>
<tr>
<td>100 yards</td>
<td>-2</td>
</tr>
<tr>
<td>500 yards</td>
<td>-3</td>
</tr>
<tr>
<td>2 miles</td>
<td>-4</td>
</tr>
<tr>
<td>10 miles</td>
<td>-5</td>
</tr>
<tr>
<td>100 miles</td>
<td>-6</td>
</tr>
<tr>
<td>1,000 miles</td>
<td>-7</td>
</tr>
</tbody>
</table>

Add an additional -1 for each 10x increase in distance.

**Preparation Time:** The amount of time taken to prepare for the teleport affects the IQ roll, as follows:

<table>
<thead>
<tr>
<th>Preparation Time</th>
<th>IQ Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-10</td>
</tr>
<tr>
<td>1 second</td>
<td>-5</td>
</tr>
<tr>
<td>2 seconds</td>
<td>-4</td>
</tr>
<tr>
<td>4 seconds</td>
<td>-3</td>
</tr>
<tr>
<td>8 seconds</td>
<td>-2</td>
</tr>
<tr>
<td>15 seconds</td>
<td>-1</td>
</tr>
<tr>
<td>30 seconds</td>
<td>0</td>
</tr>
<tr>
<td>1 minute</td>
<td>+1</td>
</tr>
<tr>
<td>2 minutes</td>
<td>+2</td>
</tr>
<tr>
<td>4 minutes</td>
<td>+3</td>
</tr>
<tr>
<td>8 minutes</td>
<td>+4</td>
</tr>
<tr>
<td>15 minutes</td>
<td>+5</td>
</tr>
<tr>
<td>30 minutes</td>
<td>+6</td>
</tr>
<tr>
<td>1 hour</td>
<td>+7</td>
</tr>
<tr>
<td>2 hours</td>
<td>+8</td>
</tr>
<tr>
<td>4 hours</td>
<td>+9</td>
</tr>
<tr>
<td>8 hours</td>
<td>+10</td>
</tr>
</tbody>
</table>

This table is not open-ended; +10 is the maximum possible bonus.

**Removal:** If you have a “second-hand” view of the destination, you are at -2 per level of removal. For instance, seeing it on TV or through someone else’s eyes would give -2, while seeing it on a television set that you are viewing through someone else’s eyes would give -4. There is an additional -2 to teleport to a place you have visited but cannot see.

**Fatigue Points:** Apply a bonus of +1 per FP spent. You must declare this before you roll, and you lose the FP whether you succeed or fail. You never have to spend FP, but it is usually a good idea if you must travel far or without much preparation.

On a success, you appear at your target destination. On a failure, you go nowhere and strain your power: you are at -5 to use it again in the next 10 minutes. On a critical failure, you arrive at the wrong destination. This can be anywhere the GM wishes! It need not be dangerous, but it should seriously inconvenience you. In addition, your power temporarily “burns out” and will not function again for 1d hours.

**Warp Jump:** This enhancement is only available if you have the Jumper advantage (p. 64). You must apply it to both Jumper and Warp. If you are both a time- and world-jumper, and wish to use Warp with both abilities, buy this enhancement twice. When you jump, you can simultaneously use Warp to appear anywhere at your destination. Two die rolls are necessary – one per ability – and it is possible for one to succeed while the other fails, or for both to fail. +10% per linked Jumper advantage.

**Wild Talent:** You can simply do things without knowing how. It does apply to skills that normally have no default, provided you meet any advantage requirements. It has no effect on skills you already know.

**Reliable:** Your power is stable and predictable. Each level of this enhancement gives +1 to the IQ roll to use this ability, allowing you to teleport with little preparation (e.g., in combat) or over long distances without spending as many FP to improve your odds. +5% per +1, to a maximum of +10.

**Hyperjump:** You physically move through “hyperspace” or “jump space” to journey between destinations. This is not true, instantaneous teleportation; you have an effective speed, which means the trip takes time. On long trips, you will need to address life-support needs! In addition, you cannot activate Hyperjump in atmosphere and you cannot travel distances shorter than one light-second (186,000 miles, -10 to IQ). This effectively limits you to space travel. There is one benefit to Hyperjump: if you possess your carrying capacity is high enough, you may transport one person with you. Light encumbrance is +10%; Medium, +20%; Heavy, +30%; Extra-Heavy, +50%.
Navigation (Hyperspace) skill, you may substitute it for IQ. -50% if your effective speed is the speed of light (every 186,000 miles traveled takes one second); -25% if you can travel one light-year (-17 to IQ) per day.

Naked: You can carry nothing when you teleport! You always arrive naked. -30%.

Psionic Teleportation: Your ability is part of the Teleportation psi power (see p. 257). -10%.

Range Limit: You cannot teleport more than a certain distance per hop. Choose a range and find its distance penalty above. The limitation is worth \( -5\% \times (10 + \text{penalty}) \); e.g., 10 yards (-0) would be -50%, while 100 miles (-6) would be -20%. A range limit of more than 100,000 miles is not a meaningful limitation.

Wealth

Above-average Wealth is an advantage, and should be noted on your character sheet.

Weapon Master

You have a high degree of training or unnerving talent with a particular class of muscle-powered weapons (swords, bows, etc. – not guns). Available classes are:

- All muscle-powered weapons. 45 points.
- A large class of weapons. Examples: all bladed weapons, all one-handed weapons. 40 points.
- A medium class of weapons. Examples: all swords, all ninja weapons. 35 points.
- A small class of weapons. Examples: fencing weapons (main-gauche, rapier, saber, and smallsword), knightly weapons (broadsword, mace, shield, and lance). 30 points.

Two weapons normally used together. Examples: broadsword and shield, rapier and main-gauche. 25 points.

One specific weapon. 20 points.

In all cases, if a weapon can be thrown, the benefits of this advantage also apply when throwing that weapon.

When using a suitable weapon, add +1 per die to basic thrust or swing damage if you know the relevant weapon skill at DX+1. Add +2 per die if you know that skill at DX+2 or better. You also have half the usual penalty to make a Rapid Strike (see Melee Attack Options, p. 369), or to parry more than once per turn (see Parrying, p. 376). None of these benefits apply to default use.

You are familiar with – if not proficient in – every weapon within your class. This gives you an improved default: DX/Easy weapon skills default to DX-1, DX/Average ones to DX-2, and DX/Hard ones to DX-3. Note that these skills are no easier to learn, and may not be “bought up” from the improved defaults in order to save points.

Finally, you may learn any cinematic skill that names this advantage as a prerequisite (see Chapter 4) – e.g., Blind Fighting and Power Blow – if you could reasonably use that skill with your weapons of choice. The GM is the final arbiter in all cases.

This trait is best suited to a “cinematic” swashbuckling game. The GM may wish to forbid it in a realistic campaign.

Wild Talent

You can simply do things without knowing how. Once per game session per level of this advantage, you may attempt a roll against any skill, using your score in the appropriate attribute: IQ for IQ-based skills, DX for DX-based skills, etc. You do not incur any default penalties, but situational and equipment modifiers apply normally, as do any modifiers for advantages or disadvantages. Tech level is irrelevant: a TL3 monk could make an IQ roll to use Computer Programming/TL12!

Wild Talent does apply to skills that normally have no default, provided you meet any advantage requirements. For instance, you could cast unknown magic spells provided you had Magery, or use unknown cinematic martial-arts skills provided you have Trained By A Master.

Wild Talent has no effect on skills you already know.

Special Enhancements

Retention: You can learn the skills you use! To do so, you must have one unspent character point available when you attempt the skill roll. On a success, you may buy the skill at the one-point level. This gives you an improved default: DX/Easy weapon skills default to DX-1, DX/Average ones to DX-2, and DX/Hard ones to DX-3. Note that these skills are no easier to learn, and may not be “bought up” from the improved defaults in order to save points.

Finally, you may learn any cinematic skill that names this advantage as a prerequisite (see Chapter 4) – e.g., Blind Fighting and Power Blow – if you could reasonably use that skill with your weapons of choice. The GM is the final arbiter in all cases.

This trait is best suited to a “cinematic” swashbuckling game. The GM may wish to forbid it in a realistic campaign.

Wild Talent

20 points/level

You can simply do things without knowing how. Once per game session per level of this advantage, you may attempt a roll against any skill, using your score in the appropriate attribute: IQ for IQ-based skills, DX for DX-based skills, etc. You do not incur any default penalties, but situational and equipment modifiers apply normally, as do any modifiers for advantages or disadvantages. Tech level is irrelevant: a TL3 monk could make an IQ roll to use Computer Programming/TL12!

Wild Talent does apply to skills that normally have no default, provided you meet any advantage requirements. For instance, you could cast unknown magic spells provided you had Magery, or use unknown cinematic martial-arts skills provided you have Trained By A Master.

Wild Talent has no effect on skills you already know.

Special Enhancements

Retention: You can learn the skills you use! To do so, you must have one unspent character point available when you attempt the skill roll. On a success, you may buy the skill at the one-point level. This gives you an improved default: DX/Easy weapon skills default to DX-1, DX/Average ones to DX-2, and DX/Hard ones to DX-3. Note that these skills are no easier to learn, and may not be “bought up” from the improved defaults in order to save points.

Finally, you may learn any cinematic skill that names this advantage as a prerequisite (see Chapter 4) – e.g., Blind Fighting and Power Blow – if you could reasonably use that skill with your weapons of choice. The GM is the final arbiter in all cases.

This trait is best suited to a “cinematic” swashbuckling game. The GM may wish to forbid it in a realistic campaign.

Wild Talent

20 points/level

You can simply do things without knowing how. Once per game session per level of this advantage, you may attempt a roll against any skill, using your score in the appropriate attribute: IQ for IQ-based skills, DX for DX-based skills, etc. You do not incur any default penalties, but situational and equipment modifiers apply normally, as do any modifiers for advantages or disadvantages. Tech level is irrelevant: a TL3 monk could make an IQ roll to use Computer Programming/TL12!

Wild Talent does apply to skills that normally have no default, provided you meet any advantage requirements. For instance, you could cast unknown magic spells provided you had Magery, or use unknown cinematic martial-arts skills provided you have Trained By A Master.

Wild Talent has no effect on skills you already know.

Special Enhancements

Retention: You can learn the skills you use! To do so, you must have one unspent character point available when you attempt the skill roll. On a success, you may buy the skill at the one-point level. This gives you an improved default: DX/Easy weapon skills default to DX-1, DX/Average ones to DX-2, and DX/Hard ones to DX-3. Note that these skills are no easier to learn, and may not be “bought up” from the improved defaults in order to save points.

Finally, you may learn any cinematic skill that names this advantage as a prerequisite (see Chapter 4) – e.g., Blind Fighting and Power Blow – if you could reasonably use that skill with your weapons of choice. The GM is the final arbiter in all cases.

This trait is best suited to a “cinematic” swashbuckling game. The GM may wish to forbid it in a realistic campaign.

Wild Talent

20 points/level

You can simply do things without knowing how. Once per game session per level of this advantage, you may attempt a roll against any skill, using your score in the appropriate attribute: IQ for IQ-based skills, DX for DX-based skills, etc. You do not incur any default penalties, but situational and equipment modifiers apply normally, as do any modifiers for advantages or disadvantages. Tech level is irrelevant: a TL3 monk could make an IQ roll to use Computer Programming/TL12!

Wild Talent does apply to skills that normally have no default, provided you meet any advantage requirements. For instance, you could cast unknown magic spells provided you had Magery, or use unknown cinematic martial-arts skills provided you have Trained By A Master.

Wild Talent has no effect on skills you already know.

Special Enhancements

Retention: You can learn the skills you use! To do so, you must have one unspent character point available when you attempt the skill roll. On a success, you may buy the skill at the one-point level. This gives you an improved default: DX/Easy weapon skills default to DX-1, DX/Average ones to DX-2, and DX/Hard ones to DX-3. Note that these skills are no easier to learn, and may not be “bought up” from the improved defaults in order to save points.

Finally, you may learn any cinematic skill that names this advantage as a prerequisite (see Chapter 4) – e.g., Blind Fighting and Power Blow – if you could reasonably use that skill with your weapons of choice. The GM is the final arbiter in all cases.

This trait is best suited to a “cinematic” swashbuckling game. The GM may wish to forbid it in a realistic campaign.

Wild Talent

20 points/level

You can simply do things without knowing how. Once per game session per level of this advantage, you may attempt a roll against any skill, using your score in the appropriate attribute: IQ for IQ-based skills, DX for DX-based skills, etc. You do not incur any default penalties, but situational and equipment modifiers apply normally, as do any modifiers for advantages or disadvantages. Tech level is irrelevant: a TL3 monk could make an IQ roll to use Computer Programming/TL12!

Wild Talent does apply to skills that normally have no default, provided you meet any advantage requirements. For instance, you could cast unknown magic spells provided you had Magery, or use unknown cinematic martial-arts skills provided you have Trained By A Master.

Wild Talent has no effect on skills you already know.

Special Enhancements

Retention: You can learn the skills you use! To do so, you must have one unspent character point available when you attempt the skill roll. On a success, you may buy the skill at the one-point level. This gives you an improved default: DX/Easy weapon skills default to DX-1, DX/Average ones to DX-2, and DX/Hard ones to DX-3. Note that these skills are no easier to learn, and may not be “bought up” from the improved defaults in order to save points.

Finally, you may learn any cinematic skill that names this advantage as a prerequisite (see Chapter 4) – e.g., Blind Fighting and Power Blow – if you could reasonably use that skill with your weapons of choice. The GM is the final arbiter in all cases.

This trait is best suited to a “cinematic” swashbuckling game. The GM may wish to forbid it in a realistic campaign.
Special Limitations

*Emergencies Only:* Your Wild Talent only works in life-threatening situations, such as mortal combat. To use it, you must ask for a particular result related to your predicament. Your request must be specific (e.g., “Get him away from me.”), but you cannot specify a skill (e.g., “Use Judo” or “Cast the Command spell”). The GM will then choose a skill that could bring about the desired result. He is not limited to mundane skills; he may choose a spell if you have Magery, a cinematic martial-arts skill if you have Trained By A Master, and so forth. Once the GM has chosen, roll against the governing attribute, as usual. If the GM feels you already have skills equal to the task, he will advise you on which skill to use. This still counts as one of your uses of Wild Talent! -30%.

*Focused:* You can only use (and if you have Retention, learn) one specific class of skills. Options include Mental (mundane skills based on IQ, Perception, or Will), Physical (mundane skills based on ST, DX, or HT), Magical (spells), and Chi (cinematic martial-arts skill). -20%.

*Xeno-Adaptability*  
*see Cultural Adaptability, p. 46*

*Zeroed*  
10 points

You do not officially exist. Even the highest authorities in the land know nothing about you. In a fantasy setting, you are a “mysterious wanderer”; magical divination cannot discover conclusive details about your past or true identity. In a high-tech world, you don’t appear in the public records – and if computer databases exist, they contain no evidence of your existence. You must provide a reason for this; e.g., your parents hid you away at birth, you are legally dead, or you somehow managed to destroy all the records (explain how!). To maintain this status, you must deal strictly in cash or commodities. Credit and bank accounts must be blind (keyed to pass-code, not a person – the “Swiss bank account”) or set up through a Temporary Identity (see p. 31).

If the authorities investigate you, they will initially assume that there has been an error. They will become increasingly concerned as no information can be found about your life. Eventually, they will attempt to apprehend you. If they can’t find you, then they’re likely to give up. But if they catch you, you are in for a thorough interrogation, possibly involving torture, mind probes, or worse. After all, a nonperson has no rights . . . and it will be very difficult for your allies to prove that you are being held, as you don’t officially exist!

**Perks**

A “perk” is a very minor advantage, worth only 1 point. Perks cannot be modified with enhancements or limitations, and they can be added in play without upsetting game balance. Otherwise, perks use the same rules as other advantages.

The GM is encouraged to create new perks. No perk should provide wealth, social standing, or combat bonuses. A perk can provide a modest bonus (up to +2) to an attribute, skill, or reaction roll in relatively rare circumstances. The GM may allow more generous bonuses, if they apply only in extremely rare situations.

*Accessory 🪑 ✨*  
Your body incorporates a tool or other useful gadget (e.g., a siren or a vacuum cleaner) that provides minor, noncombat benefits not otherwise covered by a specific advantage.

*Alcohol Tolerance 🍸*  
Your body metabolizes alcohol with remarkable efficiency. You can drink steadily for an indefinite period with no major detrimental effects. *Binging* affects you as it would anyone else. You get +2 on all HT rolls related to drinking.
Autotrance 🎯
You can enter a trance at will. This requires one minute of complete concentration and a successful Will roll, at -1 per additional attempt per hour. This trance gives +2 on rolls to contact spirits, etc. You must make a Will roll to break your trance. If you fail, you can try again every five minutes.

Deep Sleeper 🎯
You can fall asleep in all but the worst conditions, and can sleep through most disturbances. You never suffer any ill effects due to the quality of your sleep. You get an IQ roll to notice disturbances and awaken, just like anyone else; success is automatic if you have Combat Reflexes.

Fur 🎯 ◊
You have fur. This prevents sunburn. Thicker fur might justify 1-3 levels each of Damage Resistance (p. 46) and Temperature Tolerance (p. 93), while spiky “fur” might grant Spines (p. 88). You must buy these other traits separately.

Honest Face 🎯
You simply look honest, reliable, or generally harmless. This has nothing to do with your reputation among those who know you, or how virtuous you really are! People who don’t know you will tend to pick you as the one to confide in, or not to pick you if they are looking for a potential criminal or troublemaker. You won’t be spot-checked by customs agents and the like unless they have another reason to suspect you, or unless they are truly choosing at random. You have a +1 to trained Acting skill for the sole purpose of “acting innocent.”

No Hangover 🎯
No matter how much you drink, you will never get a hangover. This does not mitigate the effects of intoxication – it just eliminates the unpleasant aftereffects.

Penetrating Voice 🎯
You can really make yourself heard! In situations where you want to be heard over noise, others get +3 to their Hearing roll. At the GM’s option, you get +1 to Intimidation rolls if you surprise someone by yelling or roaring.

Sanitized Metabolism 🎯 ◊
You are totally clean. Your body produces minimal, sanitized waste products, and you never suffer from bad breath, excessive perspiration, or unsightly skin problems. This gives -1 to attempts to track you by scent and +1 to reaction rolls in close confines (cramped spaceships, submarines, elevators, etc.).

Shtick 🎯 ◊
You have a cool move or slick feature that sets you apart from the masses. This provides no combat or reaction bonuses, and you can’t use it to earn money, but it might occasionally give you some minor benefit in play (GM’s discretion). Example: your clothing is always spotless, even after combat or swimming the Nile; you can run, climb, fight, etc. while wearing high heels without suffering any special penalty for bad footing.

**Modifiers**

A modifier is a feature that you can add to a trait – usually an advantage – to change the way it works. There are two basic types of modifiers: enhancements and limitations. Adding an enhancement makes the underlying trait more useful, while applying a limitation attaches additional restrictions to your ability.

Modifiers adjust the base cost of a trait in proportion to their effects. Enhancements increase the cost, while limitations reduce the cost. This is expressed as a percentage. For instance, a +20% enhancement would increase the point cost of an advantage by 1/5 its base cost, while a -50% limitation would reduce it by half its base cost.

You can apply any number of modifiers to a trait. Total them to find the net modifier, and then apply this modifier to the base cost of the trait. Round the resulting cost up to the next-highest whole number. For example, a +10% enhancement, a +40% enhancement, a -30% limitation, and a -45% limitation would give a net modifier of -25%. This would reduce the cost of a 10-point advantage to 7.5 points, which would round up to 8 points.

Modifiers can never reduce cost by more than 80%. Treat a net modifier of -80% or worse as -80%. Thus, no matter how many limitations you take, you cannot lower the cost of a trait to less than 1/5 its base cost.

The GM has the final say as to which traits you can modify, and in what ways. Some combinations make no sense (imagine Unaging with the Limited Use limitation!), others have potential for abuse, and still others might not suit the campaign. Percentile modifiers can also result in a lot of extra math. GMs who prefer to keep things simple may wish to prohibit modifiers altogether.

---

**Special Modifiers**

Many advantages, and some disadvantages, offer “special enhancements” and “special limitations.” These modifiers are generally applicable only to the specific trait(s) with which they are described. However, the GM may choose to extend the special modifiers of one particular trait to other, very similar traits.

**Range, Area, and Duration for Advantages**

When applying modifiers, you occasionally need to know the range, area of effect, or duration of an advantage for which one or more of these quantities is not specified – for instance, when applying an enhancement that gives a range to an ability that normally has none. Assume that range is 100 yards, area is a circle 2 yards in radius (and 12’ high, should volume matter), and duration is 10 seconds, unless the advantage specifies otherwise. Exceptions will be noted.
**Enhancements**

You can apply enhancements to advantages, and more rarely to basic attributes and secondary characteristics. The GM might even permit specific enhancements on certain skills, but this is difficult to justify unless the skill functions much as an advantage (which is sometimes true of racially innate skills possessed by non-humans).

**Accurate**

Your attack is unusually accurate. Each +1 to Accuracy is a +5% enhancement.

**Affects Insubstantial**

Your ability affects insubstantial targets in addition to normal, substantial things.

**Area Effect**

Your ability works as an area power instead of affecting a single target. Everything in the area suffers the attack's damage or other effects. On a miss, use the scatter rules (p. 414) to see where the area is centered. Active defenses don't protect against an area attack, but victims may attempt to dive for cover or dodge and retreat to leave the area. For more information, see Area and Spreading Attacks (p. 413).

**Armor Divisor**

Your attack can pierce more armor than its base damage would indicate.

<table>
<thead>
<tr>
<th>Radius</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 yards</td>
<td>+50%</td>
</tr>
<tr>
<td>4 yards</td>
<td>+100%</td>
</tr>
<tr>
<td>8 yards</td>
<td>+150%</td>
</tr>
<tr>
<td>16 yards</td>
<td>+200%</td>
</tr>
</tbody>
</table>

Only Innate Attacks and Afflictions can have this enhancement. Armor Divisor is a "penetration modifier"; you cannot combine it with other penetration modifiers, such as Contact Agent (p. 103) and Follow-Up (p. 105).

**Aura**

Your attack takes the form of a malefic aura that affects anyone you touch (reach C) or who touches you. If a weapon strikes you, your aura affects the weapon. You can switch the aura on or off at the start of your turn (if not, take Always On, p. 110). You must take Aura in conjunction with Melee Attack (p. 112) at the -30% level (reach C), and you cannot claim the extra -5% for "cannot parry" – an aura cannot parry in the first place.

The classic example of an Aura is the sheath of flame surrounding a fire elemental. See Body of Fire (p. 262) for how to write this up.

**Based on (Different Attribute)**

This enhancement is only available for abilities that allow a resistance roll against ST, DX, IQ, HT, Perception, or Will. It moves the resistance roll from the usual attribute or characteristic to a different one, specified when you buy the ability. This is considered an enhancement because it lets you fine-tune your ability to be more effective against targets with known weaknesses.

**Blood Agent**

On an attack with Area Effect or Cone, this is an enhancement. See the Blood Agent limitation (p. 110) for details.
**Cone**

Variable

Your attack spreads to affect everyone in a cone-shaped area. Cones use special rules; see *Area and Spreading Attacks* (p. 413). Decide on the maximum width of the cone, in yards, at the attack’s maximum range. Cone costs +50% plus +10% per yard of maximum width.

You cannot combine Cone with Area Effect, Aura, Jet, Melee Attack, Rapid Fire, or Emanation.

**Contact Agent**

+150%

On an attack with Area Effect or Cone, this is an enhancement. See the Contact Agent limitation (p. 111) for more information.

**Cosmic**

Variable

Your ability operates on a “higher level” than is usual in your game world. This allows it to work under all circumstances, and possibly even ignore opposing powers! The value of the enhancement depends on the underlying trait:

*Ability other than an attack or a defense.* Your ability is not subject to the usual built-in restrictions. For instance, your Healing might cure otherwise “incurable” diseases, your Insubstantiality might allow you to penetrate barriers that would block other insubstantial beings, or your Shapeshifting might be immune to negation by external forces. +50%.

*Defense or countermeasure.* Your defensive trait provides its usual benefits against offensive abilities modified with the Cosmic enhancement. +50%.

*Attack with a lingering special effect.* Your attack has an enduring effect that only another Cosmic power can counteract; e.g., a burning Innate Attack that sets fires that water cannot extinguish, or a toxic Innate Attack that inflicts Cyclic (below) damage that medical technology cannot halt. This does not negate the target’s protection! DR still affects Innate Attack, a HT roll is still allowed for a Resistible (p. 115) attack, etc. +100%.

*Irresistible attack.* Your attack does negate the target’s protection; e.g., an Innate Attack that ignores DR, or Mind Control that ignores Mind Shield. The target may still attempt an active defense against the attack, if applicable. You cannot combine this enhancement with other “penetration modifiers,” such as Follow-Up (p. 105). +300%.

**Cyclic**

Variable

This enhancement is only available for Innate Attacks that inflict burning, corrosion, fatigue, or toxic damage. It represents an attack that persists on the victim: acid, disease, liquid fire, poison, etc. (For attacks that linger in the environment, see *Persistent*, p. 107.)

A Cyclic attack damages its target normally – but once the target has been exposed, the attack damages him again each time a set interval passes! All penetration modifiers (e.g., Contact or Follow-Up) continue to apply; for instance, a Cyclic attack with Follow-Up continues to ignore DR. Worst of all, the victim cannot recover HP or FP lost to a Cyclic attack until the attack stops damaging him!
You must specify a reasonably common set of circumstances that halt any further damage from your attack. For instance, to halt cyclic corrosion or burning damage, the victim might have to wash the acid off or roll on the ground to extinguish the flames, taking one or more seconds and a DX or IQ roll. Fatigue or toxic damage might require drugs or medical care (use Physician skill). Details are up to the GM.

The base value of Cyclic depends on the damage interval.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 second</td>
<td>+100%</td>
</tr>
<tr>
<td>10 seconds</td>
<td>+50%</td>
</tr>
<tr>
<td>1 minute</td>
<td>+40%</td>
</tr>
<tr>
<td>1 hour</td>
<td>+20%</td>
</tr>
<tr>
<td>1 day</td>
<td>+10%</td>
</tr>
</tbody>
</table>

Burning or corrosion attacks shouldn't have intervals longer than 10 seconds. At the GM's option, someone taking damage at one-second intervals might have to make a Fright Check!

Multiply the base value by the number of cycles after the first. The GM should consider limiting large numbers of cycles to attacks that do less than 1d damage.

Cyclic attacks are often Resistible (p. 115); if so, an extra resistance roll is allowed for each cycle, with a success preventing any further damage. If the attack is Resistible, halve the value of Cyclic.

Some Cyclic attacks are contagious. While affected, the victim can inadvertently infect others, per Illness (p. 442). This increases the final cost of the enhancement, after all other factors: +20% for a "mildly contagious" attack or +50% for a "highly contagious" one.

These factors are cumulative. For instance, a resistible disease with 31 daily cycles would cost +10% × 30 × 1/2 = +150%. If it were highly contagious, it would cost +200%.

**Damage Modifiers**

<table>
<thead>
<tr>
<th>Variable</th>
</tr>
</thead>
</table>

You may give an Innate Attack one or more of these modifiers to further qualify the way it does damage.

**Double Blunt Trauma (dbt)**

Available for Innate Attacks that do burning, corrosion, cutting, impaling, or piercing damage. Burning and corrosion attacks enhanced this way inflict 1 HP of blunt trauma injury per 10 points of basic damage resisted by flexible armor. Cutting, impaling, and piercing attacks with this enhancement inflict the same blunt trauma as a crushing attack: 1 HP of blunt trauma injury per 5 points of basic damage resisted by flexible armor.

**Fragmentation (frag)**

+15% per die

The attack scatters damaging fragments on impact. Decide on the dice of fragmentation damage and note this in brackets after the attack’s basic damage. Everyone within 5 yards per die of fragmentation damage is attacked with effective skill 15, modified by range penalties from the point of impact; see Fragmentation Damage (p. 414).

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Variable</th>
</tr>
</thead>
</table>

You may give an Innate Attack that inflicts fatigue damage one of these enhancements: Dehydration, +20%; Drowning, +0%; Freezing, +20%; Missed Sleep, +50%; Starvation, +40%; or Suffocation, +0%. Treat FP with -1d. When you use an enhanced trait, you must use all of its enhancements unless a particular enhancement – or the underlying ability itself – explicitly allows you to turn an enhancement "off."

**Double Knockback (dkb)**

+20%

This lets a crushing or cutting attack inflict twice as much knockback as usual; see Knockback (p. 378).

**Explosion (exp)**

+50% per level

The attack produces an explosion at the point of impact (on a miss, check for scatter; see p. 414). The target takes damage normally; anything nearby receives "collateral damage" equal to basic damage divided (3 × the distance in yards from the blast). If the attack also has an Armor Divisor (p. 102), it does not apply to this collateral damage.

You can take up to two additional levels of Explosion if you desire a blast that isn’t as affected by distance. The second level divides basic damage by twice the distance in yards and is +100%; the third level divides damage by the distance in yards and is +150%.

Explosion is usually limited to crushing and burning attacks, but the GM may permit other combinations.

For more on explosions, see Explosions (p. 414).

**Variable**

Hazard

You may give an Innate Attack that inflicts burning, corrosion, cutting, impaling, or piercing damage. Burning and corrosion attacks enhanced this way inflict 1 HP of blunt trauma injury per 10 points of basic damage resisted by flexible armor. Cutting, impaling, and piercing attacks with this enhancement inflict the same blunt trauma as a crushing attack: 1 HP of blunt trauma injury per 5 points of basic damage resisted by flexible armor.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 second</td>
<td>+100%</td>
</tr>
<tr>
<td>10 seconds</td>
<td>+50%</td>
</tr>
<tr>
<td>1 minute</td>
<td>+40%</td>
</tr>
<tr>
<td>1 hour</td>
<td>+20%</td>
</tr>
<tr>
<td>1 day</td>
<td>+10%</td>
</tr>
</tbody>
</table>

The attack scatters damaging fragments on impact. Decide on the dice of fragmentation damage and note this in brackets after the attack’s basic damage. Everyone within 5 yards per die of fragmentation damage is attacked with effective skill 15, modified by range penalties from the point of impact; see Fragmentation Damage (p. 414).

**When you use an enhanced trait, you must use all of its enhancements unless a particular enhancement – or the underlying ability itself – explicitly allows you to turn an enhancement “off.”**

**Double Knockback (dkb)**

+20%

This lets a crushing or cutting attack inflict twice as much knockback as usual; see Knockback (p. 378).

**Explosion (exp)**

+50% per level

The attack produces an explosion at the point of impact (on a miss, check for scatter; see p. 414). The target takes damage normally; anything nearby receives "collateral damage" equal to basic damage divided (3 × the distance in yards from the blast). If the attack also has an Armor Divisor (p. 102), it does not apply to this collateral damage.

You can take up to two additional levels of Explosion if you desire a blast that isn’t as affected by distance. The second level divides basic damage by twice the distance in yards and is +100%; the third level divides damage by the distance in yards and is +150%.

Explosion is usually limited to crushing and burning attacks, but the GM may permit other combinations.

For more on explosions, see Explosions (p. 414).

**Fragmentation (frag)**

+15% per die

The attack scatters damaging fragments on impact. Decide on the dice of fragmentation damage and note this in brackets after the attack’s basic damage. Everyone within 5 yards per die of fragmentation damage is attacked with effective skill 15, modified by range penalties from the point of impact; see Fragmentation Damage (p. 414).
lost to the attack identically to FP lost to the relevant hazard for all purposes, notably recovery (see Chapter 14).

Traits that protect the target from the hazard in question also shield him from this damage. For instance, a Starvation attack would inflict FP that could only be recovered by eating a meal, but someone with Doesn't Eat or Drink would be immune.

**Incendiary (inc)**

+10%

An Innate Attack other than a burning attack may be Incendiary. This gives the damage a secondary flame effect that can ignite volatile material (fuel, dry tinder, etc.).

**Radiation (rad)**

+25% or +100%

The attack irradiates the subject. Roll damage normally, but whether or not the attack penetrates DR, it inflicts 1 rad per point of basic damage rolled. See **Radiation** (p. 435) for effects. For a toxic attack, this dosage is instead of regular damage, and the enhancement is worth +25%; this is typical of “ordinary” radioactivity. For a burning attack, the radiation dose is as well as regular damage, and the enhancement is +100%; use this for particle beams. Other damage types cannot have this enhancement.

**Surge (sur)**

+20%

The attack produces an electrical surge or pulse that can disable electronics or anything with the Electrical disadvantage (p. 134).

**Delay**

Variable

This enhancement delays the attack’s effects until sometime after you hit the target. This lets you simulate time bombs and the like. You must specify some way to neutralize the effect before it occurs. Work out this detail with the GM.

A fixed delay (e.g., 2 seconds) is +40%.

A variable delay is +10% if you can set it for any time from “no delay” to 10 seconds, or +20% if you can set it for longer (minutes, hours, days . . .). You must select the delay before you roll to hit.

**Triggered Delay:** Instead of a time delay, the effects are triggered by a simple action: a radio signal, touch, pressure, a metal object passing within a yard, etc. Specify the trigger when you buy the attack. +50%.

**Drifting**

+20%

You may add this enhancement to any attack with Delay (above) or Persistent (p. 107). The initial attack roll places the effect. It then drifts from that point with the wind, water currents, solar wind, etc., as appropriate. Use this for poison gas, ball lightning, floating mines, and so forth.

**Extended Duration**

Variable

This enhancement increases the normal duration of your ability. “Multiple” applies to the original duration (or changes it to permanent).

<table>
<thead>
<tr>
<th>Multiple</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>3x duration</td>
<td>+20%</td>
</tr>
<tr>
<td>10x duration</td>
<td>+40%</td>
</tr>
<tr>
<td>30x duration</td>
<td>+60%</td>
</tr>
<tr>
<td>100x duration</td>
<td>+80%</td>
</tr>
<tr>
<td>300x duration</td>
<td>+100%</td>
</tr>
<tr>
<td>1,000x duration</td>
<td>+120%</td>
</tr>
<tr>
<td>Permanent*</td>
<td>+150%</td>
</tr>
</tbody>
</table>

* You must specify a reasonable set of conditions that will dispel the effect (or cure it, for abilities such as Affliction and Mind Control). The GM is the judge of what is “reasonable.” If there is no way to end the effect, the enhancement is +300%. To keep PCs from granting each other free advantages, the GM may wish to forbid this level of Extended Duration on Afflictions with the Advantage modifier.

To add Extended Duration to an attack, the attack must either have Aura, Persistent, or Wall, or specifically allow this enhancement. You can also add Extended Duration to any advantage that has the Ranged enhancement (p. 107).

If the modified trait has multiple facets with separate durations, you must specify which duration you are extending. For instance, a cloud of sleeping gas could have this enhancement to extend the duration of the sleep it induces or the length of time the cloud persists; to do both, buy this enhancement twice.

**Follow-Up**

Variable

Your attack's effects are delivered by a “carrier.” Use this to represent poison on a dart, an explosive in an armor-piercing shell, etc. Pick a different attack as the carrier. This can be either body weaponry (e.g., Claws or Teeth) or an Innate Attack (usually one that does cutting, impaling, or piercing damage).

A Follow-Up attack need only list its damage amount and type. All other details depend on the carrier attack. The Follow-Up attack only hits if the carrier attack hits. If the carrier attack hits, the Follow-Up attack affects the target’s DR, DR has no effect on the Follow-Up attack’s damage or HT rolls. If the carrier attack is an Innate Attack, the cost of Follow-Up depends on the modifiers on the carrier attack. The cost of Follow-Up equals the sum of the costs of whichever of the following modifiers apply to the carrier attack: Always On, Aura, Cone, Drifting, Emanation, Emergencies Only, Extra Recoil, Guided, Homing, Increased Range, Jet, Limited Use, Malediction, Melee Attack, Preparation Required, Rapid Fire, Reduced Range, Takes Extra Time, Takes Recharge, Unconscious Only, Uncontrollable, or Unreliable. If none of these modifiers apply to the carrier attack, Follow-Up costs +0%. Note that the Follow-Up attack itself cannot take any of these modifiers. Only its carrier attack may have them.

Follow-Up is a “penetration modifier”; you cannot combine it with other penetration modifiers (although the carrier attack can have them).

**Guided or Homing**

Variable

You can guide your attack—perhaps it “homes in” by itself! Use this enhancement to create guided missiles and supernatural effects such as magical javelins that seek your foes.
**Guided**: You steer your attack to the target using your own skill. This lets you ignore all range penalties to hit! If the target is so distant that your attack needs multiple turns to reach it (see below), you must take a Concentrate maneuver each turn. If you lose sight of the target while the attack is en route, your attack automatically misses. +50%.

**Homing**: Your attack steers itself. Decide how it seeks its target: with ordinary vision or a sensory advantage such as Detect (p. 48), Infravision (p. 60), Night Vision (p. 71), Scanning Sense (p. 81), or Vibration Sense (p. 96). The attack uses this sense for the purpose of combat modifiers; e.g., radar ignores darkness but can be jammed. To “lock on,” you must Aim at the target and make an unmodified skill roll – and ignore all range penalties to hit. Instead, use the attack’s skill of 10 – plus Accuracy, if you made your skill roll – and ignore all range penalties. Homing costs a base +50%, plus 1% per point the chosen homing mechanism would cost if bought as an advantage (without any modifiers); e.g., Infravision costs 10 points, making Homing (Infravision) +60%. Ordinary vision uses the base +50%.

If a Guided or Homing attack has a 1/2D statistic, read this as the attack’s speed in yards/second. The attack can hit a target at up to its 1/2D range on the turn you launch it. It requires multiple turns to reach more distant targets. Do not halve damage, but defer the attack roll until the attack reaches its target.

For more information, see *Guided and Homing Weapons* (p. 412).

### Increased Range

**+10%/level**

You may add this enhancement to any advantage that has a range; e.g., Innate Attack or Scanning Sense. Each level increases range as follows:

<table>
<thead>
<tr>
<th>Range Multiple</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x</td>
<td>+10%</td>
</tr>
<tr>
<td>5x</td>
<td>+20%</td>
</tr>
<tr>
<td>10x</td>
<td>+30%</td>
</tr>
<tr>
<td>20x</td>
<td>+40%</td>
</tr>
<tr>
<td>50x</td>
<td>+50%</td>
</tr>
<tr>
<td>100x</td>
<td>+60%</td>
</tr>
</tbody>
</table>

Further levels follow the same “2-5-10” progression.

If applied to a ranged attack, each level increases 1/2D and Max. You may increase 1/2D or Max individually at half cost (that is, "Increased 1/2D” and "Increased Max" are +5%/level). However, you cannot increase 1/2D past Max. At most, you can make 1/2D equal to Max – this means the attack has no 1/2D range. For attacks that already have no 1/2D range, you can increase Max for +5%/level.

**Jet**

**+0%**

Your attack is a continuous stream, like a flamethrower: Treat it as a melee weapon with a very long reach rather than as a ranged weapon. Do not apply penalties for target range and speed.

An attack with Jet has no Acc, and has 1/2D 5 and Max 10 instead of its usual range. Increased Range increases range by 100% per level instead of its usual effects.

Jet is incompatible with Area Effect, Aura, Cone, Follow-Up, Melee Attack, and Rapid Fire.

### Link

**+10% or +20%**

You can use two or more advantages simultaneously, as if they were a single ability. For +10%, your abilities are permanently linked into a single power, and must be used together – you cannot use them separately. For +20%, you can also use them separately. You must add this enhancement to all the abilities you wish to link.

If you link two attacks into one and give them identical Malf., 1/2D, Max, Acc, RoF, Shots, and Recoil, you can treat them as a single attack with one attack roll but separate rolls for damage. This is not the same as the Follow-Up enhancement (p. 105).

### Low or No Signature

**+10% or +20%**

An attack normally has a “signature”: a flash of light, a sound, etc. If left unspecified, this is assumed to be similar to a gunshot or a stroke of lightning – that is, a brilliant flash and a loud report. This enhancement makes your attack less obvious.

**Low Signature**: The attack is no more easily identifiable as an attack than the loud pop of a champagne cork; e.g., a suppressed pistol shot. +10%.

**No Signature**: The attack is almost completely unnoticeable; e.g., a blowgun’s dart. Alternatively, it is utterly undetectable by normal means, but leaves a magical or psionic trace. +20%.

### Malediction

**Variable**

Your attack is not a conventional ranged attack; it works more like a Regular spell (p. 239). It lacks Malf., 1/2D, Max, Acc, RoF, Shots, and Recoil statistics, and cannot have any enhancement or limitation that modifies those statistics. Most importantly, the target’s DR has no effect on the attack’s damage, resistance roll, or other effects.

Malediction requires a Concentrate maneuver rather than an Attack maneuver to use. It can target any victim you can see or otherwise clearly perceive. To determine if the attack succeeds, roll against your Will, applying the range penalties detailed below. Your foe may choose to resist; if so, resolve the attack as a Quick Contest of Will. You must win to affect the victim.

When enhancing an Affliction, the Quick Contest above replaces the usual resistance roll. You roll against Will, but your target rolls against HT – or other attribute, if the attack has Based on (Different Attribute) – modified as usual for the Affliction. For instance, an Affliction that allows a HT-1 roll to resist would result in a Quick Contest of your Will vs. the target’s HT-1.

The value of Malediction depends on the range modifiers it uses. If it takes -1 per yard of range, like a Regular spell, it costs +100%. If it uses the range penalties on the Size and Speed/Range Table (p. 550), it costs +150%. And if it uses the penalties given under Long-DistanceModifiers (p. 241), it costs +200%.

Malediction is a "penetration modifier"; you cannot combine it with other penetration modifiers, nor with modifiers that apply only to conventional ranged attacks.
Mobile +40%\textit{level}

You may only add this enhancement to an attack that has both Area Effect (p. 102) and Persistent (below). The area of effect moves under your control. Move equals the level of the enhancement (Move 1 at +40%, Move 2 at +80%, and so on), and cannot exceed the attack’s Max range.

To move the area of effect, you must take a Concentrate maneuver. To make the mobile area autonomous, add Homing (which causes it to attack the nearest valid target) and possibly Selective Area (so it only seeks out enemies). Buy these enhancements \textit{twice} if they’re intended to apply to both the initial attack roll and the autonomous area.

Mobile is mutually exclusive with Drifting (p. 105).

Overhead +30%

Your attack can alter its angle to strike from a different side of the target – usually the top. This bypasses any cover that does not provide overhead protection, and negates attack penalties to hit crouching, kneeling, sitting, or prone targets. (If you are already above or below your target, adjust this appropriately.) Use this to represent a rain of fire, a missile that swoops up and then dives down at the last moment, an airburst grenade, etc.

Persistent +40%

You may only add this enhancement to an Area Effect (p. 102) attack. This causes the area of effect to remain in place for 10 seconds, continuing to damage (or attack and possibly damage, if taken with Bombardment, p. 111) anyone entering or passing through it. Use Extended Duration to increase the duration.

Ranged +40%

This enhancement gives range to an advantage that normally affects your immediate area, or that requires a touch to affect others. By default, it has 1/2D 10, Max 100, Acc 3, RoF 1, Shots N/A, and Recoil 1. Duration is 10 seconds, unless the ability lists another duration (like Neutralize or Possession) or is instantaneous (like Healing), and you cannot use the ability again until all existing effects have worn off. You can apply other modifiers to change the ranged combat statistics and duration.

This enhancement is normally restricted to Healing, Mana Damper, Mana Enhancer, Neutralize, Possession, and Psi Static. The GM is free to allow it on other traits, but it should \textit{never} modify body weaponry (such as Strikers or Vampiric Bite) or abilities that already have a range.
Rapid Fire

An Innate Attack’s base Rate of Fire (RoF) is 1. Consult the table below to find the cost for a higher RoF:

<table>
<thead>
<tr>
<th>RoF</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>+40%</td>
</tr>
<tr>
<td>3</td>
<td>+50%</td>
</tr>
<tr>
<td>4-7</td>
<td>+70%</td>
</tr>
<tr>
<td>8-15</td>
<td>+100%</td>
</tr>
<tr>
<td>16-30</td>
<td>+150%</td>
</tr>
<tr>
<td>31-70</td>
<td>+200%</td>
</tr>
<tr>
<td>71-150</td>
<td>+250%</td>
</tr>
<tr>
<td>151-300</td>
<td>+300%</td>
</tr>
</tbody>
</table>

Two special options are available for attacks with this enhancement:

Multiple Projectile: Each shot splits into multiple projectiles after you attack, like a shotgun blast or forked lightning. Express this as a multiplier following RoF; for instance, RoF 3¥4 means each of three shots fired divides into four individual projectiles. Modifier cost is based on the RoF times the multiplier; e.g., RoF 3¥4 costs the same as RoF 12.

Selective Fire: You may designate a RoF 5+ attack as Selective Fire, allowing it to fire as if it had RoF 1-3. This costs an extra +10%.

Reduced Fatigue Cost

You may only take this enhancement for abilities that cost FP, and never in conjunction with the special modifier “Usually On.” You can take it any number of times. Each level cuts the cost to use the ability by 1 FP. If you must “maintain” the ability by spending FP on a regular basis, reduce this maintenance cost by a like amount.

Reduced Time

You may only add this enhancement to abilities that require time to activate. You can take it any number of times. Each level halves the time required to use the ability (round up). Once time is reduced to one second, a further level of Reduced Time makes the ability instantaneous – using it is a free action.

Note that you cannot add Reduced Time to attack powers, to traits that list any kind of special modifier that affects activation time, or to Magery (to reduce casting times).

Respiratory Agent

Your attack must be inhaled to have any effect, but it ignores all DR. Only Doesn’t Breathe and Filter Lungs protect completely – although a victim who makes a Sense roll to notice the attack in time may hold his breath (see Holding Your Breath, p. 351). To make your attack less noticeable, take Low Signature (p. 106).

You may only add this enhancement to an Affliction or to an Innate Attack that inflicts toxic or fatigue damage, and you must combine it with one of Area Effect (p. 102), Cone (p. 103), or Jet (p. 106). Persistent (p. 107) is common but not required.

Respiratory Agent is a “penetration modifier”; you cannot combine it with other penetration modifiers, such as Follow-Up (p. 105).

Selective Area

You may add this enhancement to any Area Effect (p. 102) or Cone (p. 103) attack. It lets you choose which targets within your area are actually affected.

Selectivity

This enhancement lets you turn a trait’s other enhancements off and on at will. For instance, if you had an attack with Area Effect, you could turn this enhancement off to affect only one other person. You must specify which enhancements you wish to ignore before you activate the ability. The default assumption is that you are always using all of your enhancements.

By allowing you to select which enhancements you use, Selectivity permits you to have multiple versions of the same ability without having to buy the ability multiple times. This can be extremely useful when creating comic-book supers!
Sense-Based

Your attack is channeled through your victim's senses, allowing it to ignore DR! You must specify the sense(s) affected. Examples include vision, hearing, smell, and exotic senses such as Detect. This is worth +150%, plus an extra +50% per sense after the first; e.g., Vision and Hearing-Based would be +200%.

Your attack only affects someone who is using the targeted sense. For instance, a Vision-Based attack cannot affect a blind subject or someone with his eyes closed, while a Smell-Based attack doesn’t work underwater or on a target with a gas mask. Advantages (such as Protected Sense, p. 78) and equipment that protect the sense in question either negate the attack completely or, in the case of attacks that allow a roll to resist (such as Afflictions, Maledictions, and Resistible attacks), give a bonus to the resistance roll.

The most common Sense-Based attack is an Affliction that knocks out the sense it is based on; for instance, Affliction (Blindness; Vision-Based) for a blinding flash. However, Sense-Based attacks can also be deadly, like a banshee’s wail or basilisk’s gaze.

Sense-Based is a "penetration modifier"; you cannot combine it with other penetration modifiers, such as Follow-Up (p. 105).

Exception: You can combine Sense-Based with Malediction (p. 106). In conjunction with Malediction, or when added to an ability that already ignores DR (e.g., Mind Control or Mind Reading), Sense-Based becomes a limitation. It is worth -20% if it works through one sense, -15% if two senses, or -10% if three senses. If it works through more than three senses, it is not a significant limitation.

Side Effect

You may only add this enhancement to an Innate Attack, and you cannot combine it with penetration modifiers other than Armor Divisor. If any damage penetrates the target’s DR, he must make a HT roll, at -1 per 2 points of penetrating damage, or suffer a “side effect.”

Choose the side effects from the effects described for Affliction (p. 35). Valid choices are stunning, Attribute Penalty, Disadvantage, and Incapacitation. The cost of Side Effect is a base +50%, plus the cost of the Affliction enhancements. For instance, stunning would be +50%, while Disadvantage (Blindness) would be +100%.

You may specify more than one side effect. If the victim gets a single resistance roll against all of them, treat them as a single Side Effect enhancement, totaling their cost. If the victim must resist each effect individually, take a separate Side Effect enhancement for each effect.

Stunning wears off normally, while other effects last (20 - HT) minutes, minimum 1 minute. If Incapacitation is combined with other effects, the other effects last for another (20 - HT) minutes after the Incapacitation wears off.

Symptoms

Symptoms are effects that occur if the cumulative damage (HP or FP loss) inflicted by the enhanced Innate Attack exceeds a fraction of the victim’s basic HP or FP. The victim does not get a HT roll to resist Symptoms! The GM should consider limiting Symptoms to attacks that inflict 1d damage or less.

Choose Symptoms from the following effects described as enhancements for Affliction (p. 35): Advantage, Attribute Penalty, Disadvantage, Irritant, and Negated Advantage. If the threshold for the Symptom is 2/3 the victim’s basic HP, use the cost under Affliction. If the threshold is 1/2 basic HP, double this cost. If it’s 1/3 basic HP, triple this cost.

Example: Blindness is worth +50% as an Affliction, but as a Symptom that occurs when the victim has lost half his HP to an Innate Attack, it is a +100% enhancement.

An Innate Attack can have multiple Symptoms, representing different effects that that occur at different damage thresholds.

Underwater

Attacks are assumed to be usable in air or in vacuum, but ineffective in liquid. This enhancement lets an attack work underwater at 1/10 range.

Variable

You can reduce the level of your attack. For example, if you have an Innate Attack that normally does 3d damage, you could reduce it to 1d or 2d damage. You must indicate this before you make your attack roll.

Wall

You may only add this enhancement to an attack that has both Area Effect (p. 102) and Persistent (p. 107).

For +30%, you can set up your Area Effect as a wall filled with the substance or effect of your ability. This affects anyone or anything passing through it. You get a three-yard-long by one-yard-wide wall per yard of radius in your area.

For +60%, your wall works as above, but you can form it into any shape you choose.

You must define your wall as either permeable or rigid:

Permeable: The wall is composed of liquid, gas, energy, or an amorphous solid (e.g., thorn bushes). It impedes vision, and inflicts damage on anyone who attempts to cross it, but an intruder can traverse it provided he is not stunned, knocked out, killed, etc. by its effects. Anything effective against the substance of the wall will disperse it; e.g., water or a fire extinguisher could extinguish a wall of fire.

Rigid: The wall is a material barrier: This is only possible for Innate Attacks that deal crushing, cutting, impaling, or piercing damage. Each yard of wall has DR 3 and 1/2 HP per die of damage (round up); e.g., a 6d attack produces a wall with DR 18 and 3 HP. The wall does no damage itself, but the damage type applies to the injury inflicted on anyone crashing into it.
**LIMITATIONS**

You can apply limitations to almost any trait (although as with enhancements, skills are normally off-limits). When you apply a limitation to a disadvantage, you reduce its value as a disadvantage; e.g., a -10% limitation on a -25-point disadvantage would make it a -37.5-point trait, which rounds to -27 points. Limited disadvantages are worth fewer points because they affect you under more restricted circumstances.

Remember that no matter how many limitations you take, you cannot reduce the cost of a trait by more than 80%. That is, when totaling modifiers, treat net modifiers below -80% as -80%.

**Accessibility**

**Variable**

Accessibility is a catchall limitation you can use to cover any restriction not specifically defined elsewhere. Accessibility limitations fall into two broad categories: those that limit the targets your ability can affect and those that limit the situations in which it works.

If your ability can only affect certain targets, the limitation depends on how common the target group is. “Only on women,” “Only on men,” or anything else that covers about half of the population is worth -20%. “Only on Electrical” or “Only on machines” is worth -20% in a technological setting. “Only on sea creatures” is worth -30% – unless the campaign is set on a world mostly covered with water, in which case it isn’t worth more than -10%. “Only on aliens” is worth -30% or -40%, depending on the world. “Only on psis” is worth -50% in most settings. “Not on redheads” is identical to “On everyone but redheads,” and is worth -10%.

The same yardstick applies to limitations based on the situation. “Only at day” or “Only at night” is worth -20%. “Only in direct sunlight” is worth -30%. “Only in water” is worth -30% on Earth – but more on a desert planet and less on an ocean world. “Only during full moon” or “Only during new moon” is worth -40%. And “Useless under stress” is a whopping -60%, since it makes the ability worthless in most adventuring situations!

You can also link situational Accessibility to your actions. The more unusual, difficult, or obnoxious the required action is, the greater the limitation value. Some examples:

- Limited to situations where you must collaborate with Redcoats.
- Limited to situations where nothing within 25 feet can lower your morale.

**Always On**

**Variable**

You cannot switch your advantage off. You may only add this to an ability that can normally be switched off and that is inconvenient if you can’t turn it off. It is worth -10% if the effects are social or cosmetic, -20% if they are physically inconvenient, and -40% if they are dangerous (to you!). Always On appears as a “special limitation” for most of the traits to which it would apply. The GM can add new costs as appropriate for other abilities.

**Armor Divisor**

**Variable**

Your attack can pierce less armor than its base damage would indicate. “Divisor” is the factor by which you divide. “DR Multiplier” is an equivalent calculation – multiply your opponent’s DR by this number.

<table>
<thead>
<tr>
<th>Divisor</th>
<th>DR Multiplier</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>2</td>
<td>-30%</td>
</tr>
<tr>
<td>0.2</td>
<td>5</td>
<td>-50%</td>
</tr>
<tr>
<td>0.1</td>
<td>10</td>
<td>-70%</td>
</tr>
</tbody>
</table>

In addition, if you have any level of this limitation, targets that have DR 0 (e.g., bare flesh) get DR 1 against your attack.

**Blood Agent**

**-40%**

Your attack must reach a mucous membrane (eyes, open mouth, nose, etc.) or an open wound to have any effect at all. DR always stops it.

This limitation is intended for Afflictions, and for Innate Attacks that inflict fatigue or toxic damage. It is especially appropriate for poisonous spit or spray. In conjunction with Aura (p. 102), it can also represent an attack that is delivered via intimate physical contact.

**Exception:** If the attack also has Area Effect (p. 102) or Cone (p. 103), Blood Agent works as described above and also when inhaled (like Respiratory Agent, p. 108). This lets it ignore all DR. Only targets with the...
Sealed advantage (p. 82) – or with one of Doesn’t Breathe (p. 49) or Filter Lungs (p. 55) and one of Nicitating Membrane (p. 71) or Protected Vision (p. 78) – are immune. This powerful ability converts Blood Agent into a +100% enhancement when combined with Area Effect or Cone!

This is a “penetration modifier”; you cannot combine it with other penetration modifiers, such as Follow-Up (p. 105).

Optional Rule: Limited Enhancements

If the GM allows, you can add a limitation to an enhancement. This restricts the enhancement, reducing its value as an enhancement without directly affecting the underlying ability.

Apply the limitation to the percentage value of the enhancement exactly as if it were a point value. This cannot reduce the value of the enhancement below 1/5 normal. Then apply the cheaper enhancement to the cost of the ability.

Example: Your Selective Area (+20%) enhancement has the Vision-Based (-20%) limitation. You don’t need eye contact to make the attack work, but you must make eye contact with someone in your area of effect in order to single him out. A -20% limitation on a +20% enhancement reduces the net enhancement to +16%.

A few limitations require a specific enhancement. For instance, Emanation (p. 112) always accompanies Area Effect (p. 102). Such limitations affect the underlying ability. You cannot use this rule to apply them to just the enhancement.

The GM may choose not to use this option, as it requires extra bookkeeping.

This is a “penetration modifier”; you cannot combine it with other penetration modifiers, such as Follow-Up (p. 105).

**Costs Fatigue**

Your ability costs FP to use. This is worth -5% per FP per use. What constitutes a “use” depends on the underlying trait.

For abilities that produce instantaneous effects (e.g., Innate Attack), you must pay this FP cost every time you trigger the ability.

For advantages that produce continuing effects (e.g., Flight), you must pay this FP cost to activate the ability for one minute. However, once you have paid this initial cost, you need only pay half as many FP (round up) per minute to keep the ability active. If an advantage that produces continuing effects only lasts one second, and you must pay the cost to maintain it every second, this doubles the value of the limitation to -10% per FP.

**Damage Limitations**

You may add the following limitations to an Innate Attack:

- No Blunt Trauma (nbt) -20%
- No Knockback (nkb) -10%
- No Wounding (nw) -50%

The attack inflicts basic damage, and may cause knockback and blunt trauma, but its penetrating damage has no wounding effect (HP or FP loss). Apply this limitation to a crushing attack to represent effects such as a mighty gust of wind or jet of water. Use it with impaling, piercing, or cutting attacks that are carriers for Afflictions or Innate Attacks (usually those that inflict fatigue or toxic damage) with the Follow-Up modifier (p. 105); this represents small poison darts, stings, etc. that can slip through armor without inflicting grievous wounds.

---

### Effective Skill

<table>
<thead>
<tr>
<th>Effective Skill</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>-5%</td>
</tr>
<tr>
<td>10</td>
<td>-10%</td>
</tr>
<tr>
<td>8</td>
<td>-15%</td>
</tr>
<tr>
<td>6</td>
<td>-20%</td>
</tr>
</tbody>
</table>

Modify effective skill for target size only – not for range or for any other factor. Determine hit location randomly. If the target is under cover, the cover protects normally against the damage.

This limitation is intended for attacks like electrical or ice storms, which could affect some but not all individuals within a given area.

**Contact Agent** -30%

Your attack must touch bare skin or porous clothing to have any effect at all. DR always stops it.

This enhancement is intended for Afflictions, and for Innate Attacks that inflict fatigue or toxic damage. Taken with Aura (p. 102), it can represent a “contagious” attack that spreads via skin contact.

**Exception:** If the attack also has Area Effect (p. 102) or Cone (p. 103), Contact Agent lets it ignore all DR. Only targets with the Sealed advantage (p. 82) are immune. This powerful ability converts Contact Agent into a +150% enhancement when combined with Area Effect or Cone!
**Dissipation**

-50%

You may only take this limitation in conjunction with Area Effect (p. 102) or Cone (p. 103). The further the victim is from the center of the area or the apex of the cone, the less effective your attack is. See Area and Spreading Attacks (p. 413) for details.

**Emanation**

-20%

You may only take this limitation in conjunction with Area Effect (p. 102). It means the effect has no range or Accuracy, but radiates from your body (without affecting you, if the effect is a bad one). This is incompatible with Melee Attack and ranged attack modifiers.

**Emergencies Only**

-30%

Your ability is triggered by your fear or excitement; you cannot use it under "routine" conditions. The GM is the final arbiter. He may rule that multiple successive failures of your power make you angry enough that it begins to work, but this is entirely up to him.

**Full Power in Emergencies Only:** If your ability works at half power under normal conditions, but at full power under stress, this limitation is not worth as much. For traits that come in levels, "half power" means half as many levels. The GM must decide what this means for other traits (half range, duration, bonuses, etc.). -20%.

**Extra Recoil**

-10% per +1 Recoil

By default, a ranged attack has Recoil 1, making it virtually recoilless (see p. 271). You may give an attack with Rapid Fire (p. 108) a higher Recoil (Rcl) as a limitation.

<table>
<thead>
<tr>
<th>Recoil (Rcl)</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>-10%</td>
</tr>
<tr>
<td>3</td>
<td>-20%</td>
</tr>
<tr>
<td>4</td>
<td>-30%</td>
</tr>
<tr>
<td>5+</td>
<td>-40%</td>
</tr>
</tbody>
</table>

**Inaccurate**

-5% level

Your attack benefits little from careful aiming. Most attacks start with Accuracy (Acc) 3. Each -1 to Acc is a -5% limitation. You may not reduce Acc below 0.

**Limited Use**

Variable

You can use your ability only a limited number of times in a 24-hour period. For most advantages, each "use" is 1 minute of activation. For an attack, each "use" gives shots equal to your RoF, with a minimum one shot per use; for instance, three uses of an attack with RoF 2 would give six shots. The value depends on the number of uses you get.

<table>
<thead>
<tr>
<th>Uses Per Day</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-40%</td>
</tr>
<tr>
<td>2</td>
<td>-30%</td>
</tr>
<tr>
<td>3-4</td>
<td>-20%</td>
</tr>
<tr>
<td>5-10</td>
<td>-10%</td>
</tr>
</tbody>
</table>

More than 10 uses per day is not a significant limitation.

Two special options are available for attacks (and optionally, other abilities) that have this enhancement:

**Fast Reload:** You can replace all your uses in 3 to 5 seconds simply by replenishing ammunition. The GM determines the weight and cost of the ammunition. This halves the value of the limitation; e.g., three or four uses would be worth only -10%.

**Slow Reload:** As above, except if you have two or more shots (not uses) you must reload each shot individually (taking 3 or more seconds per shot). If you have only one shot, it must take at least 6 seconds to reload – possibly longer; if using this limitation to represent a very slow-firing weapon such as a flintlock. This makes the limitation worth 5% less than usual; e.g., three or four uses would be worth only -15%.

**Melee Attack**

Variable

Your attack functions as a melee weapon. It has no range, but allows you to parry, use Rapid Strike, Feint, etc. It lacks Malf., 1/2D, Max, Acc, RoF, Shots, and Recoil statistics, and may not have any enhancement or limitation that modifies these statistics. Instead, it has a Reach statistic.

<table>
<thead>
<tr>
<th>Reach</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-30%</td>
</tr>
<tr>
<td>1 or 2</td>
<td>-25%</td>
</tr>
<tr>
<td>C, 1, or 1, 2, or 2, 3</td>
<td>-20%</td>
</tr>
<tr>
<td>1-4 (like a whip)</td>
<td>-15%</td>
</tr>
</tbody>
</table>

If your attack cannot parry, it is worth an extra -5%.

**Mitigator**

Variable

You may only apply this limitation to a disadvantage. A particular item or substance – the *mitigator* – temporarily negates your disadvantage. The more effective the mitigator, the fewer points you get for the disadvantage. Use the following guidelines:

**Mitigator is vulnerable, and easily stolen, broken, or misplaced (e.g., a pair of glasses).** -60%.

**Mitigator is a drug or other treatment that you must take daily.** -60%.

**Mitigator is a weekly treatment.** -65%.

**Mitigator is a monthly treatment.** -70%.

This assumes your treatments are available at pharmacies. If you require a special (and possibly expensive) prescription, add +5% to the values above; e.g., -70% becomes -65%. If you can only get your treatments from one specific source, such as an experimental drug program, add +10%; e.g., -70% becomes -60%.

**Example 1:** Bad Sight is worth -25 points. Glasses cure Bad Sight while worn, but are breakable, for a -60% Mitigator limitation. This reduces Bad Sight to -10 points.

**Example 2:** Jan has AIDS, and would die in a month without treatment. This level of Terminally Ill is normally worth -100 points. Fortunately, Jan is on an experimental drug plan that is holding him in remission. The treatments are weekly (-65%) but impossible to find outside his program (+10%), for a -55% Mitigator limitation. This reduces Terminally Ill to -45 points. As long as Jan stays with the program, his countdown to death is halted.

**Nuisance Effect**

Variable

Your ability has a "side effect" that causes you serious inconvenience. The GM must approve this limitation and determine its value in each case, and should ruthlessly forbid effects that are abusive or that do not genuinely limit the ability's value. A few
guidelines (a given trait can have more than one of these drawbacks):

- Your ability earns a reaction penalty from those around you. Perhaps it makes you look disgusting, or requires you to perform some sort of distressing ritual. -5% per -1 to reactions (maximum -4).
- Your ability makes you obvious, limiting stealth and attracting enemies. -5%.
- Your ability physically inconveniences you – it attracts stinging insects, causes your armor to rust, makes you ravenously hungry, etc. -5%.

You cannot take a valuable power as a Nuisance Effect. For instance, "Kills everyone within a mile" is not an acceptable Nuisance Effect! Neither can you claim a limitation for a harmless nuisance. If your Terror advantage attracts gerbils instead of frightening them, this is amusing but not a limitation.

**Onset 🔧 Variable**

You must “stack” this limitation with one of Blood Agent, Contact Agent, Follow-Up, Malediction, or Respiratory Agent. It delays the damage or affliction caused by the attack until some time after exposure. The delay determines the value of the limitation.

<table>
<thead>
<tr>
<th>Delay</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 minute</td>
<td>-10%</td>
</tr>
<tr>
<td>1 hour</td>
<td>-20%</td>
</tr>
<tr>
<td>1 day</td>
<td>-30%</td>
</tr>
<tr>
<td>1 week (or more)</td>
<td>-40%</td>
</tr>
</tbody>
</table>

Delays that fall between two values use the smaller limitation; e.g., 30 minutes is -10%. If you can control the onset time, take Delay (p. 105) instead.

A variant limitation is Exposure Time, which is only available for attacks with Aura or Persistent. Use it to represent radioactivity, mildly toxic gases, etc. It works just like Onset, except that the victim must be exposed for the entire period to suffer the effect (or repeat it, if you continue exposure). This is worth an extra -20%; e.g., 1 minute is -30%.

**Pact** Variable

A Higher Power – god, spirit, etc. – grants your ability under the condition that you follow a strict moral code. This code must take the form of one or more of the traits listed under Self-Imposed Mental Disadvantages (p. 121). These disadvantages give you the usual number of points. Should you ever stray from the path, your ability immediately ceases to function until you repent. The limitation value is numerically equivalent to the point cost of the required disadvantages; e.g., a -10-point Vow gives a -10% Pact limitation.
Preparation Required

Variable

Your ability requires special preparation before you can use it. Perhaps you have to meditate first, or perform some ritual to focus concentration.

This limitation is particularly appropriate for supernatural traits such as Channeling (p. 41) and Medium (p. 68).

You cannot use an unprepared ability. To prepare, take the Concentrate maneuver for the required amount of time. You need not specify how you plan to use your ability while you are preparing it, but you must specify which ability you are preparing if you have more than one trait with this limitation.

You can use a prepared ability normally – either immediately or at a later time. However, you can only have one advantage with this limitation prepared at a time, and it becomes unprepared immediately after use, regardless of success or failure (but if your ability has continuing effects, you can maintain them once activated).

The value of this limitation depends on the time required to prepare the ability.

<table>
<thead>
<tr>
<th>Preparation Time</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 minute</td>
<td>-20%</td>
</tr>
<tr>
<td>10 minutes</td>
<td>-30%</td>
</tr>
<tr>
<td>1 hour</td>
<td>-50%</td>
</tr>
<tr>
<td>8 hours</td>
<td>-60%</td>
</tr>
</tbody>
</table>

Weakened Without Preparation: Your ability works if you do not prepare it beforehand, but at half duration, range, effect, etc. This does not make sense for all advantages (GM’s decision as to when it does). Weakened Without Preparation is worth exactly half as much as listed above.

Examples of Modified Attacks

Banshee’s Wail: Affliction 3 (HT-2; Area Effect, 64 yards, +300%; Emanation, -20%; Hearing-Based, +150%; Heart Attack, +300%; Limited Use, 1/day, -40%; Selective Area, +20%) [243].

Dragon’s Breath: Burning Attack 4d (Cone, 5 yards, +100%; Limited Use, 3/day, -20%; Reduced Range, x1/5, -20%) [32].

Hand of Death: Toxic Attack 6d (Contact Agent, -30%; Costs Fatigue, 2 FP, -10%; Delay, Variable, +20%; Low Signature, +10%; Melee Attack, Reach C, -30%; Resistible, HT-4, -10%) [12].

Implanted 9mm SMG: Piercing Attack 3d-1 (Accurate +2, +10%; Extra Recoil +1, -10%; Increased Range, x20, +40%; Limited Use, 3 uses/30 shots, Fast Reload, -10%; Rapid Fire, RoF 10, +100%) [33].

Lightning Bolt: Burning Attack 6d (Side Effect, Stunning, +50%; Surge, +20%) [51].

Mind Blast: Affliction 1 (Will; Based on Will, +20%; Malediction 2, +150%; Secondary Unconsciousness, +40%; Telepathic, -10%) [30].

Poison Bite: Sharp Teeth [1], plus Toxic Attack 2d (Cyclic, 1 hour, 5 cycles, resistible, +40%; Follow-Up, Sharp Teeth, +0%; Resistible, HT-3, -15%) [10].
**Reduced Range**  
-10%/level

You may add this limitation to any advantage that has a range; e.g., Innate Attack or Scanning Sense. It comes in three levels, depending on the range divisor:

<table>
<thead>
<tr>
<th>Range Divisor</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>-10%</td>
</tr>
<tr>
<td>5</td>
<td>-20%</td>
</tr>
<tr>
<td>10</td>
<td>-30%</td>
</tr>
</tbody>
</table>

If applied to a ranged attack that has a 1/2D range, each level reduces both 1/2D and Max. You may reduce 1/2D only at half value (that is, “Reduced 1/2D” is -5%/level). You may not reduce Max independently.

**Resistible**  
Variable

This limitation is only available for Innate Attacks that inflict fatigue or toxic damage. You must combine it with one of Blood Agent, Contact Agent, Follow-Up, Respiratory Agent, or Sense-Based. It represents poison, disease, or a similar effect that a sufficiently healthy victim can resist or "shrug off."

The victim gets a HT roll to avoid the effect. A resistance roll against HT-5 is worth -5%. Each +1 to the roll is a worth another -5% (e.g., HT-4 is -10%, and HT-4 is -50%).

If the attack is also Cyclic (p. 103), the victim rolls before each cycle (including the first). Success means the attack ends without further injury; failure means the target takes damage normally and the attack continues.

**Sense-Based**  
Variable

On an attack with Malediction or an ability that normally ignores DR (e.g., Mind Control), this is a limitation. See the Sense-Based enhancement (p. 109) for details.

**Takes Extra Time**  
-10%/level

You can only apply this limitation to abilities that require time to activate and that work fast enough to be useful in an emergency (e.g., combat). This is up to the GM, who is free to restrict this limitation to advantages that take only 1 or 2 seconds to activate.

For abilities that require a Ready or Concentrate maneuver, each level of Takes Extra Time doubles the time required. Activation occurs at the end of this time. For instance, Takes Extra Time 1 on an advantage that usually requires a one-second Ready maneuver would increase the Ready time to 2 seconds.

For attacks, the first level of Takes Extra Time results in a one-second Ready maneuver before you can make your Attack maneuver. Successive levels double the Ready time.

**Takes Recharge**  
Variable

Your ability requires “recharging” after each use. It is unavailable during the recharge period. Value depends on the time between uses: five seconds (or twice the time required to use the ability, if longer) is -10%, 15 seconds (or 5 times the time required to use the ability, if longer) is -20%, and one hour (or 10 times the time required to use the ability, if longer) is -30%.

Longer recharge times are not valid as limitations (but see Limited Use, p. 112).

**Temporary Disadvantage**  
Variable

You may add this limitation to any advantage that can be switched off and on at will, and that takes at least one second to switch. When you switch on the advantage, you suffer one or more disadvantages until you switch it off again. This limitation is worth -1% per point the temporary disadvantages are worth, to a maximum of -80%.

**Example:** You can use your feet as hands, but can’t walk while doing so. This is Extra Arms 2 (20 points) with Temporary Disadvantage: Legless (-30%), for 14 points.

The point break due to Temporary Disadvantage cannot exceed 80% of the value of the original disadvantage.

**Example:** You have Altered Time Rate 1 (100 points) with Temporary Disadvantage: Hemophilia (-30%) – you bleed faster, too! Since Hemophilia is worth -30 points normally, the most it can be worth as a Nuisance Effect is -24 points; therefore, it reduces the cost of Altered Time Rate by 24 points (to 76 points) and not by 30 points (to 70 points).

You may only take Temporary Disadvantages that could logically inconvenience you for the period of time the advantage is normally on. In the case of mental disadvantages (Berserk, Lecherousness, etc.), if a failed self-control roll indicates that you give in to the disadvantage, you will suffer the disadvantage’s effects until the GM rules you have regained your composure – which might be long after you deactivate the advantage with this limitation!

You can also use this limitation to remove an advantage temporarily. This is worth -1% per point the negated advantage is worth, and the point break cannot exceed 80% of the deactivated advantage’s cost. Only one of the involved advantages can take this limitation – you cannot take two advantages, both with this limitation, each of which negates the other when used.

**Trigger**  
Variable

Your advantage requires exposure to a specific substance or condition (e.g., a dose of a drug) to function. One dose or exposure is required per one-minute “use.” Cost depends on the rarity of the Trigger:

- **Very Common** (available almost anywhere): -10%.
- **Common** (expensive, somewhat hard to find): -20%.
- **Occasional** (very expensive and hard to find): -30%.
- **Rare** (cannot be bought; must be found or made): -40%.

Multiply the limitation value by 1.5 if the Trigger is illegal, addictive, or otherwise dangerous.

**Unconscious Only**  
-20%

You may only take this limitation in conjunction with Uncontrollable (below). You cannot consciously activate your ability at all; it can only come into play under GM control, as a result of stress. Like Uncontrollable, you may buy this off later on, as you gain control over your ability.
**Uncontrollable**

-10% or -30%

Your ability tends to manifest itself at undesirable or inappropriate times. Whenever the GM rules that you are in a stressful situation – including any situation that requires a Fright Check or a self-control roll for a mental disadvantage – you must make a Will roll to keep your ability under control, even if you did not intend to use it! You need only roll once per stressful situation, but a roll of 14+ always fails, regardless of Will.

On a failure, the GM takes over your ability, playing it as though it were an entity of a prankish or hostile nature. The actions of your ability will often reflect your “suppressed desires,” as reflected in your quirks and mental disadvantages.

An ability that cannot inflict damage – for instance, Flight or Jumper – will activate unexpectedly. This is inconvenient and embarrassing, but not overly dangerous. After each uncontrolled act, you get another Will roll to control your power. This goes on until you make a Will roll. In this case, Uncontrollable is worth -10%.

A harmful ability goes after obvious foes first, and will never turn on you . . . but nobody else is safe! After each uncontrolled act (or before an attack on a Dependent or other loved one), you get another Will roll to control your power. This continues until you make a Will roll. In this case, Uncontrollable is worth -30%.

You may buy this limitation off later on, as you gain control over your ability.

**Unreliable**

Variable

Sometimes your ability works and sometimes it doesn’t! It just comes and goes, and you’ve never identified why. This is completely separate from any roll normally needed to activate the ability. You can have skill 20 and still have problems making it work!

Every time you want to use the power, you must roll the activation number (see below) or less on 3d. Once you succeed, the ability will work for that particular use. When you cease to use it, you must make another activation roll to start it again.

If you cannot activate your ability on your first attempt, you may try again once per second after that, at no penalty. Each successive attempt costs one FP. If you are reduced to three or fewer FP, you must rest until all FP are regained before you can attempt to use your ability again.

Example of Character Creation (cont’d)

Dai’s main advantage is that he can teleport. This is Warp (p. 97), which costs 100 points! But Dai has two special limitations to lower the cost. First, his Warp is psionic, so “anti-psi” can keep it from working. This gives the Psionic Teleportation limitation, worth -10%. Second, his ability has a very short range: 10 yards. That’s a Range Limitation worth -50%.

These limitations mean that Dai gets Warp at 60% off, for 40 points.

We decide to give Dai another psi ability useful to a thief: a “sixth sense” that warns him of traps and similar dangers. This is Danger Sense (p. 47), with the ESP special limitation. Danger Sense costs a basic 15 points, but the -10% limitation reduces this to 13.5 points, which rounds up to 14 points.

Even without his psi abilities, Dai is a gifted thief. His specialty is second-story work, so we add Flexibility (p. 56), for 5 points, because it gives a big bonus when climbing; Perfect Balance (p. 74), for 15 points, so he won’t lose his balance and fall off; and Absolute Direction (p. 34), for 5 points, to help him negotiate back alleys and rooftops.

Since we want Dai to be able to disappear into a crowd, we throw in the 1-point Honest Face perk (p. 101) – he doesn’t “look like a thief.” Dai’s advantages total 80 points, raising his current point total to 223 points.

### Activation Number | Modifier
---|---
5 | -80%
8 | -40%
11 | -20%
14 | -10%

Unreliable works differently when applied to attacks which are also gadgets or built-in firearms. Instead of requiring an activation roll, it gives a Malfunction number worse than 17.

### Malfunction | Modifier
---|---
12 | -25%
13 | -20%
14 | -15%
15 | -10%
16 | -5%

Untrainable

-40%

You may only apply this limitation to abilities that normally require a skill to use. You can’t learn to control your power well. You learn all skills associated with it as though the relevant attribute were only 8 (or at one less than its usual value, if already at 8 or worse), and your maximum skill level is 10.

### GADGET LIMITATIONS

The GM may require you to pay points for any “gadget” that grants traits that usually cost points (attribute levels, advantages, etc.). However, he should charge points only for items that even the most advanced technology could not produce (e.g., a ring that bestows Luck) – and even then, only if those items are not for sale at any price in the game world.

In particular, the GM should never charge points for ordinary, manufactured equipment – or even for special equipment, if it is for sale – unless it happens to be Signature Gear (p. 85). Body armor; a rifle, and night-vision goggles effectively bestow Damage Resistance, Innate Attack, and Infravision, respectively . . . but since...
anyone could buy these items, they have a cash cost, not a point cost.

Traits bestowed by items have their usual point cost. You can give them any logical combination of modifiers, plus one or more of the special limitations below.

**Breakable**

Your foes can destroy the item. Once destroyed, it will cease to grant you its benefits until repaired. Add the following elements together to find the final limitation value.

*Durability*: The easier the object is to break, the greater the limitation. Decide on the gadget’s weight and DR.

<table>
<thead>
<tr>
<th>DR</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 or less</td>
<td>-20%</td>
</tr>
<tr>
<td>3-5</td>
<td>-15%</td>
</tr>
<tr>
<td>6-15</td>
<td>-10%</td>
</tr>
<tr>
<td>16-25</td>
<td>-5%</td>
</tr>
<tr>
<td>26 or higher</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Reparability*: You can normally repair your gadget if it breaks; the GM chooses the skill(s) needed to make repairs. If you *cannot* repair it, and it requires inconvenient time, effort, or expense to replace (GM’s decision), it is worth an additional -15%.

*Size*: The item’s Size Modifier affects Vision rolls to identify it out of combat and rolls to hit it in combat.

<table>
<thead>
<tr>
<th>SM Modifier</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>-9 or less</td>
<td>0%</td>
</tr>
<tr>
<td>-7 or -8</td>
<td>-5%</td>
</tr>
<tr>
<td>-5 or -6</td>
<td>-10%</td>
</tr>
<tr>
<td>-3 or -4</td>
<td>-15%</td>
</tr>
<tr>
<td>-1 or -2</td>
<td>-20%</td>
</tr>
<tr>
<td>0 or more</td>
<td>-25%</td>
</tr>
</tbody>
</table>

**Can Be Stolen**

Your foes can take this item from you, depriving you of its benefits. This is only a limitation if the item is obviously powerful and likely to be the target of theft! The value of the limitation depends on how hard it is to steal:

<table>
<thead>
<tr>
<th>Difficulty</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily snatched</td>
<td>-40%</td>
</tr>
<tr>
<td>Thief must win a Quick Contest of DX (e.g., a bracelet) or ST (e.g., a wand) with you</td>
<td>-30%</td>
</tr>
<tr>
<td>Can only be taken by stealth or trickery (e.g., a coin in a pocket)</td>
<td>-20%</td>
</tr>
</tbody>
</table>

Must be forcefully removed (e.g., a suit of armor): -10%.

Halve the value of the limitation if the gadget will not immediately work for the thief.

**Unique**

You may only take this limitation in conjunction with Breakable or Can Be Stolen. Normally, you can replace a broken or stolen gadget – although this might require significant time and effort (GM’s decision). If the item is Unique, you *cannot* replace it! Character points spent for the item are lost for good if it is broken or stolen.

The GM is free to add as many new advantages as he can think of. Players take note: You may invent new advantages only with the GM’s permission.

**NEW ADVANTAGES**

The GM (no doubt with the enthusiastic advice of the players!) is free to add as many new advantages as he can think of. What follows are some guidelines on how to balance the costs of such advantages in light of the traits in this chapter.

Players take note: these rules are for GMs. You may invent new advantages only with the GM’s permission.

**MODIFYING EXISTING ADVANTAGES**

*GURPS* has a lot of advantages. Often, one of these is similar to what you had in mind, in which case you can “tweak” an existing ability instead of inventing a new one.

**Rename**

The advantage you’re looking for might already exist, but under a moniker you dislike or find unintuitive. In this case, creating a “new” advantage is just a matter of changing the name! For instance, if you want a Light Intensification advantage that lets those who have it see in the dark, just rename “Night Vision” to “Light Intensification.”

**Redefine**

Many “new” advantages amount to existing advantages with revised special effects. If an existing advantage provides the right ability with the wrong justification, use the game mechanics and point cost of the existing trait but come up with a new explanation for how it works. For instance, Night Vision assumes natural, dark-adapted eyes, but you are free to explain it as ultra-tech implants, if that suits your campaign better.

**Combine**

Still other “new” advantages are combinations of existing traits. If a mix of advantages (possibly with a few disadvantages, to bring the cost down) collectively provide the effects you want, just group them together, add their costs, and rename the whole thing.


Note that this is identical to the way meta-traits work in Chapter 7.
**Modify**

The game mechanics for an existing advantage will sometimes be almost, but not quite, what you want. In that case, start with the nearest existing advantage, apply enhancements and limitations that add the desired effects, and present the final product as an entirely new advantage.

For instance, suppose undead beings in your campaign can see the Spectral Plane. This gives them Night Vision with the side effects that they see ghosts and have glowing red eyes. You could write this as "Night Vision 5 (Affects Insubstantial, +20%; Temporary Disadvantage: Unnatural Feature, -5%) [6]," but it would be simpler to write “Spectral Vision [6]" on character sheets and leave the design details in your notes.

**Fine-Tune**

After applying the above processes to achieve the effects you seek, you might wish to add some “color” or adjust the cost – perhaps by adding minor side effects, such as small modifiers to certain success rolls. The guidelines and examples under Perks (p. 100) and Quirks (p. 162) can be useful here.

For instance, you might want “Spectral Vision" to cost a nice, round 5 points, but you don’t want to make the ability to see ghosts a freebie. To justify shaving the cost down to 5 points, you toss in a -1 to Vision rolls made in bright daylight. After all, everyone knows the undead don’t like sunlight!

**DESIGNING ENTIRELY NEW ADVANTAGES**

There are times when nothing less than a totally new advantage will do. Advantages in *GURPS* usually grant one of four basic types of abilities (although a single advantage often qualifies in more than one category).

1. **Situational bonuses to attributes.** Handle attribute bonuses by assuming that each +1 is worth 10 points for ST or HT, or 20 points for DX or IQ, and then modifying the cost downward to reflect how often the bonus applies. See Accessibility (p. 110) for inspiration. For instance, Rapid Healing is basically +5 HT (base cost 50 points) that only applies to rolls to recover from damage. Since most people go to great pains to avoid damage, and since rolls for natural recovery rarely matter in settings with magical, psionic, or ultra-tech healing, the point value of the bonus is reduced to 1/10 of normal, for a net cost of 5 points.

2. **Bonuses to skill rolls.** In general, simply work out the equivalent Talent (p. 89) and add its cost to the advantage. If the advantage modifies one skill, then assume it is worth 2 points per +1 to skill, to a maximum of +3 to skill for 6 points.

3. **Bonuses to reaction rolls.** Work out reaction bonuses as described for Reputation (p. 26). You may include a bonus that applies to a very small class of people (e.g., "anyone with a Ph.D. in Comparative Anatomy from Harvard," unless the campaign happens to be set at Harvard Medical School) for free as a "special effect." Note that these bonuses need not be actual Reputations – they could as easily be due to looks, a psionic aura, or mind-control lasers.

4. **Unique abilities that those without the advantage do not have in any measure.** You should price these abilities by comparison. Examine other traits in the rules and assign a similar cost for an advantage that is about equal in power. Reduce or increase the cost if the ability is slightly more or less powerful than the one to which you are comparing it. For instance, “automatically makes all normal Vision rolls" is about as useful as “automatically makes all Fright Checks," so you might price that ability along the lines of Unfazeable, for 15 points.

**Finalizing the Cost**

To determine the final cost of a new advantage, add up the costs of all the abilities it grants. If the advantage is extremely rare, and those who have it could reliably use it as a surprise tactic or as a means of making money, increase its final cost by up to 100%. Conversely, if the GM wants it to be extremely common, he may reduce its final cost by as much as 50%. Use fine-tuning (above) to further adjust the cost.

The GM is the final arbiter when it comes to the cost of new advantages. He is free to charge an Unusual Background – over and above the cost of the advantage – for any new advantage he wishes to restrict to a certain class of characters. This is in addition to any “built-in" rarity modifier.
A “disadvantage” is a problem or imperfection that renders you less capable than your attributes, advantages, and skills would indicate. In addition to the traits in this chapter, this includes anything with a negative point cost in Chapter 1: low Status, below-average Wealth, etc.

You are probably wondering, “Why would I want to give my character disadvantages?” There are two good reasons:

1. Each disadvantage has a negative cost in character points. Thus, disadvantages give you extra character points, which let you improve your character in other ways. But note that disadvantages limit you in proportion to their cost. Be sure to read the disadvantage description in full to know what you are getting into!

2. An imperfection or two makes your character more interesting and realistic, and adds to the fun of roleplaying!

### Disadvantages for Heroes

Two kinds of disadvantages are particularly suitable for heroic PCs. Roleplayed well, they might limit the character’s choices, but they should make the player’s experience more fun.

**“Good” Disadvantages**

It might seem strange that virtues such as Truthfulness and Sense of Duty are listed as “disadvantages.” In the real world, we regard such traits as advantages! Their disadvantage value in *GURPS* comes from the fact that these virtues limit your freedom of action. For instance, someone with Truthfulness will have trouble lying, even for a good cause; therefore, within the framework of the game, he has a disadvantage. This has one very worthwhile benefit: if you want to create a wholly heroic character, you don’t have to take any “character flaws” at all. You can get points by choosing only those disadvantages that are actually virtuous!

**Tragic Flaws**

Many of the greatest heroes of history and literature had a “tragic flaw.” Alcoholism, great ugliness, bad temper; compulsive behavior; and even drug addiction – all are found in the heroes of fact and fiction. So don’t assume that your heroes have to be perfect . . . try giving them significant problems to overcome.
Restrictions on Disadvantages

Your GM might wish to “cap” the extra points you can gain from disadvantages; see Disadvantage Limit (p. 11). This limit applies to the total points you can get from all traits with negative point costs, from Chapter 1 (reduced attributes, low Status, etc.) or the list below. Mandatory disadvantages assigned by the GM don’t count against this limit.

Most GMs will want to enforce two additional restrictions:

Negated Disadvantages

You cannot take a disadvantage that one of your advantages would mitigate or negate! For instance, if you have Acute Hearing, you cannot take Hard of Hearing. Contradictory disadvantages, such as Curious and Incurious, are also mutually exclusive. The GM has the final say as to which traits are compatible.

Secret Disadvantages

You may give your character a disadvantage unknown both to him and to you. Choose a point value and tell the GM. The GM will select a disadvantage and give you its value plus an additional -5 points (e.g., Unluckiness, normally worth -10 points, gives -15 points as a secret disadvantage)... but he will not give you any hints as to what it is! When your disadvantage finally becomes obvious in the course of play (GM’s decision), you must buy off the extra -5 points as soon as possible.

The GM must pick a secret disadvantage carefully. It should be something that you could believably not know about. If it is a mental disadvantage, the conditions that trigger it should never have arisen (Berserk, Bloodlust, Combat Paralysis, the less-common Phobias, and Split Personality all work well here). Most physical disadvantages are too obvious – although something like Hemophilia might go unnoticed.

You can only list one secret disadvantage on your character sheet, but this might represent more than one trait. The GM is free to select multiple, related disadvantages worth the appropriate number of points.

Villain Disadvantages

You can acquire a physical disadvantage during play, most likely due to accident or combat. In this case, you immediately suffer the bad effects of the disadvantage. Unlike starting disadvantages, however, physical handicaps acquired in play do not “give back” points with which to buy abilities – they just lower your point value!

Example: If you start out blind, you start with an extra 50 points... but if an explosion blinds you during the game, you’re just blind and that’s that. Reduce your point total by 50 points to reflect your new disadvantage. You should not keep the same point total and take 50 points of compensating advantages!

Physical disadvantages are marked ⚖️.

Social disadvantages are associated with your identity. Should it become important to know whether they go with mind or body, the GM’s word is final. Note that this category includes below-average Status, Wealth, and so forth from Chapter 1. Social disadvantages are marked 📝.

The GM is the final judge of which category a disadvantage belongs in. It is possible to interpret certain disadvantages in more than one way!

Exotic ⚖️, Supernatural ⚖️, and Mundane

Exotic disadvantages are forbidden to normal humans. Nonhumans may acquire such traits from their racial template (see Chapter 7), but they still need the GM’s permission to take additional exotic disadvantages. Exotic disadvantages are marked ⚖️.

Supernatural disadvantages are the result of divine intervention, magic, psionics, etc. With the GM’s permission, anyone might be cursed in this way – but only if supernatural powers exist in the game world. Supernatural disadvantages are marked 📝.

Mundane disadvantages are everything else. They are inborn, acquired, or self-imposed handicaps that anyone might have. Mundane disadvantages are not marked in any special way. Assume that a disadvantage with neither ⚖️ nor 📝 is available to anyone.

Self-Control for Mental Disadvantages

Many mental disadvantages do not affect you constantly – you may attempt to control your urges. An
Self-Control Rolls

In circumstances that are likely to trigger your problem, you may opt to roll 3d against your self-control number to see whether your disadvantage actually affects you. If you roll less than or equal to this number, you resist your disadvantage – this time. Otherwise, you suffer the listed effects. This is called a self-control roll.

Like all success rolls, self-control rolls are subject to modifiers. Exceptionally mild or severe stimuli can give bonuses or penalties. Drugs and afflictions can make you more or less likely to give in. Other disadvantages can make you irritable, reducing your odds of resisting. See the disadvantage descriptions for details.

Example: Your self-control number is 15, but you are in a highly stressful situation that gives -5 to your self-control roll. You must roll 10 or less to resist your disadvantage.

Many mental disadvantages do not affect you constantly – you may attempt to control your urges.

Self-Imposed Mental Disadvantages

Certain mental disadvantages – Code of Honor (p. 127), Disciplines of Faith (p. 132), Fanaticism (p. 136), Honesty (p. 138), Intolerance (p. 140), Sense of Duty (p. 153), Trademark (p. 159), and Vow (p. 160) – are not psychiatric problems, but beliefs or codes of conduct. Such “self-imposed mental disadvantages” share three features that distinguish them from other mental disadvantages:

- They can be “bought off” with earned points at any time. People really do wake up in the morning and resolve to live their lives differently for no apparent reason!
- They cannot be caused by Afflictions (p. 35), drugs, brain surgery, and similar “quick and dirty” behavior alteration. Such techniques can create a pacifist or a maniac, but you need magic, Mind Control (p. 68), or prolonged Brainwashing (p. 182) to impose anything as complex as a code of conduct.
- They can be used with the Pact limitation (p. 113) as conditions to which you must adhere to retain certain supernatural powers.

You never have to try a self-control roll – you can always give in willingly, and it is good roleplaying to do so. However, there will be times when you really need to resist your urges, and that is what the roll is for: Be aware that if you attempt self-control rolls too often, the GM may penalize you for bad roleplaying by awarding you fewer earned points.

Optionally, the GM may permit you to use one unspent character point to “buy” an automatic success on a self-control roll. Points spent this way are gone for good, but there will be times when staying on the straight and narrow is worth the sacrifice. In this case, the GM should not penalize you for bad roleplaying, because you are penalizing yourself!

Note that high Will helps you make Fright Checks and resist supernatural emotion control, but it does not improve self-control rolls – not even for disadvantages with effects identical to these things. Mental disadvantages represent an aspect of your personality that you cannot simply will (or reason) away. This is part of what makes them disadvantages!

“Buying Off” Disadvantages

You may use bonus points to “buy off” many disadvantages – whether you started with them or acquired them in play. This costs as many points as the disadvantage originally gave you. If the GM permits, you may buy off leveled disadvantages one level at a time. Likewise, you can buy off those with self-control numbers gradually, by raising the self-control number. In both cases, the point cost is the difference between your former level and your current one. For more on buying off disadvantages, see Chapter 9.
**DISADVANTAGE LIST**

**Absent-Mindedness** 🖦 -15 points

You have trouble focusing on anything not of immediate interest. You have -5 on all IQ and IQ-based skill rolls, save those for the task you are currently concentrating on. If no engaging task or topic presents itself, your attention will drift to more interesting matters in five minutes, and you will ignore your immediate surroundings until something catches your attention and brings you back. Once adrift in your own thoughts, you must roll against Perception-5 in order to notice any event short of personal physical injury.

You may attempt to rivet your attention on a boring topic through sheer strength of will. To do so, make a Will-5 roll once every five minutes. Boring topics include small talk, repetitive manual tasks, guard duty, driving on an empty highway...

Absent-minded individuals also tend to forget trivial tasks (like paying the bills) and items (like car keys and checkbooks). Whenever it becomes important that you have performed such a task or brought such an item, the GM should call for a roll against IQ-2. On a failure, this detail slipped your attention.

Example: An absent-minded detective is in a shootout. He was involved in gunplay earlier in the day, in which he fired four rounds, so the GM calls for an IQ-2 roll. The detective fails the roll, and discovers too late that he forgot to reload his weapon, so his revolver has only two bullets left!

This is the classic disadvantage for eccentric geniuses.

**Addiction** 🌭

Variable

You are addicted to a drug, which you must use daily or suffer withdrawal. The value of this disadvantage depends on the cost, effects, and legality of the drug:

- **Cost (per day)**
  - Cheap (up to 0.1% of average starting wealth): -5 points.
  - Expensive (up to 0.5% of average starting wealth): -10 points.
  - Very expensive (more than 0.5% of average starting wealth): -20 points.

- **Effects**
  - Incapacitating or hallucinogenic: -10 points.
  - Highly addictive (-5 on withdrawal roll): -5 points.
  - Totally addictive (-10 on withdrawal roll): -10 points.

- **Legality**
  - Illegal: -0 points.
  - Legal: +5 points.

**Examples**: Tobacco is cheap, highly addictive, and legal; a chain-smoker has a -5-point Addiction. Heroin is very expensive, incapacitating, totally addictive, and illegal; a heroin addict has a -40-point Addiction.

**Non-Chemical Addictions**: You can take Addiction to an activity instead of a drug – for instance, telepathic contact or spending time in virtual reality. If this costs money, price the Addiction based on its daily cost. If it is free (e.g., telepathic contact), treat it as “Cheap” if it can do it almost anywhere (telepathic contact with anyone) or as “Expensive” if restrictive conditions apply (telepathic contact with one specific person). Such Addictions almost always cause psychological dependency (see Withdrawal, below).

**Effects of Drugs**

- A stimulating drug leaves you feeling energized... until it wears off. Then you are depressed and irritable. An incapacitating drug renders you unconscious (or just blissfully, useless-ly drowsy) for about two hours. A hallucinogenic drug renders you useless for work or combat, though you might be active and talkative. Some drugs (e.g., tobacco) have none of these effects, while others have unique effects. Side effects are also possible. For detailed rules, see Addictive Drugs (p. 440).

**Withdrawal**

Sometimes, voluntarily or otherwise, you must try to give up your Addiction. Addiction to a drug that causes psychological dependency is a mental disadvantage; withdrawal from such a drug requires a series of Will rolls, and may result in mental problems. Addiction to a drug that induces physiological dependency is a physical disadvantage; withdrawal is a function of your HT, and may cause physical injury. For details, see Drug Withdrawal (p. 440). Should you successfully withdraw from an Addiction, you must immediately buy off this disadvantage.

**Minor Addictions**

For an Addiction worth only -5 points, the GM may rule that the expense, stigma, and detrimental long-term effects of use are the whole of the disadvantage, and waive the usual withdrawal rules. This is appropriate for such drugs as tobacco and caffeine. If forced to go without, you must make a Will or HT roll as usual, but the only effects on a failure are general anxiety, irritability, or restlessness. This manifests as a temporary -1 to DX, IQ, self-control rolls, or reaction rolls (GM’s choice) – not as insanity or injury. Successive failures prolong the duration of the effects; they do not increase the size of the penalty. If you can make 14 successful rolls in succession, you must buy off your Addiction.

It is also possible to create a 0-point Addiction using these rules. Such Addictions are always Minor Addictions, and you may take them as -1-point quirks (see Quirks, p. 162).

**Alcoholism** 🌭 -15 or -20 points

You are an alcohol addict. Alcoholism uses the Addiction rules (above). It is cheap, incapacitating, and usually legal, so it would normally be a -10-point Addiction. But it is also insidious; therefore, it is worth -15 points – or -20 points if it is illegal.

Most of the time, you may confine your drinking to the evenings, and therefore function normally (for game purposes). However, *any time* you are in the presence of alcohol, you must roll vs. Will to avoid partaking. A failed roll means you go on a “binge” lasting...
2d hours, followed by a hangover; see *Drinking and Intoxication* (p. 439). Alcoholics on a binge are characterized by sudden mood swings – from extreme friendliness to extreme hostility – and may attack friends, talk too freely, or make other mistakes.

The other drawback of Alcoholism is that it is hard to get rid of. Should you manage to “withdraw,” you no longer need to drink daily . . . but you must still make a Will +4 roll whenever you are in the presence of alcohol. A failed roll does not reinstate the addiction, but does set off a binge. (Three binges in a week will reinstate the addiction.) Thus, there is no normal way to “buy off” this disadvantage.

Continued Alcoholism will steal your abilities. You must roll yearly against HT +2 until you withdraw. Failure means you lose a level from one of your four basic attributes – roll randomly to determine which.

**Amnesia 👮**

- **-10 or -25 points**

You’ve lost your memory. You can’t remember any of your past life, including your name. This disadvantage comes in two levels:

Partial Amnesia: You, the player, can see your character sheet, but the GM may reserve up to -30 points of your disadvantage allotment for “secret” disadvantages of his choosing. You know that you can use certain skills, but have no idea where you learned them. You are likely to have enemies – and possibly friends – that you can’t remember. If you turn yourself in to the police, they can perform their standard ID checks . . . but you might turn out to be a wanted criminal. Even if you aren’t, finding out your name won’t restore your memory! -10 points.

Total Amnesia: The only traits you can specify during character creation are those you could see in a mirror: The GM assigns everything else – and holds onto your full character sheet until your memory returns! You have no idea of your full abilities. Since the GM knows your quirks and mental traits, and you don’t, he will sometimes overrule your statements about what you’re doing. He will also make all skill rolls for you, because you have no idea what you can do until you try it! Your IQ-based skill rolls are at -2 unless the GM feels that memory would have no effect at all on the task at hand. -25 points.

You can only buy off Amnesia if there is some reason why you might recover your memory; e.g., meeting an old friend, reliving some fateful event, or the ever-popular blow to the head. In most cases, the cure will be related to the cause of the memory loss. Particularly twisted GMs might enjoy making the cause in question some form of brainwashing. In this case, one of the hidden disadvantages will probably be an Enemy with sufficient resources to have arranged the brainwashing in the first place.

**Appearance**

- see p. 21

Below-average appearance is a disadvantage, and should be noted as such on your character sheet.

**Bad Back 👯**

- **-15 or -25 points**

For whatever reason, your spinal column is in bad shape. During strenuous physical activity, you may “throw your back” and suffer crippling pain or further injury. Whenever you make a ST roll, and whenever you roll 17 or 18 on an attack or defense roll in melee combat, or on a roll for an “athletic” skill such as Acrobatics, make a HT roll as well.

Modifiers: Any modifiers to the success roll for the activity that triggered the HT roll. For a long task that allows the luxury of planning, you can try to minimize the strain on your back; a successful IQ-2 or Physiology+4 roll gives +2 on the HT roll.

On a failure, you throw your back. Consequences depend on the severity of your case:

Mild: You are at -3 DX until you rest or someone helps you; a First Aid 2 roll will reset your back. You are also at -3 IQ, but during the next second only (for your next turn, in combat). On a critical failure, you are at -5 DX and must make a Will roll to perform any physical action. -15 points.

Severe: The HT roll is at -2. On a failure, DX and IQ are both at -4 until you receive rest or help; you are in constant agony. On a critical failure, you take 1d-3 damage and are at -6 DX and -4 IQ. -25 points.

High Pain Threshold (p. 59) halves all DX and IQ penalties (drop fractions), but does not eliminate them completely.

**Bad Grip 👯**

- **-5 points/level**

You have a penalty on tasks that require a firm grip. Each level (maximum three levels) gives -2 with such tasks. This penalty is overall – not per hand. Affected tasks include melee weapon use, climbing, catching things, and anything else the GM deems requires a firm grip (e.g., an Acrobatics roll to catch a trapeze).

This disadvantage is mutually exclusive with No Fine Manipulators (p. 145).

**Bad Sight 👯**

- **-25 points**

You have poor vision. This applies to all your visual senses: regular vision, Infravision, Ultravision, etc. You may be nearsighted or farsighted – your choice.

Nearsighted: You cannot read small print, computer displays, etc., more than a foot away, or road signs, etc., at more than about 10 yards. You are at -6 to Vision rolls to spot items more than one yard away. When making a melee attack, you are at -2 to skill. When making a ranged attack, double the actual distance to the target when calculating the range modifier. -25 points.

Farsighted: You cannot read text except with great difficulty (triple normal time). You are at -6 to Vision rolls to spot items within one yard, and you have -3 to DX on any close manual task, including close combat. -25 points.

**Special Limitations**

Mitigator: At TL5+, you can acquire glasses that compensate totally for Bad Sight while they are worn. At TL7+, contact lenses are available. In both cases, remember that accidents can happen . . . and that enemies can deprive you of these items. If you are starting at a tech level in which vision can be corrected, you must take this limitation. -60%.
**Bad Smell **

* -10 points

You exude an appalling odor that you cannot remove, such as the stench of death and decay. This causes a -2 reaction from most people and animals (although pests or carrion-eating scavengers might be unusually attracted to you!). You can mask the smell with perfumes, but the overpowering amount needed results in the same reaction penalty.

**Bad Temper **

* -10 points*

You are not in full control of your emotions. Make a self-control roll in any stressful situation. If you fail, you lose your temper and must insult, attack, or otherwise act against the cause of the stress.

**Berserk **

* -10 points*

You tend to rampage out of control when you or a loved one is harmed, making frenzied attacks against whoever or whatever you see as the cause of the trouble. If you also suffer from Bad Temper (above), any stress may trigger Berserk.

Make a self-control roll any time you suffer damage over 1/4 your HP in the space of one second, and whenever you witness equivalent harm to a loved one. If you fail, you go berserk. You go berserk automatically if you fail a self-control roll for Bad Temper! You may deliberately go berserk by taking the Concentrate maneuver and making a successful Will roll. Once you are berserk, the following rules apply:

- If armed with a hand weapon, you must make an All-Out Attack each turn a foe is in range. If no foe is in range, you must use a Move maneuver to get as close as possible to a foe – and if you can Move and Attack, or end your Move with a slam, you will.

- If the enemy is more than 20 yards away, you may attack with a ranged weapon if you have one, but you may not take the Aim maneuver. If using a gun, you blaze away at your maximum rate of fire until your gun is empty. You cannot reload unless your weapon – and your Fast-Draw skill – lets you reload "without thought" (can take no more than one second). Once your gun is empty, you must either draw another gun or charge into melee combat.

- You are immune to stun and shock, and your injuries cause no penalty to your Move score. You make all rolls to remain conscious or alive at +4 to HT. If you don't fail any rolls, you remain alive and madly attacking until you reach -5×HP. Then you fall – dead!

- When you down a foe, you may (if you wish) attempt another self-control roll to see if you snap out of the berserk state. If you fail (or do not roll), you remain berserk and attack the next foe. Treat any friend who attempts to restrain you as a foe! You get to roll again each time you down a foe, and you get one extra roll when no more foes remain. If you are still berserk, you start to attack your friends . . .

Once you snap out of the berserk state, all your wounds immediately affect you. Roll at normal HT to see whether you remain conscious and alive.

**Special Enhancements**

Battle Rage. You go berserk in any combat situation, regardless of whether you have been injured. To avoid this, you must make a self-control roll when you first enter combat (even a barroom brawl or a boxing match). +50%.

**Bestial **

* -10 or -15 points*

You think and react like a wild animal. You have no concept of "civilized" standards of morality or propriety, and no concept of property. You fight or flee from those who frighten or threaten you. You cannot learn skills that, in the GM's opinion, rely on "civilized" notions of art or social interaction, and you have no default with such skills.

You are not necessarily out of control; you simply react in an animalistic manner. You will usually ignore those who leave you alone (unless they're food!), and might even come to display affection for those who treat you with special kindness. You cannot understand property in the human sense, but (depending on your race) you might understand territory and avoid doing damage to objects on another's territory. Whether you regard humans as individuals with territory rights is an open question! You might also understand dominance, and respect or even obey a human who has proved to be stronger than you.

You cannot take an Odious Personal Habit for your beast-like behavior; that's included in the cost of Bestial. But if your behavior is extremely repugnant to humans – equivalent in severity to a -15-point Odious Personal Habit – the GM might rule that Bestial is worth -15 points instead of the usual -10. You are free to take Odious Personal Habits unrelated to beast-like behavior (including "eats humans"), however.

Bestial is not necessarily tied to low IQ, but roleplaying a character who is both Bestial and remarkably intelligent would be a major challenge requiring a lot of thought and effort. The GM may therefore choose to restrict Bestial to characters with IQ scores under 10 (or even under 6!), or simply reserve it for NPCs.

Note that the Wild Animal meta-trait (p. 263) includes this disadvantage.

**Blindness **

* -50 points

You cannot see at all. In unfamiliar territory, you must travel slowly and carefully, or have a companion or guide animal lead you. Many actions are impossible for you; the GM should use common sense.

You are at -6 to all combat skills. You can use hand weapons, but you cannot target a particular hit location. If using a ranged weapon, you can only attack randomly, or engage targets so close that you can hear them. All this assumes you are accustomed to blindness. If you suddenly lose your eyesight, you fight at -10, just as if you were in total darkness. In either case, you suffer no extra penalties for operating in the dark.

If you have Blindness, you cannot purchase superhuman vision abilities. If you see in a spectrum other than the visible one, you have the 0-point version of Infravision (p. 60) or Ultravision (p. 94) – not Blindness and the 10-point version of one of those advantages. Note that Scanning Sense
(p. 81) and Vibration Sense (p. 96) are not visions; you may take either of these traits in conjunction with Blindness, at the usual point costs.

**Bloodlust** -10 points*

You want to see your foes dead. In battle, you must go for killing blows, and put in an extra shot to make sure of a downed foe. You must make a self-control roll whenever you need to accept a surrender, evade a sentry, take a prisoner, etc. If you fail, you attempt to kill your foe instead – even if that means breaking the law, compromising stealth, wasting ammo, or violating orders. Out of combat, you never forget that a foe is a foe.

This may seem a truly evil trait, but many fictional heroes suffer from it. The hero is not a fiend or sadist; his animosity is limited to "legitimate" enemies, be they criminals, enemy soldiers, or feuding clansmen. He often has a good reason for feeling as he does. And, in an ordinary tavern brawl, he would use his fists like anyone else. On the other hand, a gladiator or duelist with Bloodlust would be very unpopular, a policeman would soon be up on charges, and a soldier would risk a court-martial.

**Bully** -10 points*

You like to push people around whenever you can get away with it. Depending on your personality and position, this might take the form of physical attacks, intellectual harassment, or social "cutting." Make a self-control roll to avoid gross bullying when you know you shouldn’t – but to roleplay your character properly, you should bully anybody you can. Since nobody likes a bully, others react to you at -2.

**Callous** -5 points

You are merciless, if not cruel. You can decipher others’ emotions, but you do so only to manipulate them – you don’t care about their feelings or pain. This gives you -3 on all Teaching rolls, on Psychology rolls made to help others (as opposed to deduce weaknesses or conduct scientific research), and on any skill roll made to interact with those who have suffered the consequences of your callousness in the past (GM's decision). As well, past victims, and anyone with Empathy, will react to you at -1. But ruthlessness has its perks: you get an extra +1 to Interrogation and Intimidation rolls when you use threats or torture.

**Cannot Learn** -30 points

You cannot spend earned character points to add or improve DX, IQ, skills, or mental advantages, nor can you acquire new techniques (see Techniques, p. 229) or familiarities (see Familiarity, p. 169) to accompany existing skills. You are stuck with your starting abilities!

You can still increase your ST and HT, and add physical advantages (with the GM's permission). As well, Cannot Learn doesn’t prevent you from temporarily acquiring skills using the Modular Abilities advantage (p. 71). Those with computer brains often possess both traits.

This trait is most suitable for golems, mindless undead, robots, and other automata.

**Cannot Speak** -15 or -25 points

You have a limited capacity for speech. This trait comes in two levels:

- **Cannot Speak:** You can make vocal sounds (bark, growl, trill, etc., as appropriate), but your speech organs are incapable of the subtle modulations required for language. You may still have the Mimicry or Voice advantage, or the Disturbing Voice disadvantage (but not Stuttering). Most animals have this trait. -15 points.

- **Mute:** You cannot vocalize at all. All communications with others must be nonverbal: writing, sign language, Morse code, telepathy, etc. Time spent communicating this way counts at full value for study of the related skills (see Chapter 9). No roll is required (or allowed!) when you try to communicate with PCs who don’t know your sign language – roleplay this on your own! You cannot have any other voice-related traits. -25 points.

**Charitable** -15 points*

You are acutely aware of others’ emotions, and feel compelled to help those around you – even legitimate enemies. Make a self-control roll in any situation where you could render aid or are specifically asked for help, but should resist the urge. If you fail, you must offer assistance, even if that means violating orders or walking into a potential trap.
**Chronic Depression ★**

-15 points*

You've lost your will to live. You'd commit suicide, but it seems like so much trouble. Make a self-control roll to do anything but acquire and consume the minimum necessities for survival (for instance, to motivate yourself to go to a movie, attend a job interview, or keep a date), or whenever you must choose between two or more actions. If you fail, you take the path of least resistance. This usually means staying put and doing nothing.

If your self-control number is sufficiently low, you will find it almost impossible to do anything at all for yourself, unless someone physically drags you out of your lair. If somebody shows up and demands that you go out and do something with him, make a self-control roll. If you fail, you go along with his plan out of apathy.

You may eventually replace this disadvantage with another one of equivalent value that is more conducive to self-esteem. The GM need only allow this evolution if you roleplay it convincingly. The GM may also require you to roleplay both disadvantages (the new one constantly, the Chronic Depression whenever the GM decides to bring it into play) during the transition period.

You may also acquire this disadvantage in play. If you violate a self-imposed mental disadvantage (see p. 121), or lose a Dependent, the GM may replace that disadvantage with this one.

**Chronic Pain ★**

Variable

You have an injury, disorder, or illness that leaves you in severe pain on a regular basis – perhaps even constantly. Examples include arthritis, bone cancer, migraines, and pieces of shrapnel embedded in the body (an "old war wound").

Roll against the frequency of appearance for your Chronic Pain once per day. If you roll below this number, you suffer a bout of pain. The timing of this attack is up to the GM, but it usually occurs during waking hours – you might wake up with it, or it might be set off by stress (fatigue, exertion, etc.) during the day.

While in pain, reduce your DX and IQ by the amount specified for the severity of your pain (see below). Reduce self-control rolls to resist disadvantages such as Bad Temper and Berserk by the same amount – someone in pain is more likely to lose his cool. If the GM rules that the attack occurs while you are trying to sleep, you suffer penalties for sleep deprivation instead of the usual effects of this disadvantage.

Chronic Pain attacks endure for a fixed "interval," after which you may attempt a HT roll to recover. If you succeed, you have dealt with your pain . . . today. If you fail, the attack continues for another interval, after which you may attempt another HT roll. And so on.

If your self-control number is sufficiently low, you will find it almost impossible to do anything at all for yourself, unless someone physically drags you out of your lair.

Find the point cost of Chronic Pain by choosing a severity and then multiplying the given cost to reflect the interval and frequency of attacks. Drop all fractions.

**Severity**

- Mild: -2 to DX, IQ, and self-control rolls: -5 points.
- Severe: -4 to DX, IQ, and self-control rolls: -10 points.
- Agonizing: -6 to DX, IQ, and self-control rolls: -15 points.

**Interval**

- 1 hour: x0.5.
- 2 hours: x1.
- 4 hours: x1.5.
- 8 hours: x2.

**Frequency of Appearance**

- Attack occurs on a roll of 6 or less: x0.5.
- Attack occurs on a roll of 9 or less: x1.

- Attack occurs on a roll of 12 or less: x2.
- Attack occurs on a roll of 15 or less: x3.

**Clueless ★**

-10 points

You totally miss the point of any wit aimed at you, and are oblivious to attempts to seduce you (+4 to resist Sex Appeal). The meanings of colloquial expressions escape you. Sophisticated manners are also beyond you, giving -4 to Savoir-Faire skill. You have many minor habits that annoy others (e.g., leaving the turn signal on while driving from Chicago to Albuquerque), and may take one or two of these as quirks. Most people will react to you at -2.

Unlike No Sense of Humor (p. 146), you may make jokes – albeit lame ones – and you can appreciate slapstick and written humor. However, you rarely "get" verbal humor, especially if you are the target (roll vs. IQ-4 roll to realize you're the butt of the joke). And unlike Gullibility (p. 137),
you normally realize when someone is trying to take advantage of you, except in social situations. You are no more susceptible to Fast-Talk than normal, save when someone is trying to convince you that an attractive member of the appropriate sex is interested in you . . .

This disadvantage is most appropriate for ivory-tower geniuses, aliens from Mars, etc.

**Code of Honor**

-5 to -15 points

You take pride in a set of principles that you follow at all times. The specifics can vary, but they always involve "honorable" behavior. You will do nearly anything – perhaps even risk death – to avoid the label "dishonorable" (whatever that means).

You must do more than pay lip service to a set of principles to get points for a Code of Honor. You must be a true follower of the Code! This is a disadvantage because it often requires dangerous – if not reckless – behavior. Furthermore, you can often be forced into unfair situations, because your foes know you are honorable.

Code of Honor is not the same as Duty (p. 133) or Sense of Duty (p. 153). A samurai or British grenadier marches into battle against fearful odds out of duty, not for his personal honor (though of course he would lose honor by fleeing). The risks you take for your honor are solely on your own account.

The point value of a particular Code of Honor depends on how much trouble it is liable to get you into and how arbitrary and irrational its requirements are. An informal Code that applies only among peers is worth -5 points. A formal Code that applies only among peers, or an informal one that applies all the time, is worth -10 points. A formal Code that applies all the time, or that requires suicide if broken, is worth -15 points. The GM has the final say! Some examples:

*Code of Honor (Pirate's):* Always avenge an insult, regardless of the danger; your buddy's foe is your own; never attack a fellow crewman or buddy except in a fair, open duel. Anything else goes. This is also suitable for brigands, bikers, etc. -5 points.

*Code of Honor (Professional):* Adhere to the ethics of your profession; always do your job to the best of your ability; support your guild, union, or professional association. This is most suitable for lawyers and physicians (Hippocratic Oath), but dedicated tradesmen, merchants, and so forth may have a similar Code. -5 points.

*Code of Honor (Gentleman's):* Never break your word. Never ignore an insult to yourself, a lady, or your flag; insults may only be wiped out by an apology or a duel *(not necessarily to the death!)*. Never take advantage of an opponent in any way; weapons and circumstances must be equal (except in open war). This only applies between gentlemen. A courtesy from anyone of Status 0 or less calls for a whipping, not a duel! -10 points.

*Code of Honor (Soldier's):* An officer should be tough but fair; lead from the front, and look out for his men; an enlisted man should look out for his buddies and take care of his kit. Every soldier should be willing to fight and die for the honor of his unit, service, and country; follow orders; obey the "rules of war"; treat an honorable enemy with respect (a dishonorable enemy deserves a bullet); and wear the uniform with pride. -10 points.

*Code of Honor (Chivalry):* As Code of Honor (Gentleman's), except that flags haven't been invented. Respond to any insult to your liege-lord or to your faith. Protect any lady, and anyone weaker than yourself. Accept any challenge to arms from anyone of greater or equal rank. Even in open war, sides and weapons must be equal if the foe is also noble and chivalrous. -15 points.

**Colorblindness**

-10 points

You cannot see any colors at all (this is total colorblindness). In any situation requiring color identification (e.g., gem buying, livery identification, or pushing the red button to start the motor), the GM should give you appropriate difficulties. Certain skills are always harder for you. In particular, you are at -1 on most Artist, Chemistry, Driving, Merchant, Piloting, and Tracking rolls.

**Combat Paralysis**

-15 points

You tend to "freeze up" in combat situations, and receive -2 to all Fright Checks. This has nothing to do with Cowardice (p. 129) – you may be brave, but your body betrays you.

In any situation in which personal harm seems imminent, make a HT roll. Do not roll until the instant you need to fight, run, pull the trigger; or whatever. Any roll over 13 is a failure, even if you have HT 14+. On a success, you can act normally. On a failure, you are mentally stunned (see Effects of Stun, p. 420). Make another HT roll every second, at a cumulative +1 per turn after the first, to break the freeze. A quick slap from a friend gives +1 to your cumulative roll.

Once you unfreeze, you will not freeze again until the immediate danger is over. Then, in the next dangerous situation, you may freeze once again.

This trait is the opposite of Combat Reflexes (p. 43). You cannot have both.
Compulsive Behavior 🎁
-5 to -15 points*

You have a habit – often a vice – that wastes a good deal of your time or money. You must indulge at least once per day, if at all possible, and do so any time you have the opportunity unless you can make a self-control roll. You seek to avoid any situation where you know you will be unable to indulge for more than a day. You must make a self-control roll to enter into such a situation; if you succeed (or are forced into the situation), you suffer from Bad Temper (p. 124) the whole time, with the same self-control roll as your Compulsive Behavior. It’s bad role-playing to try to avoid your compulsion regularly!

The point value of this disadvantage depends on how much your habit costs and how much trouble it is likely to get you into. The GM is the final judge. Examples include:

Compulsive Carousing: You cannot resist the urge to party! Once per day, you must seek out a social gathering and lounge around – feasting, drinking, singing, and joking – for at least an hour. If you are not invited, you crash the party; if there is no party, you attempt to liven things up. Money is no object! If you have it, you will spend it. You try almost any mind-altering substance without a second thought, never refuse a social drink, and aren’t particularly picky about your romantic partners. You get +1 to reactions from like-minded extroverts, but -1 or worse from sober-minded citizens – and -4 in puritanical settings. -5 points* (-10 points* in puritanical settings).

Compulsive Gambling: You cannot pass up an opportunity to gamble. Bets, wagers, games of chance, and even lotteries hold an uncanny fascination for you. If there is no game of chance or bet going, you will start one. You try any gambling game proposed to you, whether you know it or not. You do not have to have the Gambling skill, but if you don’t, you will need a steady source of wealth! If you are prevented from gambling – for instance, by traveling with nongamblers – you will quickly earn a reaction penalty (-1 per -5 points in this disadvantage, after the self-control multiplier) by constantly talking about gambling and attempting to draw others into games or wagers. -5 points.*

Compulsive Generosity: You are too open-handed. If a beggar asks for cash, you give – and where others give copper, you give silver. You always listen to larger requests for financial aid, if they are even remotely plausible, and you must make a self-control roll whenever you hear a good hard-luck story (if you are broke when asked, you apologize profusely). You aren’t a complete sucker – you just feel guilty about being better off than others. In a society with a lot of beggars around, increase your cost of living:

<table>
<thead>
<tr>
<th>Self-Control Number</th>
<th>Cost of Living Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>20%</td>
</tr>
<tr>
<td>9</td>
<td>15%</td>
</tr>
<tr>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>15</td>
<td>5%</td>
</tr>
</tbody>
</table>

This may earn you a +1 reaction bonus from pious folk; if you are poor yourself, the reaction bonus may be even higher. This trait is incompatible with Miserliness. -5 points.*

Compulsive Lying: You lie constantly, for no reason other than the joy of telling the tale. You delight in inventing stories about your deeds, lineage, wealth – whatever might impress your
Compulsive Spending: Cash just runs through your fingers! You enjoy being seen as a big spender; are too fond of luxury, or find the experience of buying to be fun – perhaps all three. Make a self-control roll whenever someone offers you a purchase that matches any of your quirks or interests, and the cash in your pocket is more than twice the asking price. If you fail, you buy. This raises your cost of living, and gives you a penalty to Merchant skill when you bargain or haggle:

<table>
<thead>
<tr>
<th>Self-Control Number</th>
<th>Cost of Living Increase</th>
<th>Merchant Skill Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>80%</td>
<td>-4</td>
</tr>
<tr>
<td>9</td>
<td>40%</td>
<td>-3</td>
</tr>
<tr>
<td>12</td>
<td>20%</td>
<td>-2</td>
</tr>
<tr>
<td>15</td>
<td>10%</td>
<td>-1</td>
</tr>
</tbody>
</table>

Compulsive Spending is not limited to the wealthy! A poor farmer can be a spendthrift. This trait is incompatible with Miserliness (it’s the opposite!), but you can combine it with Greed. -5 points.

Compulsive Vowing: You never simply decide to do something; you must make it an oath. Although these vows are often trivial in nature, you approach them all with the same solemnity and dedication. You may tack extraneous vows onto legitimate solemnity and dedication. You may make it an oath. Although these vows are often trivial in nature, you approach them all with the same solemnity and dedication. You may tack extraneous vows onto legitimate solemnities. -5 points.

Confused

-10 points

To you, the world seems a strange and incomprehensible place most of the time. You are not necessarily stupid, but you are slow to pick up on new facts or situations. In particular, you respond poorly to excessive stimulation. When alone in the peace and quiet of your own home, you function normally. But in a strange place, or when there’s a commotion going on, you must make a self-control roll. On a failure, you freeze up instead of taking decisive or appropriate action. This often prevents you from making Tactics rolls and engaging in other sorts of long-range planning. The GM should adjust the self-control roll in accordance with the stimuli in the area. To resist confusion from two friends chatting quietly in a familiar room would require an unmodified roll, but a nightclub with flashing lights and pounding music might give -5, and a full-scale riot or battle would give -10!

If this disadvantage strikes in combat, you must take the Do Nothing maneuver each turn. You are not stunned, and if you are directly and physically attacked, you can defend yourself normally. You can even launch a counterattack against that one foe. But you never act – only react.

Cowardice

-10 points

You are extremely careful about your physical well-being. Make a self-control roll any time you are called on to risk physical danger. Roll at -5 if you must risk death. If you fail, you must refuse to endanger yourself unless threatened with greater danger!

Cowardice gives a penalty to Fright Checks whenever physical danger is involved:

<table>
<thead>
<tr>
<th>Self-Control Number</th>
<th>Fright Check Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>-4</td>
</tr>
<tr>
<td>9</td>
<td>-3</td>
</tr>
<tr>
<td>12</td>
<td>-2</td>
</tr>
<tr>
<td>15</td>
<td>-1</td>
</tr>
</tbody>
</table>

In some times and places, soldiers, police, etc., react to you at a similar penalty if they know you are a coward.

Curious

-5 points

You are naturally very inquisitive. This is not the curiosity that affects all PCs (“What’s in that cave? Where did the flying saucer come from?”), but the real thing (“What happens if I push this button?”). Make a self-control roll when presented with an interesting item or situation. If you fail, you examine it –

Debt

see p. 26

Decreased Time Rate

-100 points

This is the disadvantageous counterpart to Altered Time Rate (p. 38). You experience time half as fast as normal: one subjective second for every two real seconds that pass. You only get a turn every two seconds in combat! (Gaming groups that enjoy extra detail might wish to give characters with Decreased Time Rate “half-turns” instead: splitting a Move maneuver across two turns, declaring an Attack maneuver one turn and rolling to hit the next, etc.)
Delusions 🧠 -5 to -15 points

You believe something that simply is not true. This may cause others to consider you insane. And they may be right! If you suffer from a Delusion, you must roleplay your belief at all times. The point value of the Delusion depends on its nature:

Minor: This Delusion affects your behavior, and anyone around you will soon notice it, but it does not keep you from functioning more-or-less normally. Those who notice your Delusion will react at -1. Examples: “Squirrels are messengers from God.” “The Illuminati are watching me constantly – but only to protect me.” “I am the rightful Duke of Fnordia, stolen at birth by Gypsies and doomed to live among commoners.” -5 points.

Major: This Delusion strongly affects your behavior, but does not keep you from living a fairly normal life. Others will react at -2. Examples: “The government has all phones tapped.” “I have Eidetic Memory and Absolute Direction.” -10 points.

Severe: This Delusion affects your behavior so much that it may keep you from functioning in the everyday world. Others react to you at -3, but they are more likely to fear or pity you than to attack. A Delusion this severe can keep you from participating meaningfully in the campaign; therefore, you should always clear it with the GM first. Examples: “I am Napoleon.” “I am immortal.” “Ice cream makes machines work better, especially computers. Spoon it right in.” -15 points.

Depending on your behavior, the same Delusion could be a quirk (-1 point) or worth -5, -10, or -15 points. Consider “Everything colored purple is alive.” If you pat purple things and say hello, that’s a quirk. If you won’t discuss serious matters with purple things in the room, it’s a Minor Delusion. If you picket the Capitol demanding Civil Rights For Purple Things, that’s Major. If you attack purple things on sight, that’s Severe!

Regardless of how insane you really are, you may not get more than -40 points, total, from Delusions.

A GM who wants to shake up his players can have a Delusion turn out to be true. This does not suit all Delusions. Of those listed above, for instance, the ones about squirrels, ice cream, and Napoleon seem unlikely. But the Illuminati might really exist, or Gypsies might really have stolen the heir to the throne of Fnordia . . . Have fun!

If your Delusion turns out to be true, you don’t have to buy it off until the other players realize it’s true. (And remember: the GM won’t tell you that you are not really crazy. You can be right and still be crazy . . .)

A GM who wants to shake up his players can have a Delusion turn out to be true. (And remember: the GM won’t tell you that you are not really crazy. You can be right and still be crazy . . .)

Dependency 💡 Variable

You must regularly ingest a substance (e.g., a drug or magic potion), touch or carry an object (e.g., a holy shrine or magical amulet), or spend time in an environment (e.g., your coffin or your home country, planet, or plane) in order to survive. If you fail to do so, you start to lose HP and will eventually die. Point value depends on the rarity of the item you depend on:

Rare (cannot be bought; must be found or made): -30 points.
Occasional (very expensive or hard to find): -20 points.
Common (expensive, somewhat hard to find): -10 points.

Very Common (available almost anywhere): -5 points.

Add -5 points to these values for items that are illegal in your game world.

Apply a multiplier based on the frequency with which you must receive the item:

Constantly: You must carry and use the substance at all times – for example, an exotic atmosphere. Lose 1 HP per minute without the substance. x5.
Hourly: Lose 1 HP per 10 minutes after missing an hourly dose. x4.
Daily: Lose 1 HP per hour after missing a daily dose. x3.
Weekly: Lose 1 HP per six hours after missing a weekly dose. x2.
Monthly: Lose 1 HP per day after missing a monthly dose. x1.
Seasonally: Lose 1 HP per three days after missing a seasonal dose (a “season” is three months for this purpose). x1/3 (drop all fractions).
Yearly: Lose 1 HP per two weeks after missing a yearly dose. x1/10 (drop all fractions).

If you need to touch an object or spend time in an environment, you must do so for time equal to your damage interval in order to avoid damage. For instance, to avoid losing 1 HP per hour to a daily Dependency on rest in your coffin, you must spend at least one hour per day in your coffin. To avoid losing 1 HP every two weeks to a yearly Dependency on visiting your home planet, you must visit your home planet for at least two weeks per year.

With the GM’s permission, normal humans may take this disadvantage to represent the special requirements of certain chronic illnesses.

Not every life-support requirement qualifies as Dependency. Use Maintenance (p. 143) if you require skilled care – not a substance, object, or environment – to avoid HT loss (not injury). Use Restricted Diet (p. 151) for special dietary requirements that result in slow starvation as opposed to rapid HP loss when you are forced to do without.

Special Enhancements

Aging: You age unnaturally without the item you depend on. For each HP lost, you also age two years (even if you are normally Unaging). +30%.
Dependents

A "Dependent" is an NPC for whom you are responsible; e.g., your child, kid brother, or spouse. You must take care of your Dependents. Furthermore, your foes can strike at you through them. (If you have both an Enemy and a Dependent, and the dice indicate that both appear, then the GM can build an entire adventure around this theme!)

If your Dependent ends up kidnapped or otherwise in danger during play, you must go to the rescue as soon as possible. If you don't go to his aid immediately, the GM can deny you bonus character points for "acting out of character." Furthermore, you never earn any character points for a game session in which your Dependent is killed or badly hurt.

Three factors determine the disadvantage value of a Dependent: his competence, his importance (to you!), and his frequency of appearance.

Competence

Specify the number of points your Dependent is built on. The more points you use to "build" your Dependent, the more competent he will be, and the fewer points he will be worth as a disadvantage. "Point Total" is the Dependent's point total as a fraction of the PC's, except for the last line, which is absolute; "Cost" is the number of character points the disadvantage is worth.

<table>
<thead>
<tr>
<th>Point Total</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>No more than 100%</td>
<td>-1 point</td>
</tr>
<tr>
<td>No more than 75%</td>
<td>-2 points</td>
</tr>
<tr>
<td>No more than 50%</td>
<td>-5 points</td>
</tr>
<tr>
<td>No more than 25%</td>
<td>-10 points</td>
</tr>
<tr>
<td>0 or fewer points</td>
<td>-15 points</td>
</tr>
</tbody>
</table>

The same person can be both a Dependent and an Ally (p. 36)! Add the cost of Ally and Dependent together, and treat the combination as a single trait: an advantage if the total point cost is positive, a disadvantage if it is negative. You must use the same point total for him in both cases, but frequency of appearance can differ. Roll separately for his appearance as a Dependent and as an Ally. If he appears as a Dependent, he shows up in a way that causes you trouble (e.g., he's captured). If he appears as an Ally, he manages to be helpful and take care of himself. If he appears as both, he is helpful and troublesome at the same time; for instance, he uses his skills to assist you, but also wanders off, is singled out by the enemy, or otherwise causes problems equal to the assistance he offers.

Importance

The more important your Dependent is to you, the more you multiply his intrinsic "nuisance value" and worth in points.

Employer or acquaintance: You feel a responsibility toward this person, but you may weigh risks to him in a rational fashion. ×1/2.

Friend: You must always try to protect this person. You may only risk harm to him if something very important (such as the safety of many other people) is at stake. ×1.

Loved one: The Dependent is a relative or a lover. You may not put anything before his safety! ×2.

Frequency of Appearance

Choose a frequency of appearance, as explained under Frequency of Appearance (p. 36). This should fit the "story" behind the Dependent. If the Dependent were your infant child, for instance, it would be odd for him to appear "quite rarely!

Multiple Dependents

You cannot earn points for more than two Dependents. However, if you have a group of Dependents, you may count the entire group as your two Dependents. Work out the value of an average member of the group as a Dependent, and then claim twice this point value.

Example: A vigilante who is a schoolteacher by day could have "generic dependents": all pupils. They are young (-10 points), around "quite often" (×2), and count as "friends" (×1), for -20 points each. However, the two-Dependent limit lets the hero claim -40 points' worth of Dependents. (And if one gets hurt, there are always others.)

Dependents in Play

As you earn points, the GM will scale your Dependent's abilities proportionally to keep his point total a fixed percentage of your own. Thus, his value as a disadvantage will not change. Children grow up, adults earn money, and everyone learns new skills. Dependents who spend a lot of time around you might become adventurers in their own right. You are free to suggest reasonable improvements for your Dependents, but the GM's word is final.

If your Dependent is killed, or so seriously injured that the GM decides he is effectively out of the campaign, you must make up the bonus points you got for him. You have three options: buy off the amount by spending earned character points, take a new disadvantage (e.g., Chronic Depression, p. 126), or get a new Dependent. New Dependents are usually inappropriate, but a mental disability brought on by the loss is a good solution. (Ever since the octopus got Amy, you've been afraid of the ocean . . .)

Examples of Dependents

- For anyone: elderly relatives, teachers, friends, children, younger brothers or sisters, lovers, husbands or wives.
- For crimefighters: young sidekicks, reporters, or wards.
- For wizards: apprentices.
- For ship captains (ocean- or space-going): ensigns or cabin boys.
- For soldiers: orphans or new recruits.
- For criminals or mad scientists: incompetent henchmen.

Destiny

A disadvantageous Destiny functions identically to an advantageous one (see p. 48), save that it always leads to something bad – but perhaps not immediately, and not without a chance to gain honor by dealing with it well. A fated, tragic death can be an end worthy of a hero! This kind of Destiny comes in three levels:

Minor Disadvantage: You are fated to play a small part in a larger story, and you will not come off so well. You are guaranteed at least one tragic experience or embarrassing failure – although these things are unlikely to result in your death except under the most desperate and heroic of circumstances. -5 points.
**Major Disadvantage:** You are fated to play a key role in a sorry turn of events. For instance, you might be late with a message that could save the day . . . or execute the only competent general in a threatened province, causing its loss to barbarian invaders. Still, you will survive. -10 points.

**Great Disadvantage:** Death stalks you. Something out there has your name on it. It knows where you are and it's getting closer all the time. You will either die or be ruined, and your fall will have terrible repercussions for others. This kind of Destiny is not suitable for every campaign! The GM does not have to allow it – and if he does, he should plan on letting the campaign take a radical turn, or end, when the Destiny is fulfilled. -15 points.

You must buy off a disadvantageous Destiny as soon as it is fulfilled. This is automatic if the outcome strips you of Allies, Status, Wealth, etc. worth the same number of points. If you lack the points to buy off your Destiny, you gain Unluckiness (p. 160), regardless of the point value of the Destiny. It is up to the GM whether you can buy off the Unluckiness! Alternatively, the GM might assign you a new bad Destiny, Divine Curse (below), or other supernatural disadvantage.

**Disciplines of Faith**

-5 to -15 points

You live by a strict set of rules in order to achieve a greater understanding of your faith. This might be a personal decision or a requirement of your religion. Such rules are optional in many faiths, though – indeed, some religions might forbid them as excesses! Disciplines of Faith are often a prerequisite for abilities that channel divine power: Power Investiture, True Faith, etc.

Some examples of Disciplines of Faith:

- Asceticism: You have renounced the comforts of society to lead a life of self-denial and self-discipline. This often involves some sort of isolation in bleak, austere settings. It might even involve sporadic bouts of severe self-punishment to excise the mortal taint of earthly desire. You must try to transcend all need for worldly possessions, and in any event cannot have above-average Wealth, or Status beyond that granted by your Religious Rank (if any). -15 points.

- Monasticism: You lead a life apart from worldly concerns. You are completely devoted to religious pursuits, which often involves the denial of ego and self. You must spend at least 75% of your time sequestered from the world, and cannot have above-average Wealth, or Status beyond that granted by your Religious Rank (if any). -10 points.

- Mysticism: You engage in deep meditation and trance-like contemplation, with the aim of obtaining a closer union with the divine. You spend most of your time engaged in these rituals, complete with chanting and any other necessary trappings. Individuals other than devout co-religionists will consider you a bit mad, and will react at -2. -10 points.

- Ritualism: You adhere strictly to elaborate rituals regarding every aspect of life – from waking to eating to bathing to sex. Each ritual has its proper place, time, words, trappings, and ceremony. Your fundamental belief is that, through the perfect performance of these rituals, you bring each aspect of your life closer to the divine. -5 points.

**Disturbing Voice**

-10 points

Your voice is naturally unpleasant or obviously artificial. Details can vary. You might be a robot, or use a technological aid to mitigate the Mute disadvantage. Your voice might be raspy, hollow, or squeaky, or your speech might be monotonous and without inflection. The game effects in all cases are identical to those of Stuttering (p. 157), although you do not necessarily stutter.

This trait is the opposite of the Voice advantage (p. 97); you cannot have both.

**Divine Curse**

Variable

You suffer from a curse placed by a god or similar supernatural force. The curse might be on just you, on your entire family, or even on your nation or race.

Divine Curse can take any form the GM desires. It can be a continuing commandment (e.g., “You may never sleep at night,” -10 points), a misfortune (e.g., “Every child born to you will die young,” -5 points), or even a particularly nasty disadvantage such as Berserk, Blindness, or Epilepsy (at the usual cost). What makes it distinct from other disadvantages is the potential for removal. The curse was given for a reason, and you can try to uncover this reason and atone in play, thereby lifting the curse.

The GM should judge the point value of Divine Curse on a case-by-case basis, using existing disadvantages as guidelines: the more encompassing or debilitating the curse, the higher its value. Curses that result in standard disadvantages should never be worth more points than those disadvantages. Price commandments as if they were Vows. The terms of atonement will often be nearly as bad as the curse itself, or require great effort to discover and satisfy. Halve the point value if this is not the case.

**Draining**

Variable

Once per day, at a specific time – sunrise, noon, sunset, midnight, etc. – you take 2 HP of damage. You can do nothing to prevent this, and cannot heal the damage naturally (even if you have Regeneration!), technologically, or supernaturally. The only way to regain your lost HP is to receive a daily dose of a particular substance. Point cost depends on the rarity of this substance:

- Rare (e.g., a special potion): -15 points.
- Occasional (e.g., virgin’s blood): -10 points.
- Common (e.g., human blood): -5 points.

Add -5 points to these values for items that are illegal in your game world.

This is not the same as Dependency (p. 130). You can have both!

**Dread**

Variable

You suffer from a supernatural aversion that compels you to keep a
certain, minimum distance from a particular item or substance. If outside forces bring you and the item you dread closer together than that, you must move away as fast as you can, by the most direct route possible. You may do nothing else until you are beyond the range of your Dread. If you cannot put at least that much distance between yourself and the object of your Dread, your Dread will render you helpless!

You can instantly sense the presence of the dreaded substance as soon as you enter the forbidden radius. You do not know exactly where it is, but you know what direction it lies in and are compelled to go exactly the other way.

Base value of Dread is -10 points, which prohibits you from coming within one yard of the dreaded substance. A larger radius gives an additional -1 point per yard, to a maximum of -20 points at 11 yards. Find the final disadvantage value by multiplying the point value for your range to reflect the rarity of the substance, as described for Weakness (p. 161).

Special Enhancements

Cannot Be Trapped: You cannot enter the forbidden zone of your own volition, but if carried there by an outside force, you no longer feel your Dread. You can act normally in the forbidden zone until you leave the substance's presence, at which time the prohibition reactivates. -50%.

Duty

If your occupation and social situation saddle you with a significant personal obligation toward others, and occasionally require you to obey hazardous orders, you have a “Duty.” Duty most often accompanies Rank (p. 29), a Patron (p. 72), or one of the traits discussed under Privilege (p. 30).

A particularly arduous job might qualify as a Duty, but most ordinary jobs would not. A wholly self-imposed feeling of duty is not a Duty, either (but it can still be a disadvantage; see Sense of Duty, p. 153). Finally, you cannot claim points for a Duty toward Dependents (p. 131); the points you get for Dependents already reflect your obligations in this regard.
The GM may restrict the Duties allowed in a campaign, or even forbid them entirely; if he feels they would unduly disrupt the flow of the adventure.

If you have a Duty, the GM rolls at the beginning of each adventure to see whether it comes into play. Being "called to duty" could delay your plans . . . or be the reason for the adventure! Alternatively, your master might give you a secret agenda to pursue, or his associates might harass you while you are officially "on leave." If you try to avoid your Duty, your GM is within his rights to penalize you for bad role-playing.

The basic point cost of a Duty depends on the frequency with which it comes up in play:

- Almost all the time (roll of 15 or less): -15 points. At this level, the GM may rule that you are always on duty.
- Quite often (roll of 12 or less): -10 points.
- Fairly often (roll of 9 or less): -5 points.
- Quite rarely (roll of 6 or less): -2 points.

This cost is for an occasionally hazardous Duty imposed through normal social means. If this does not describe your Duty, you should modify the cost:

- Extremely Hazardous: You are always at risk of death or serious injury when your Duty comes up. There are significant penalties if you refuse to take these risks: dismissal in disgrace, imprisonment, perhaps even death. The GM has the final say as to whether a given Duty is "extremely hazardous" in his campaign. -5 points.

- Involuntary: Your Duty is enforced by threats to you or your loved ones, or is imposed by exotic mind control, a curse, etc. This is unrelated to how hazardous the Duty is when you carry it out – the danger here lies in what will happen if you don't carry it out! A Duty can be Involuntary and either Extremely Hazardous or Nonhazardous. -5 points.

- Nonhazardous: Your Duty never requires you to risk your life. This option is mutually exclusive with Extremely Hazardous. +5 points. (If this raises the cost of your Duty to 0 points or more, the obligation is too trivial to qualify as a Duty.)

Examples

**Example 1:** A mayor is indebted to the crime lord who got him elected. His benefactor rarely calls on him for favors (-2 points), but since the mayor faces blackmail or violence if he refuses to comply, his Duty is Involuntary. Duty (Crime Lord, 6 or less; Involuntary) is worth -7 points.

**Example 2:** A commando is always on duty (-15 points). He might see only a handful of combat assignments in his whole career, but these will be deadly. And his daily routine calls for him to jump out of planes, hike through snake-infested jungles, and train with live ammo. A commando has Duty (Army, 15 or less; Extremely Hazardous), for -20 points.

**Dwarfism**  
see p. 19

**Dyslexia**  
-10 points

You have a crippling reading disability. Even simple maps and road signs are beyond you. You start with a written comprehension level of "None" in your native language. This is included in Dyslexia; you get no extra points for it. Furthermore, you may never improve your written comprehension level beyond "None" in any language. For more on language comprehension, see Language (p. 23).

You can learn "book-learned" skills at normal speed if you have a teacher to substitute for your inability to use texts. Attempts to learn such a skill without a teacher progress at 1/4 speed – if the skill is one you can teach yourself without books. The GM's word is final in all cases. In traditional fantasy settings, magic is a book-learned skill, and Dyslexia prevents you from ever becoming a wizard.

Note that this is a severe case. Mild dyslexia is not significant in game terms, except possibly as a quirk.

**Easy to Kill**  
-2 points/level

You have a health problem or structural weakness that leaves you prone to catastrophic system failure if you suffer enough damage. Each level of Easy to Kill gives -1 to HT rolls made for survival at -HP or below, and on any HT roll where failure would mean instant death (e.g., heart failure). This does not affect most normal HT rolls – only those to avoid certain death. You may not reduce your HT roll below 3. For instance, if you have HT 10, you are limited to Easy to Kill 7.

**Easy to Read**  
-10 points

Your body language betrays your true intentions. This is not the same as Truthfulness (p. 159). You have no moral problem with lying, and may even possess Fast-Talk at a high level, but your face or stance gives the game away.

Easy to Read gives others +4 on all Empathy, Body Language, and Psychology rolls to discern your intentions or the truth of your words. As well, they get +4 to their IQ, Detect Lies, and Gambling rolls in any Quick Contest with your Acting, Fast-Talk, or Gambling skill when you try to lie or bluff. (If you also have Truthfulness, your Fast-Talk skill is at -5 on top of this.) This is a crippling disadvantage for a would-be spy, con man, or gambler!

This is a mental disadvantage, despite its physical manifestations; with enough practice, you can "buy it off."

**Electrical**  
-20 points

Your body contains unshielded electronics, or relies on electrical power for its vital energy. This makes you susceptible to attacks that only affect electrical systems, such as spells, advantages, and ultra-tech weapons that drain power or produce "surge" effects, and the electromagnetic pulse from a nuclear blast. A critical hit from an electrical attack causes you to “short-circuit,” rendering you unconscious in addition to any other damage effects.

This disadvantage usually accompanies the Machine meta-trait (p. 263), but this is not required. Afflictions and Innate Attacks that only affect those with this trait are possible. Apply the -20% Accessibility limitation “Only on Electrical” to all such attacks.
Enemies

Variable

An "Enemy" is an NPC, group of NPCs, or organization that actively works against you, personally, on your adventures. Some Enemies want to kill you . . . others have more devious goals.

Determine the nature of your Enemy when you create your character, and explain to the GM why the Enemy is after you. The GM is free to fill in additional details as he sees fit.

Three factors determine the disadvantage value of an Enemy: its power, its intent, and its frequency of appearance.

Power

The more powerful the Enemy, the more points it is worth as a disadvantage. The GM sets this value. Note that when your Enemy is an organization, the point value is based on the number of individuals who are after you – not on the total size of the group!

One person, less powerful than the PC (built on about 50% of the PC’s starting points). -5 points.

One person, equal in power to the PC (built on about 100% of the PC’s starting points), or a small group of less-powerful people (3 to 5 people). Examples: A mad scientist, or the four brothers of the man you killed in a duel. -10 points.

One person, more powerful than the PC (built on at least 150% of the PC’s starting points), or a medium-sized group of less-powerful people (6 to 20 people). Examples: A single superhuman or a city police department (which numbers in the hundreds, but they’re not all after you at once). -20 points.

A large group of less-powerful people (21 to 1,000 people), or a medium-sized group that includes some formidable or superhuman individuals. Examples: the FBI or the Mafia. -30 points.

An entire government, a whole guild of powerful wizards, an organization of supers, or some other utterly formidable group. -40 points.

Special Cases

There are two special cases for which you should adjust the costs given above before multiplying for intent and frequency of appearance:

Evil Twin: Your Enemy looks and sounds like you, and perhaps even uses your name, but acts completely opposite. Often, others will think you suffer from Split Personality (p. 156), and react appropriately (-3 to reactions). You might never meet your Evil Twin, but you will hear about him – usually when you’re taking the blame for something you didn’t do. Normally, an Evil Twin has exactly the same skills and abilities as you, but his mental disadvantages are opposite or skewed. This makes him an even match: a -10-point Enemy. If he is more capable than you, he is worth extra points, because he is better equipped to make you look insane, and you are less able to predict and thwart his actions.

Evil Twin is more skilled than you or possesses abilities that you do not (GM decides): -5 points.

Evil Twin is more skilled than you and possesses abilities that you do not (GM decides): -10 points.

Unknown: You know you have an Enemy, but you have no idea who it is. Tell the GM the power level of your Enemy. He will create the Enemy in secret and give you no details whatsoever! The advantage of surprise increases your Enemy’s effective power level, and hence its disadvantage value. -5 points.

Intent

The more unpleasant the Enemy’s intentions, the more you multiply its worth in points.

Watcher: Your Enemy stalks you or spies on you. This is annoying, and makes it hard to keep secrets, but it is rarely more than a minor inconvenience. Examples: an aggressive journalist dogging a politician, detectives shadowing a suspected criminal. x1/4.

Rival: Your Enemy wishes to upstage or inconvenience you, or plays cruel practical jokes on you (this is typical of most Evil Twins), but stops short of anything that would do lasting harm. Examples: a politician’s bitter political rival, detectives harassing a suspected criminal. x1/2.

Hunter: The Enemy intends to arrest, bankrupt, injure, or otherwise harm you in some lasting way – or simply wants to kill you. Examples: an assassin gunning for a politician, detectives out to arrest a suspected criminal. x1.

Frequency of Appearance

Choose a frequency of appearance, as explained under Frequency of Appearance (p. 36). Roll at the beginning of each adventure, or at the start of each session of a continuing adventure.

Limits on Enemies

You may not take more than two Enemies, or claim more than -60 points in Enemies. (If the whole U.S. government is out to get you, the fact that your old college professor has lost his mind, and is also after you, pales to insignificance.)

Enemies in Play

If the dice indicate that an Enemy should show up, the GM must decide how and where the Enemy becomes involved. If an Enemy is very powerful, or if a number of different Enemies show up at the same time, this may influence the whole adventure.

If you take an extremely powerful Enemy, you are likely to be jailed or killed before long. So it goes. You can get a 60-point bonus by taking Enemy (FBI, 12 or less; Hunter), but your every adventure will be that of a hunted criminal. Even with an extra 60 points, your career may be short.

If you start with a weak Enemy, or play cleverly, you might manage to eliminate your foe or permanently change his attitude toward you. But as the saying goes, “There ain’t no such thing as a free lunch.” If you get rid of an Enemy, you have three choices:

1. Pay enough character points to buy off the original bonus you got for that Enemy.
2. Take a disadvantage to make up for the point bonus. For instance, you might have been kicked in the head during the final battle, leaving you partially deaf. Or a giant spider might have attacked you, leaving you with arachnophobia. The new disadvantage should have the same point cost as your former Enemy (or less, if you want to buy off part of the disadvantage). If you cannot think of a good substitute disadvantage, the GM will be more than happy to supply one!
3. Take a new Enemy of equal value. You might have destroyed the fiendish Dr. Scorpion – but his brother is continuing his evil work.
**Epilepsy 🧬**

-30 points

You suffer from severe epilepsy. You are subject to seizures during which your limbs tremble uncontrollably and you cannot speak or think clearly.

Make a HT roll whenever you are in a stressful situation (especially if your life or the life of a friend is threatened). If you have any sort of Phobia, exposure to the object of your fear counts as a stressful situation; roll vs. HT once every 10 minutes. On a failure, you suffer a seizure that lasts 1d minutes and costs you 1d FP. You can do nothing during that time.

You may attempt to induce a seizure through autohypnosis. This requires one minute of concentration and a successful Will or Autohypnosis roll. Seizures near areas charged with supernatural energies might produce visions. Whether these are useful is up to the GM.

Low-tech individuals who do not understand "fits" may be awed by them, and perhaps even believe your seizure represents a communication from the gods. Make a reaction roll at +1. A reaction of "Very Good" or better indicates religious awe! "Poor" or worse causes the observers to flee – not to attack (unless they had other provocation).

**Extra Sleep 🧬**

-2 points/level

You need more sleep than most people. A normal human requires 8 hours of sleep per night. Each level (maximum of four levels) means you need one additional hour of sleep. Thus, you must go to bed early or sleep in for a few hours each day. This gives you less time each day in which to study or work on other projects.

**Fanaticism 🧬**

-15 points

You believe so strongly in a country, organization, philosophy, or religion that you put it ahead of everything else. You might even be willing to die for it! If the object of your Fanaticism demands obedience to a code of behavior or loyalty to a leader, you oblige willingly and unquestioningly. You must roleplay your unwavering dedication.

Fanaticism does not make you mindless or evil. A glaring priest of Set, brandishing his bloody dagger, is a fanatic. But so is a kamikaze pilot, exchanging himself for an aircraft carrier. And so is a patriot who says, "Give me liberty or give me death!" Fanaticism is a state of mind; it is what you are fanatic about that makes the difference.

**Extreme Fanaticism:** This is an advanced case of Fanaticism. You get +3 on Will rolls to resist Brainwashing, Interrogation, and supernatural mind control in any situation where failure to resist would lead to betrayal of your cult or organization. On the other hand, you will not hesitate to die for your cause, and will undertake suicide missions "matter-of-factly." This is still worth -15 points. Your willingness to die is offset by the significant bonus to Will (which will apply a good deal of the time, if you are roleplaying properly).

**Fat**

See p. 19

**Fearfulness 🧬**

-2 points/level

You are nervous and timid. Subtract your Fearfulness from your Will whenever you make a Fright Check, and whenever you must resist the Intimidation skill (p. 202) or a supernatural power that causes fear. As well, add your Fearfulness level to all Intimidation rolls made against you.

You may not reduce your Will roll below 3. For instance, if you have Will 11, you are limited to Fearfulness 8.

This trait is the opposite of Fearlessness (p. 55); you cannot have both.

**Flashbacks 🧬**

Variable

You tend to experience "flashbacks" when under stress. These are vivid hallucinations, full-participation replays of memories, or similar phenomena. You should choose the type of flashback you experience when you take this disadvantage. The content of each episode is up to the GM.

In any situation that the GM feels is stressful, he will roll 3d. On a 6 or less, you have a flashback. The GM will roll whenever you miss a Fright Check or make the roll exactly, and whenever you fail a self-control roll for another stress-related disadvantage. The flashback occurs in addition to any other results!

Point value depends on the severity of the flashback:

- **Mild:** Duration is 2d seconds. The attendant hallucinations give -2 on all skill rolls, but they are minor – you realize that you are experiencing a flashback. -5 points.
- **Severe:** Duration is 1d minutes. The hallucinations give -5 on all skill rolls, and seem real. -10 points.
- **Crippling:** Duration is 3d minutes. The hallucinations are so severe that they preclude all skill use. The flashback seems completely, 100% real, and can be potentially fatal, as you are receiving no input from the real world. -20 points.

**Fragile 🧬**

Variable

You are susceptible to wounding effects that do not apply to normal humans. Attacks do not injure you any more than usual (that's Vulnerability, p. 161), but enough penetrating damage can trigger results more catastrophic than stunning, unconsciousness, or bleeding. Possibilities include:

- **Brittle:** You are brittle (like a creature of ice or crystal) or rotten (like a decaying undead monster). Whenever an injury cripples one of your limbs or extremities, it breaks off. If you can make a HT roll, it falls off in one piece; otherwise, it shatters or liquefies irrecoverably. Furthermore, should you fail any HT roll to avoid death, you are instantly destroyed – you shatter, melt, decay to goo, etc., and instantly go to -10xHP. -15 points.

**Combustible:** Your body burns more easily than flesh. Perhaps it is dry, resinous, or made of wood. Make a HT roll to avoid catching fire whenever you receive a major wound from a burning or explosive attack. You catch fire automatically if such an attack inflicts 10+ HP of injury. Once aflame, you suffer 1d-1 injury per second until you extinguish the fire by immersion in water, rolling on the ground (takes 3 seconds), etc. -5 points.
Explosive: Your body contains explosives, compressed gas, or something else unstable. On any critical failure on the HT roll for a major wound, you explode! You also explode if you fail any HT roll to avoid death by 3+. Treat this as a \(6d \times (\text{HP}/10)\) crushing explosion. The blast instantly reduces you to -10xHP, regardless of the damage it inflicts. -15 points.

Flammable: Your body contains something highly flammable: gasoline, hydrogen gas, etc. Make a HT roll to avoid catching fire, with effects as per Combustible, after a major wound from any kind of attack. Roll at -3 for a burning or explosive attack, -3 if the attack struck the vitals, and -6 if both. Once you are burning, a critical failure on any HT roll to avoid death means you explode as described for Explosive. You may be Combustible as well. If so, any burning or explosive attack that inflicts either a major wound or 10+ HP of injury automatically sets you ablaze. -10 points.

Unnatural: You are summoned, conjured, or a magical or weird-scientific "construct" (e.g., demon, golem, or undead). You automatically fail the HT roll to stay alive if reduced to -HP or below; as that much damage severs your ties with the force that animates you. -50 points.

It sometimes makes sense to take more than one of the above (in particular, Explosive and Flammable often occur together). The GM must personally approve any combination of Fragile with Injury Tolerance (p. 60), as these traits are in many ways opposites.

Frightens Animals -10 points

Animals react to you with fear and aggression. Horses do not permit you to ride them, dogs shy away from you or attack savagely, and your mere scent is enough to panic most creatures. You get -4 on all reaction rolls made by animals. Anyone who sees how animals react to you – and those with Animal Empathy – reacts to you at -1. Note that guards or police with guard animals, "sniffer" dogs, etc. decide how to deal with you based on the animal's reaction roll, not their own!

If your disadvantage is due to lycanthropy, vampirism, or a similar trait, observers get +1 on all rolls to deduce your secret!

G-Intolerance -10 or -20 points

You function well under a narrow range of gravities. For a normal human, the penalties for non-native gravity accrue in increments of 0.2G; see Different Gravity (p. 350). An increment of 0.1G is worth -10 points. An increment of 0.05G is worth -20 points.

This disadvantage is only allowed in campaigns that feature regular space travel.

Gigantism see p. 20

Gluttony -5 points*

You are overly fond of good food and drink. Given the chance, you must always burden yourself with extra provisions. You should never willingly miss a meal. Make a self-control roll when presented with a tempting morsel or good wine that, for some reason, you should resist. If you fail, you partake – regardless of the consequences.

Greed -15 points*

You lust for wealth. Make a self-control roll any time riches are offered – as payment for fair work, gains from adventure, spoils of crime, or just bait. If you fail, you do whatever it takes to get the payoff. The GM may modify this roll if the money involved is small relative to your own wealth. Small sums do not tempt you much if you are rich, but if you are poor, you get -5 or more on your self-control roll if a rich prize is in the offing. If you have Honesty (p. 138), your self-control roll is at +5 for a shady deal and +10 for outright crime. However, it is almost a foregone conclusion that you will eventually do something illegal.

Gullibility -10 points*

There's one born every minute, and you're it. You believe everything you hear. You'll swallow even the most ridiculous story, if it's told with conviction. Make a self-control roll, modified by the plausibility of the story, whenever you are confronted with a lie – or an improbable truth, for that matter. If you fail, you believe what you were told!

A lie well told, or involving something you have no familiarity with (“My father is the chief of police in this town, and he won't stand for this!”) gives -6 to the self-control roll. A lie concerning a topic you are familiar with (“Didn't you know they bred ducks in your village, Torg?”) gives -3. You believe even a totally outlandish tale (“Of course the Eskimos are ducks in your village, Torg?”) gives -3.

Others may attempt to help you overcome your feelings of guilt by making Fast-Talk or Psychology rolls. The GM is free to modify their rolls, depending on how convincing they sounded. Roleplay it!

Guilt Complex -5 points

You feel personally responsible for those who play a significant role in your life. This includes adventuring companions, employers, subordinates, Allies, Dependents, and those toward whom you have a Duty or a Sense of Duty. If anything bad happens to someone like this, you will be wracked by anxiety and guilt – even if there was nothing you could have done to avert the disaster.

If the mishap was not your fault, you will suffer the effects of Chronic Depression (p. 126) for (15 - Will) days, minimum one day. Use your Will as your effective self-control number. If the mishap was your fault, the effects of Chronic Depression will last (20 - Will) days, minimum two days, and your effective self-control number is Will-3.

Others may attempt to help you overcome your feelings of guilt by making Fast-Talk or Psychology rolls. The GM is free to modify their rolls, depending on how convincing they sounded. Roleplay it!

DISADVANTAGES 137
Ham-Fisted ♦
-5 or -10 points

You have unusually poor motor skills. You suffer a penalty to any DX-based roll to do fine work using the skills listed under High Manual Dexterity (p. 59), and to Fast-Draw skill. For -5 points, the penalty is -3; for -10 points, it is -6. This does not affect IQ-based tasks or large-scale DX-based tasks, nor does it modify combat-related die rolls other than Fast-Draw.

You are also a messy eater, can’t tie a necktie properly, and so on. At the GM’s option, you get -1 per level of this trait on any Influence or reaction roll where being tidy or well-groomed would matter.

This disadvantage is mutually exclusive with High Manual Dexterity.

Hard of Hearing ♦
-10 points

You are not deaf, but you have some hearing loss. You are at -4 on any Hearing roll, and on any skill roll where it is important that you understand someone (if you are the one talking, this disadvantage doesn’t affect you).

Hemophilia ♦
-30 points

You are a “bleeder.” Even a small wound will not heal unless well-bandaged – and you may bleed to death. Any untreated wound bleeds at a rate equal to its original damage every minute. For instance, an untreated 3 HP wound bleeds for 3 HP of damage per minute until stanched.

First Aid is enough to staunch most wounds, but an impaling wound to the torso causes slow internal bleeding. It does damage every minute, as above, until you receive First Aid. Furthermore, it continues to do damage equal to its original damage once per day until properly treated. Only a Surgery roll or supernatural healing can stop internal bleeding or restore HP lost to it. If proper treatment is not available, you will soon die.

If you suffer from this disadvantage, your HT score may not exceed 10.

Hidebound ♦
-5 points

You find it difficult to come up with an original thought. You have a -2 penalty on any task that requires creativity or invention, including most rolls against Artist skill, all Engineer rolls for new inventions, and all skill rolls made to use the Gadgeteer advantage.

Honesty ♦
-10 points*

You must obey the law, and do your best to get others to do so as well.

In an area with little or no law, you do not “go wild” – you act as though the laws of your own home were in force. You also assume that others are honest unless you know otherwise (make an IQ roll to realize someone might be dishonest if you haven’t seen proof).

This is a disadvantage, because it often limits your options! Make a self-control roll when faced with the “need” to break unreasonable laws; if you fail, you must obey the law, whatever the consequences. If you manage to resist your urges and break the law, make a second self-control roll
afterward. If you fail, you must turn yourself in to the authorities!

You may fight (or even start a fight, if you do it in a legal way). You may even kill in a legal duel or in self-defense – but you may never murder. You may steal if there is great need, but only as a last resort, and you must attempt to pay your victims back later. If you are jailed for a crime you did not commit, but treated fairly and assured of a trial, you will not try to escape.

You always keep your word. (In a war, you may act “dishonestly” against the enemy, but you will not be happy about it!) However, you are allowed to lie if it does not involve breaking the law. Truthfulness (p. 159) is a separate disadvantage.

Honesty has its rewards, of course. If you stay alive and in one place long enough for your honesty to become known, the GM should give you +1 on any noncombat reaction roll – or +3 if a question of trust or honor is involved. This is essentially a free Reputation (see Reputation, p. 26).

**Horizontal 🌟🌟**

-10 points

You have a horizontal posture, like a cat. You can stand on your hind legs for short periods, but find this very uncomfortable. You can use one hand (if you have hands) while standing on your other limbs, or two hands while sitting on your haunches; in both cases, your ground Move is 0 while doing so. You can carry but not use an object in one hand if moving at half Move. If you are human-sized, you take up two hexes on a battle map.

A horizontal build does not let you put your full weight behind a kick. As a result, your thrusting damage is at -1 per die when you kick. Ignore this penalty if you have Claws (p. 42) – that trait includes the necessary adaptations to strike at full power. The penalty does apply if you have Hooves, however.

Do not take this disadvantage if you are Aerial or Aquatic (see No Legs, p. 145). If you are fully adapted to a three-dimensional environment, body posture is irrelevant.

**Hunchback 🌟🌟**

-10 points

You have a spinal deformity that forces you into a twisted or hunched position, usually resulting in a noticeable hump or lump on one or both shoulders. This reduces height by 6” without changing weight or build. Normal clothing and armor will fit badly, giving you -1 to DX; to avoid this, you must pay an extra 10% for specially made gear.

Most people find you disturbing to see and react at -1. This penalty is cumulative with regular appearance modifiers (see Physical Appearance, p. 21), and you may have no better than Average appearance. Your appearance is also distinctive, which gives you -3 to Disguise or Shadowing skill, and +3 to others’ attempts to identify or follow you.

Realistic hunchbacks should have the Bad Back disadvantage (p. 123) as well, but this is not required.

**Impulsiveness 🌟🌟**

-10 points*

You hate talk and debate. You prefer action! When you are alone, you act first and think later. In a group, when your friends want to stop and discuss something, you should put in your two cents’ worth quickly – if at all – and then do something. Roleplay it!

Make a self-control roll whenever it would be wise to wait and ponder. If you fail, you must act.

**Increased Consumption 🌟🌟**

-10 points/level

One “meal” keeps you going for a much shorter period of time than it would a normal human. This is suitable for small creatures that must eat often, or for machines that rapidly exhaust their fuel or energy supply.

Increased Consumption 1: You must eat six meals a day. If you have the Machine meta-trait (p. 263), you have a 4-hour endurance.

Increased Consumption 2: You must eat 12 meals a day. If you have the Machine meta-trait, you have a 2-hour endurance.

Increased Consumption 3: You must eat 24 meals a day. If you have the Machine meta-trait, you have a 1-hour endurance.

... and so on, doubling consumption and halving endurance for each additional level. A single level of this trait is appropriate for normal humans who have a build of Overweight or heavier (see Build, p. 19), or the Gluttony disadvantage (p. 137).

**Increased Life Support 🌟🌟**

Variable

Your environmental requirements in a life-support situation are greater than those of a normal human. Some examples:

- Extreme Heat/Cold: You require a temperature above 200° or below 0°. -10 points.
- Massive: You require more than a ton of additional weight in order to survive aboard a spacecraft or a submarine, or in any other setting where resources and space are limited. If you can wear an environment suit, this always weighs at least a ton. -10 points.
- Pressurized: You require a separate pressurized compartment to survive. -10 points.
- Radioactive: You are radioactive or require a radioactive environment. -10 points.

The GM may allow other kinds of Increased Life Support. These should worth no more than -10 points apiece unless they are extremely exotic. Add together the value of multiple special requirements, but note that the total disadvantage value cannot exceed -40 points.

Increased Life Support represents the logistical inconvenience of special life-support requirements, while Dependency (p. 130), Maintenance (p. 143), and Restricted Diet (p. 151) all reflect the health effects of doing without such requirements. The same requirement can qualify in both categories if it has consequences for both health and logistics. But note that a Dependency you can satisfy with a one-ounce inhaler of a drug does not let you claim Increased Life Support for a pressurized cabin full of the stuff! The GM’s word is final.

With the GM’s permission, normal humans may take this disadvantage to represent the special requirements of certain chronic illnesses.
**Incurious ✂**

-5 points*

You hardly ever notice things unrelated to the business at hand. Make a self-control roll when confronted with something strange. If you fail, you ignore it! You react at -1 to new things.

**Indecisive ✂**

-10 points*

You find it difficult to make up your mind. As long as there is a single path before you, you are fine, but as soon as there is a choice, you begin to dither. Make a self-control roll whenever a choice confronts you, modified downward by the number of alternatives you can see: -2 if there are two choices, -3 if there are three, etc. If you fail, you do nothing. Roll again every minute (or every second in combat or a similar high-stress situation) until you make up your mind, after which you may act normally until the next time you face a decision.

If you are Indecisive and Confused (p. 129), you must roll as described above to decide on a course of action. When you finally succeed, you must make another self-control roll — this one for Confused — to see whether you can act on your decision immediately.

**Infectious Attack ✂**

-5 points

You have an infectious supernatural condition. This works identically to the Dominance advantage (p. 50), except that you do not control those you infect and cannot add them as Allies. This is a disadvantage, because enemies who survive (or don’t survive!) violent encounters with you become stronger through the “gift” of supernatural powers, and are completely free to use their new abilities to seek vengeance for what you have done to them.

To prevent PCs with this trait from turning their friends into powerful monsters for free, the GM should consider making infected PCs pay points for supernatural racial templates gained this way. If they cannot afford such a template, the GM is free to balance its point cost with supernatural drawbacks such as Cursed, Dread, Revulsion, and Weakness.

**Innumerate ✂**

-5 points

You have little or no grasp of mathematics. You cannot learn — and get no default with — Computer Programming, Economics, or any of the skills that benefit from Mathematical Ability (see Talent, p. 89). You effectively have Incompetence (p. 164) in those areas. This has many frustrating side effects: you must use your fingers to count or perform arithmetic, you have no idea if the results computed by calculating machines are correct (making them basically useless), and you are easily cheated by dishonest merchants (-4 to rolls to notice you’ve been had).

In “innumerate” cultures, including many cultures at TL4 or below, this disadvantage is widespread, and the GM should not count it against the campaign disadvantage limit (if any). In societies that prize technological or mercantile ability, Innumerate individuals are liable to have a Social Stigma as well. This is worth an additional -5 points and gives -1 to reaction rolls.

**Insomniac ✂**

-10 or -15 points

You go through periods where falling asleep is very difficult. During such an episode, you must make a HT-1 roll once per night. On a success, you fall asleep easily, ending that episode of insomnia. On a failure, you lose two hours of sleep that night (and suffer all the usual effects; see Missed Sleep, p. 426) and the episode continues for another night. On a critical failure, you get no sleep that night.

Point value depends on severity:

- **Mild**: The GM secretly rolls 3d for the number of days between episodes. -10 points.
- **Severe**: The GM rolls 2d-1 for the number of days between episodes. -15 points.

Regardless of severity, whenever you suffer prolonged stress, the GM can require a HT roll. Failure means an episode starts immediately.

**Intolerance ✂**

Variable

You may be prejudiced on the basis of class, ethnicity, nationality, religion, sex, or species. Victims of your Intolerance will react to you at -1 to -5 (GM’s decision). Point value depends on the scope of your Intolerance.

If you are thoroughly intolerant, you react at -3 toward anyone not of your own class, ethnicity, nationality, religion, or species (pick one). On a “Good” reaction, you tolerate the person and are as civil as possible (but are stiff and cold toward him). On a “Neutral” reaction, you still tolerate him, but make it plain in words and deeds that you don’t care to be around him and consider him inferior or offensive. On any worse reaction, you attack or refuse to associate with the victim. Total Intolerance of this kind is worth -10 points.

Intolerance directed at only one specific class, ethnicity, nationality, religion, sex, or species is worth from -5 points for a commonly encountered victim to -1 point (a nasty quirk) for a rare victim.

**Invertebrate ✂**

-20 points

You have no spine, exoskeleton, or other natural body support. Use your full Basic Lift for the purpose of pushing, but only 1/4 your BL to calculate the weight you can lift, carry, or pull. This trait has a small side benefit, however: you can squeeze through much smaller openings than your size might suggest!

Note that this trait differs somewhat from the biological term “invertebrate.”

**Jealousy ✂**

-10 points

You react poorly toward those who seem smarter, more attractive, or better off than you! You resist any plan proposed by a “rival,” and hate it if someone else is in the limelight. (Jealousy goes well with Megalomania.) If an NPC is jealous, the GM will apply a -2 to -4 reaction penalty toward the victim(s) of his jealousy.

**Killjoy ✂**

-15 points

Your brain’s pleasure center is burned out or absent. You cannot...
appreciate the taste of good food, the joy of sex, the savage beauty of combat, and so on. You might not even remember what these pleasures were like! You can "go through the motions," but you have -3 on all Carousing, Connoisseur, Erotic Art, and Gambling rolls. Others react to you at -1 to -3 in any situation where your lack of appreciation becomes obvious (GM’s decision). A bad reaction indicates ridicule from cultured folk, rejection by a lover, etc. – not violence.

Some ultra-tech societies might use surgery to inflict this state as a form of punishment! If so, you won’t plot your revenge . . . because there won’t be any pleasure in it.

*Kleptomania*

-15 points*

You are compelled to steal – not necessarily things of value, but anything you can get away with. Make a self-control roll whenever you are presented with a chance to steal, at up to -3 if the item is especially interesting to you (not necessarily valuable, unless you are poor or have Greed). If you fail, you must try to steal it. You may keep or sell stolen items, but you may not return or discard them.

*Klutz* -5 or -15 points

You have an uncanny affinity for gross physical blunders. You do not necessarily have a low DX (you may have up to DX 13 and still select this trait) but you are more awkward than your DX would suggest. This disadvantage comes in two levels:

*Klutz:* Make a DX roll to get through the day without doing a pratfall, dropping books, or knocking over shelves filled with fragile items. This is rarely life-threatening, but it is inconvenient and often expensive. The GM should be creative in inventing minor torments. You should especially avoid laboratories, explosives, china shops, etc. -5 points.

*Total Klutz:* As above, but in addition, any failure on a DX roll or DX-based skill roll is considered a critical failure for you! -15 points.

This trait might seem silly, but it need not be. Most realistic TL7-8 robots have this disadvantage!

*Lame* -10 to -30 points

This disadvantage assumes that you are a member of a race with legs. If your entire race is legless, see *No Legs* (p. 145).

You have some degree of impaired mobility:

*Crippled Legs:* You have all of your legs, but some of them are damaged. For a human, this means one bad leg. You are at -3 to use any skill that requires the use of your legs, including all Melee Weapon and unarmed combat skills (but not ranged combat skills). You must reduce your Basic Move to half your Basic Speed (round down), but you get full points for this (see *Basic Move*, p. 17). -10 points.

*Missing Legs:* You have lost some, but not all, of your legs. For a human, this means you have one leg. You are at -6 to use any skill that requires the use of your legs. Using crutches or a peg leg, you can stand up and walk slowly. You must reduce Basic Move to 0, but you get full points for this. -20 points.

*Legless:* You have all of your legs, but they are paralyzed. The effects and point value are identical to Legless. Unlike a Legless character, you can be struck in the legs for damage. This is balanced by the fact that it isn’t inconceivable that you could regain the use of your legs (a Legless character is out of luck). -30 points.

Without your crutches or peg leg, you cannot stand, walk, or kick. -20 points.
Technological Assistance
A muscle-powered wheelchair or wheeled platform has ground Move equal to 1/4 your ST (round down), but cannot pass through narrow doorways, negotiate staircases or steep curbs, enter most vehicles, etc.

If you have advanced prosthetics that cancel this disadvantage while worn, apply a Mitigator limitation (p. 112) to Lame and any reduced Basic Move. If surgery or ultra-tech replacement parts eliminate this disadvantage completely, you must pay back the points you received for Lame and reduced Basic Move.

Laziness -10 points
You are violently averse to labor. Your chances of getting a raise or promotion in any job are halved. If you are self-employed, halve your monthly pay (see Jobs, p. 516). You must avoid work – especially hard work – at all costs. Roleplay it!

Lecherousness -15 points*
You have an unusually strong desire for romance. Make a self-control roll whenever you have more than the briefest contact with an appealing member of the sex you find attractive – at -5 if this person is Handsome/Beautiful, or at -10 if Very Handsome/Very Beautiful. If you fail, you must make a “pass,” using whatever wiles and skills you can bring to bear. You must then suffer the consequences of your actions, successful or not: physical retribution, jail, communicable disease, or (possibly) an adoring new friend.

Unless the object of your affection is Very Handsome/Very Beautiful, you need not roll more than once a day to avoid making a pass. If someone turns you down very firmly (e.g., a black eye, or an arrest for sexual harassment) the GM may give you a bonus to future self-control rolls regarding that individual . . .

Note that you are likely to change your standards of attractiveness if no truly attractive members of the appropriate sex are available!

Lifebane -10 points
You have a supernatural aura of death about you. Grass dies in your footprints and will never grow there again, larger plants wilt instantly in your presence, and insects and other tiny creatures die if they get within a yard of you. Your aura has no effect on animals that weigh more than a few ounces, on very large plants such as (but the leaves closest to you might die, and a tree you pass daily for years will eventually be affected), on ordinary life forms controlled by supernatural means (e.g., insect swarms conjured up using magic), or on supernatural entities of any kind.

Lifebane gives -2 on reaction rolls made by anyone in a position to notice it. If it stems from demonic powers, vampirism, etc., observers get +2 on all rolls to deduce your secret! This trait makes it difficult to use stealth- or invisibility-related abilities outdoors, too: +2 on rolls to locate you in most outdoor environments. It has its side benefits, however. For instance, you need never buy insect repellent!

Light Sleeper -5 points
You do not sleep as soundly or as easily as most people. Whenever you must sleep in an uncomfortable place, or whenever there is more than the slightest noise, you must make a HT roll in order to fall asleep. On a failure, you can try again after one hour, but you will suffer all the usual effects of one hour of missed sleep (see Missed Sleep, p. 426).

You usually wake up if there is activity going on around you (but you are stunned unless you have Combat Reflexes). If you wish to continue sleeping, you must fail a Sense roll. If you wake up, you must make HT rolls to get back to asleep, as above. This can occasionally be to your advantage, but the most likely effect is that you miss sleep whenever inconsiderate companions trade watches or return from a night on the town.

Loner -5 points*
You require a great deal of “personal space.” Make a self-control roll whenever anyone lingers nearby, watches over your shoulder, etc. If you fail, you lash out at that person just as if you had Bad Temper (p. 124). Loner NPCs always react to others at a penalty.

Low Empathy -20 points
You cannot understand emotions at all. This doesn’t prevent you from having and showing emotions of your own (unless you have something like No Sense of Humor) – your problem is that you don’t really understand them. As a result, you have difficulty interacting socially.

You may not take the Empathy advantage, and suffer a -3 penalty on all skills that rely in whole or in part on understanding someone’s emotional motivation, including Acting, Carousing, Criminology, Detect Lies, Diplomacy, Enthrallment, Fast-Talk, Interrogation, Leadership, Merchant, Politics, Psychology, Savoir-Faire, Sex Appeal, Sociology, and Streetwise. You can still have these skills – you just aren’t as good at them as someone without this disadvantage.

Low Empathy is common in androids, demons, golems, the undead, and some aliens. It is also appropriate for certain humans! This trait is mutually exclusive with the somewhat similar disadvantages Callous (p. 125) and Oblivious (p. 146), both of which assume some understanding of emotions, however flawed.

Low Pain Threshold -10 points
You are very sensitive to pain of all kinds. Double the shock from any injury; e.g., if you take 2 HP of damage, you are at -4 to DX on your next turn. You roll at -4 to resist knockdown, stunning, and physical torture. Whenever you take a wound that does more than 1 HP of damage, you must make a Will roll to avoid crying out. This can give away your presence, and may earn you a -1 reaction from “macho” individuals.
Low Self-Image -10 points

You lack self-confidence and under-rate your abilities to such a degree that it interferes with your performance. You are at -3 to all skill rolls whenever you believe that the odds are against you or others expect you to fail (GM's judgment). For instance, if you're a mechanic, you have no penalty to repair an engine in your shop . . . but you are at -3 to make the same repairs on the road, in the rain, with only a portable tool kit, and an enemy hot on your trail – on top of the usual modifiers that would apply in that situation!

Low TL

see p. 22

Lunacy -10 points

The moon has a dramatic and inconvenient effect on your personality. During the full moon, you are extremely emotional and volatile (-2 to all Will and self-control rolls), while on nights of the new moon, you are very passive (you temporarily suffer from the Laziness disadvantage, p. 142). While the moon is waxing, you are focused and pleasant; while it is waning, you are apathetic and a little touchy. Roleplay it!

Magic Susceptibility -3 points/level

Magic is more likely to affect you. Add your Magic Susceptibility to the skill of anyone casting a spell on you, and subtract it from your roll to resist any spell that you can resist. For instance, if you have Magic Susceptibility 4, wizards have +4 to cast spells on you and you get -4 to resist.

Magic Susceptibility only makes you more vulnerable to spells cast directly on you. It does not affect Missile spells, attacks by magic weapons, or information-gathering spells that aren't cast directly on you. It also has no effect on supernatural powers other than magic; e.g., divine miracles, psionics, or the innate powers of spirits. Magic Susceptibility works normally against Area spells; do not double its effects as you would those of Magic Resistance (p. 67).

Magic Susceptibility, and its precise level, can be recognized by any mage who looks at your aura or by anyone who casts a spell on you. You may have no more than five levels of Magic Susceptibility.

You can combine Magic Susceptibility with Magery but not with Magic Resistance.

Maintenance Variable

You require skilled attention at regular intervals to avoid HT loss. Examples include a robot that needs a mechanic, a chronically ill person who needs a doctor's attention, or a god that requires devout prayer.

Decide on the care you require and the skill needed to provide it. Possibilities include electronic maintenance (use Electronics Repair), mechanical maintenance (use Mechanic), medical care (use Physician), and physical repairs (use Carpenter, Electrician, etc.). You may specify an advantage or disadvantage instead; e.g., a god might require worshippers with Disciplines of Faith. You can split Maintenance between multiple skills; for instance, a robot might require Electronics Repair and Mechanic.

 Those who maintain you must have access to the appropriate facilities: a mechanic needs tools, worshippers must pray at a temple, etc. No resources are consumed, however; for that, take Dependency (p. 150).

Each installment of maintenance takes one hour: The base point value depends on the number of people needed to perform it:

<table>
<thead>
<tr>
<th>Number of People</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-10</td>
</tr>
<tr>
<td>2</td>
<td>-20</td>
</tr>
<tr>
<td>3-5</td>
<td>-30</td>
</tr>
<tr>
<td>6-10</td>
<td>-40</td>
</tr>
<tr>
<td>11-20</td>
<td>-50</td>
</tr>
<tr>
<td>21-50</td>
<td>-60</td>
</tr>
<tr>
<td>51-100</td>
<td>-70</td>
</tr>
</tbody>
</table>

Add another -10 points per full doubling of the number of people required; e.g., a god that requires 10,000 worshippers would have a base -130-point disadvantage. Extra maintenance may substitute for extra people, if the GM approves.

The frequency with which you require maintenance modifies this base cost.

<table>
<thead>
<tr>
<th>Maintenance Interval</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>1/5</td>
</tr>
<tr>
<td>Bi-weekly</td>
<td>1/3</td>
</tr>
<tr>
<td>Weekly</td>
<td>1/2</td>
</tr>
<tr>
<td>Every other day</td>
<td>3/4</td>
</tr>
<tr>
<td>Daily</td>
<td>1</td>
</tr>
<tr>
<td>Twice daily</td>
<td>2</td>
</tr>
<tr>
<td>Three to five times daily</td>
<td>3</td>
</tr>
<tr>
<td>Constant</td>
<td>5</td>
</tr>
</tbody>
</table>

If you miss a maintenance period, your HT attribute drops by 1 and you must make a HT roll. Failure results in some additional incapacity of the GM's choosing. Critical failure means a potentially fatal outcome; e.g., a human might suffer a heart attack, or a vehicle's brakes might fail while it is moving.

To restore lost HT and capabilities requires suitable intervention and skill rolls (repairs if you're a machine, surgery if you're a living being, etc.). If you require an unusual form of maintenance, this might call for exotic measures!

Manic-Depressive -20 points

Your moods are on a seesaw. You bounce back and forth between bubbling enthusiasm and morose withdrawal. At the beginning of each play session, roll 1d. On 1-3, you are in your manic phase; 4-6 indicates depression. Every five hours of game time thereafter, roll 3d. A 10 or less indicates that you begin a mood swing. Over the next hour, you shift from your current phase to the opposite one. You remain in the new phase for at least five hours, after which you must again roll 3d.

In the manic phase, you suffer the effects of Overconfidence (p. 148) and Workaholic (p. 162). You are friendly, outgoing, and excited about whatever it is you're doing. In the depressive phase, you suffer the effects of Chronic Depression (p. 126). You are not interested in doing anything but lying in bed, sitting in a dark room and moping, etc. Your effective self-control number for these effects is equal to your Will.
Emergencies can also cause mood swings; in that case, the switch is immediate. On a roll of 10 or less on 3d, you change phases. This can be good (an emergency jars you into action) or bad (a problem triggers depression and you become worthless).

**Megalomania**

-10 points

You believe you are a superman, that you have been chosen for some great task, or that you are destined to conquer. You must choose a grand goal – most often conquest or the completion of some fantastic task. You must let nothing stand between you and this goal.

You may attract followers with Fanaticism, but nobody else enjoys hearing you talk about your brilliance and great plans. Young or naive characters, and fanatics looking for a new cause, react to you at +2; others will react at -2.

This is a better disadvantage for NPCs than it is for PCs.

**Miserliness**

-10 points

You are preoccupied with conserving your wealth. You must always hunt for the best deal possible. Make a self-control roll any time you are called on to spend money. If the expenditure is large, this roll may be at -5 or worse (GM’s decision). If you fail, you refuse to spend the money. If the usual penalty is between -1 and -4 for most people, your penalty is the worse of double the usual penalty or -3. If the usual penalty is -5 or worse, you function as though you were completely blind (see Blindness, p. 124). If you have Acute Vision (p. 35), it only applies in situations with no darkness penalty.

This trait is mutually exclusive with both Night Vision (p. 71) and Dark Vision (p. 47).

**Night Blindness**

-10 points

You have poor night vision. If the vision or combat penalty for poor lighting is between -1 and -4 for most people, your penalty is the worse of double the usual penalty or -3. If the usual penalty is -5 or worse, you function as though you were completely blind (see Blindness, p. 124). If you have Acute Vision (p. 35), it only applies in situations with no darkness penalty.

Many other symptoms are possible, including gross motor impairment (buy down DX or Move), involuntary vocalizations (treat as Noisy, p. 146), and facial contortions (reduce appearance level; see Physical Appearance, p. 21). Violent tics and profane involuntary vocalizations might qualify as Odious Personal Habits (p. 22).

**Neurological Disorder**

**Variable**

You suffer from one of several neurological disorders that cause tremors, involuntary movements, facial contortions, etc. Point value depends on severity:

Mild: Your condition is obvious to anyone who observes you for more than a few seconds. You are at -2 to tasks that involve fine manipulation (see High Manual Dexterity, p. 59), and such tasks take twice the normal time. You also have -2 to social skills such as Acting, Leadership, Performance, Public Speaking, and Sex Appeal in any situation where your condition would be apparent (GM’s decision). -15 points.

Severe: You find it difficult to function in normal society. You are at -4 to tasks that involve fine manipulation, and such tasks take four times as long. Your DX and Basic Move cannot exceed your racial average (DX 10 and Move 5 for a human), and might be lower. You get -4 to social skills whenever your condition becomes apparent. -35 points.

Crippling: You find it almost impossible to function in normal society. You are at -6 to tasks that involve fine manipulation, and such tasks take six times as long. Your DX and Basic Move cannot exceed 80% of your racial average (DX 8 and Move 4 for a human), and might be considerably lower. You get -6 to social skills most of the time. -55 points.

Many other symptoms are possible, including gross motor impairment (buy down DX or Move), involuntary vocalizations (treat as Noisy, p. 146), and facial contortions (reduce appearance level; see Physical Appearance, p. 21). Violent tics and profane involuntary vocalizations might qualify as Odious Personal Habits (p. 22).

**Nightmares**

-5 points

You are tormented each night by horrible nightmares. Sometimes they’re so harrowing that they affect your efficiency during waking hours. Make a self-control roll each morning upon awakening. If you fail, you suffer nightmares; this costs you 1 FP that you can only recover through sleep. On a roll of 17 or 18, you are left...
shaking, and are at -1 to all skill and Perception rolls for the entire day.

These nightmares can be so vivid that they’re indistinguishable from reality. The GM might choose to play them out in the game, starting out like a normal scenario and steadily becoming more horrible. The victim should only gradually come to suspect that he is dreaming. Such dreams can have a dramatic effect on the dreamer’s waking life, such as temporary Obsessions or Phobias, or even a psychosomatic loss of HP or attribute levels.

If other PCs are involved in the nightmare, they’re completely unaffected by anything that occurs there (but if the nightmare takes a long time to play out, the GM might wish to reward the players with a bonus character point as a token of appreciation for their time – maybe two points if they roleplay the dream-situation particularly well). It’s the GM’s option whether to let the other players know in advance that the scenario is a dream. Either way can lead to unique and fascinating roleplaying.

**No Depth Perception**

You have two eyes, but you lack effective binocular vision and cannot visually judge distances. This might be due to a vision disorder or a quirk of your racial neurology. The game effects are identical to One Eye (p. 147); you may not take both disadvantages.

**No Fine Manipulators**

Your body lacks hands and possibly limbs. Point value depends on the extent of your limitation:

No Fine Manipulators: You have no body part more agile than paws or hooves. You cannot use your limbs to make repairs, pick locks, tie knots, wield weapons, etc., or even to grasp anything. You don’t have a rear appendage that is as good as a hand, you do not have No Fine Manipulators! -30 points.

No Manipulators: You have no limbs. The only way for you to manipulate objects is to push them around with your body or head. You can still move, and are capable of rolling, wriggling, bouncing, etc. at your Basic Move unless you buy it down to 0. -50 points.

Note that this trait is limited to non-humans and supers. Either level qualifies you to buy ST and DX with the -40% No Fine Manipulators limitation.

**No Legs**

This disadvantage assumes that your race lacks legs. If your race has legs, but you are missing yours, see Lame (p. 141).

You are a member of a legless race. There are several different forms of this trait, but in all cases, you cannot kick, cannot be struck in the legs in combat, and need not wear leg armor. The point costs below assume that the benefit of having no legs for foes to target in combat balances the drawback of being unable to kick.

**Aerial:** You cannot move on land, but you can hover, glide, or fly. You **must** purchase the Flight advantage (p. 56). Calculate Basic Speed as usual and use this value to determine your basic air Move, as described for Flight. Your ground Move is 0. 0 points.

**Aquatic:** You cannot move on land, but you are adapted to movement on or in water, like a ship or a fish. Calculate Basic Move and use this as your basic water Move. Your ground Move is 0. You suffer no skill penalties for working in or under water. 0 points. If your mobility depends on fins, masts, paddles, or sails that you can’t arm, or you can’t dive: -5 points. If both: -10 points.

**Bounces, Rolls, or Slithers:** You move on land without using legs, like a snake or a wheel-form robot. Work out Basic Move and use it as your ground Move, just as a legged character would. 0 points.

**Semi-Aquatic:** You “walk” on flippers, like a seal. Use Basic Move as your basic water Move and 1/5 this as your ground Move – that is, reverse the normal relationship between ground and water Move. You suffer standard skill penalties in the water: 0 points.

**Sessile:** Your base is anchored where you sit, like a tree or a building. You can’t move under your own power in any environment, and lack the option of using a moving platform (although you can be moved, with considerable effort). Your Basic Move is automatically 0, and you get no extra points for this. You can still have manipulators. If so, you wield weapons at no DX penalty, because unlike those with the Lame disadvantage, you have a very stable base! -50 points.

**Tracked or Wheeled:** You have tracks or wheels instead of legs. Specify how many – one to four, or any higher even number. If using hit locations, treat each track or wheel as if it were a leg. You can neither jump nor negotiate obstacles that require arms and legs working together (e.g., a ladder or rope). You always leave a visible trail (giving others a Tracking bonus: +1 for Wheeled, +2 for Tracked). Tracks are also noisy (+2 to all Hearing rolls to detect you), but let you handle rough terrain more easily. Tracked and Wheeled do not reduce Move; in fact, you may buy up to three levels of Enhanced Move (Ground). This disadvantage usually accompanies the Machine meta-trait (p. 263). -20 points.
No Manipulators

see No Fine Manipulators, p. 145

No Sense of Humor

-10 points

You never get any jokes; you think everyone is earnestly serious at all times. Likewise, you never joke, and you are earnestly serious at all times. Others react at -2 to you in any situation where this disadvantage becomes evident.

No Sense of Smell/Taste

-5 points

This affliction – known as anosmia – prevents you from smelling or tasting anything. Thus, you are unable to detect certain hazards that ordinary people spot quickly. However, the disability has its advantages... you need never worry about skunks, and can always eat what is set before you.

Nocturnal

-20 points

You can only be active when the sun is below the horizon. This represents more than a preference for night over day! As soon as dawn starts to break, you become lethargic – and when the sun clears the horizon, you fall paralyzed and comatose until the sun goes down again.

Note that this is not the same as the biological term “nocturnal.”

Special Enhancements

Permanent Paralysis: You turn to stone or suffer some other permanent incapacitation if struck by the sun’s rays. Only one specific power or item – most often a powerful magic spell – can reverse this effect. Details are up to the GM. +100%.

Noisy

-2 points/level

You make a lot of noise! Perhaps you’re a ghost with clanking chains, a cyborg with a rasping ventilator, or a machine with a loud engine... or perhaps you’re absurdly inept at stealth.

You make noise constantly – even when standing still – unless you are comatose (for animate beings) or powered down (for machines). Each level gives +2 to Sense rolls to hear you or -2 to your Stealth rolls, as the situation warrants. In some circumstances (e.g., at the opera), each level might also give -1 to reactions! You may not take more than five levels of Noisy without the GM’s permission.

Non-Iconographic

-10 points

You are incapable of processing abstract images and symbols. Graphical computer interfaces, maps, heraldic devices, and magical runes are completely meaningless to you. Like Dyslexia (p. 134), this is a structural shortcoming of your brain; you cannot normally buy it off.

You cannot learn Cartography, Heraldry, Symbol Drawing, or any similar skill used mainly to design or arrange patterns and symbols. You also cannot use graphical computer interfaces; you are limited to text interfaces and immersive virtual realities. Finally, since you cannot grasp magical symbols, you cannot learn magic save through oral tradition.

Note that you can process text without difficulty, and may learn written languages normally (see Language, p. 23).

Numb

-20 points

You have no sense of touch. You have a limited degree of pressure sense – enough to feel your weight and stand up and walk without falling over – but you cannot distinguish textures by touch at all. Feats that depend on touch alone (e.g., touch-typing, or untying your hands behind your back) are impossible for you.

When performing a task that requires hand-eye coordination, you suffer all the effects of one level of Ham-Fisted (p. 138) unless you take twice as long to perform the action and can clearly see what you’re doing. If you also have Ham-Fisted, add its effects.

You experience pain, temperature, and shock as acutely as anyone else, unless you also have High Pain Threshold (p. 59), but you won’t know where you were injured without looking. Instead, you feel pain as generalized shock throughout your entire body. As a result, you cannot perform First Aid on yourself if you can’t see the injury.

Oblivious

-5 points

You understand others’ emotions but not their motivations. This makes you awkward in situations involving social manipulation. You are the classic “nerd”! You have -1 to use or resist Influence skills (see Influence Rolls, p. 359): Diplomacy, Fast-Talk, Intimidation, Savoir-Faire, Sex Appeal, and Streetwise.

Obsession

-5 or -10 points* 

Your entire life revolves around a single goal. Unlike Compulsive Behavior (p. 128), this is not a daily habit, but an overpowering fixation that motivates all of your actions. And unlike Fanaticism (p. 136), this does not necessarily imply a set of philosophical beliefs.

You must rationalize all of your actions as an attempt to reach your goal. Make a self-control roll whenever it would be wise to deviate from your goal. If you fail, you continue to pursue your Obsession, regardless of the consequences.

Point cost depends on the time needed to realize your goal. A short-term goal (e.g., assassinating someone) is worth -5 points, while a long-term goal (e.g., becoming President) is worth -10 points. In both cases, modify the base cost to reflect your self-control number. If your Obsession causes others to react badly, take Odious Personal Habit (p. 22) or Delusion (p. 130) as well.

Should you ever reach your goal, you must either substitute a new goal or buy off your Obsession.

Odious Personal Habits

see p. 22

On the Edge

-15 points*

You take grossly unreasonable risks in the face of mortal danger. Make a self-control roll whenever you face a life-threatening situation: piloting a burning vehicle, staring down an entire street gang while armed only with a toothbrush, etc. If you fail, you...
may not back down from the challenge — but you may roll again after every success roll or reaction roll relating to the situation. This might be once per second in a potential combat situation but only once per day on a dangerous space mission.

In combat, make a self-control roll every time you take your turn. If you fail, you must make an All-Out attack or engage in some other kind of near-insane, suicidal behavior.

Most people think you’re crazy if they witness this behavior; giving -2 on reaction rolls. Individuals who value bravery over self-preservation (GM’s decision) will react at +2.

**One Arm ** [-20 points]

You have only one arm. You cannot use two-handed weapons, wield two weapons at once (or a weapon and a shield), or perform any task that requires two arms. You get -4 on tasks that are possible with one arm but that are usually executed with two (e.g., most Climbing and Wrestling rolls). You have no penalty on tasks that require only one arm. In all cases, the GM’s ruling is final. When in doubt, try a quick reality check if possible!

If you originally had two arms, assume that you lost the left arm if you were right-handed, or vice versa.

If you are a nonhuman who only had one arm to begin with, your “arm” need not be an arm at all — it can be any appendage capable of fine manipulation. For instance, a parrot that used its beak and tongue would have One Arm (and not No Fine Manipulators).

If you have advanced prosthetics that cancel One Arm while worn, apply a Mitigator limitation (p. 112). Should you ever eliminate One Arm completely through surgery or an ultra-tech replacement limb, you must pay back the points you received for it.

**One Eye ** [-15 points]

You have only one eye. Either you are missing an eye (in which case you may wear a glass eye or cover the missing eye with a patch) or you have only a single, cyclopean eye. You suffer -1 to DX in combat and on any task involving hand-eye coordination, and -3 on ranged attacks (unless you Aim first) and on rolls to operate any vehicle faster than a horse and buggy.

Some cultures regard those who are missing an eye as unattractive. If this is generally true in your game world, losing an eye will also reduce your appearance by one level (see Physical Appearance, p. 21). If you start with this trait, assume that it is already factored into your appearance — do not apply an additional reaction modifier.

**One Hand ** [-15 points]

You have only one hand. For the most part, use the rules under One Arm (above). The difference is that you may make unarmed parries with a handless arm, and possibly strap something to it (e.g., a shield).

Good-quality prosthetic replacements use the rules under One Arm. Not all prosthetics are good enough to count as Mitigators, though. A low-tech mechanical replacement gives you -2 (for a grabber) or -4 (for a hook or claw) on tasks involving that hand.

A hook or claw also counts as an undroppable large knife in combat (use Knife skill), and gives +1 to Intimidation skill if waved at your foes. In some societies, such crude replacements will reduce appearance as described under One Eye (above).
**Overconfidence**

-5 points*

You believe that you are far more powerful, intelligent, or competent than you really are. You may be proud and boastful or just quietly determined, but you must roleplay this trait.

You must make a self-control roll any time the GM feels you show an unreasonable degree of caution. If you fail, you must go ahead as though you were able to handle the situation! Caution is not an option.

You receive +2 on all reaction rolls from young or naive individuals (who believe you are as good as you say you are), but -2 on reactions from experienced NPCs.

Overconfidence is like Megalomania (p. 144) on a smaller scale. Robin Hood was overconfident – he challenged strangers to quarterstaff duels. Hitler was a megalomaniac – he invaded Russia! Heroes are rarely megalomaniacal but often overconfident.

**Overweight**

see p. 19

**Pacifism**

Variable

You are opposed to violence. This can take several forms. Choose one of the following:

*Reluctant Killer*: You are psychologically unprepared to kill people. Whenever you make a deadly attack (e.g., with a knife or a gun) against an obvious person whose face is visible to you, you are at -4 to hit and may not aim. If you cannot see the foe’s face (due to a mask, darkness, or distance, or because you attacked from behind), the penalty is only -2, save in close combat. You have no penalty to attack a vehicle (even an occupied one), an opponent you do not believe is a person (including things with Horrific or Monstrous appearance), or a target you can’t actually see (e.g., a set of map coordinates or a blip on a radar screen). If you kill a recognizable person, the effect on you is the same as for Cannot Kill (see below). You have no problem with your allies killing; you may even supply ammo, loaded weapons, and encouragement! You just can’t do the killing yourself. -5 points.

*Cannot Harm Innocents*: You may fight – you may even start fights – but you may only use deadly force on a foe that is attempting to do you serious harm. Capture is not “serious harm” unless you are already under penalty of death or have a Code of Honor that would require suicide if captured. You never intentionally do anything that causes, or even threatens to cause, injury to the uninvolved – particularly if they are “ordinary folks.” This trait is especially appropriate for crime-fighters, supers, etc. -10 points.

*Cannot Kill*: You may fight – you may even start fights – but you may never do anything that seems likely to kill another. This includes abandoning a wounded foe to die “on his own!” You must do your best to keep your companions from killing, too. If you do kill someone (or feel responsible for a death), you immediately suffer a nervous breakdown. Roll 3d and be totally morose and useless (roleplay it!) for that many days. During this time, you must make a Will roll to offer any sort of violence toward anyone, for any reason. -15 points.

*Self-Defense Only*: You only fight to defend yourself or those in your care, using only as much force as necessary (no pre-emptive strikes allowed!). You must do your best to discourage others from starting fights. -15 points.

*Total Nonviolence*: You will not lift a hand against another intelligent creature, for any reason. You must do your nonviolent best to discourage violent behavior in others, too. You are free to defend yourself against attacks by animals, mosquitoes, etc. -30 points.

In a high-realism campaign, the GM might require all PCs to start out with Reluctant Killer or even Cannot Kill, giving them extra points but putting them at a disadvantage when facing hardened foes.

**Paranoia**

-10 points

You are out of touch with reality, and think that everyone is plotting against you. You never trust anyone except old friends... and you keep an eye on them, too, just in case. Most people, understandably, react to you at -2. A paranoid NPC reacts at -4 toward any stranger, and any “legitimate” reaction penalty (e.g., for an unfriendly race or nationality) is doubled. Paranoia goes very well with Delusions (p. 130), which of course have their own disadvantage value!

**Phobias**

Variable*

You are afraid of a specific item, creature, or circumstance. Many fears are reasonable, but a Phobia is an
unreasonable, unreasoning, morbid fear. The point value depends on how common the object of your fear is—fear of darkness is far more troublesome than fear of left-handed plumbers.

Make a self-control roll whenever you are exposed to the object of your Phobia. If you fail, roll 3d, add the amount by which you failed your self-control roll, and look up the result on the Fright Check Table (p. 360). For instance, if your self-control number is 9 but you rolled a 13, roll 3d+4 on the table. The result from the table affects you immediately!

If you succeed, you have successfully mastered your Phobia (for now), but you are still shaken, and have a penalty to all DX, IQ, and skill rolls while the cause of your fear persists. The penalty depends on your self-control number:

<table>
<thead>
<tr>
<th>Self-Control Number</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>-4</td>
</tr>
<tr>
<td>9</td>
<td>-3</td>
</tr>
<tr>
<td>12</td>
<td>-2</td>
</tr>
<tr>
<td>15</td>
<td>-1</td>
</tr>
</tbody>
</table>

You must roll again every 10 minutes to see if the fear overcomes you. Even the mere threat of the feared object requires a self-control roll, although this is at +4. If your enemies actually inflict the feared object on you, you must make an unmodified self-control roll, as described above. If you fail, you might break down, depending on the Fright Check results, but you won’t necessarily talk. Some people can panic and fall apart, but still refuse to talk—just as some people do not talk under torture.

A phobic situation is by definition stressful. If you have other mental disadvantages that are triggered by stress, you are likely to have these reactions if you fail to resist a Phobia.

<table>
<thead>
<tr>
<th>Phobia</th>
<th>Disadvantage</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Alone (Autophobia)</td>
<td>You cannot stand to be alone, and do anything in your power to avoid it.</td>
<td>-15 points.*</td>
</tr>
<tr>
<td>Blood (Hemophobia)</td>
<td>The sight of blood gives you the screaming willies! You need to make a self-control roll during most combats . . .</td>
<td>-10 points.*</td>
</tr>
<tr>
<td>Cats (Ailurophobia)</td>
<td>-5 points.*</td>
<td></td>
</tr>
<tr>
<td>Crowds (Demophobia)</td>
<td>Any group of over a dozen people sets off this fear unless they are all well known to you. The self-control roll is at -1 for over 25 people, -2 for a crowd of 100 or more, -3 for 1,000, -4 for 10,000, and so on.</td>
<td>-15 points.*</td>
</tr>
<tr>
<td>Darkness (Scotophobia)</td>
<td>A common fear, but crippling. You should avoid being underground if possible; if something happens to your flashlight or torch, you might well lose your mind before you can relight it.</td>
<td>-15 points.*</td>
</tr>
<tr>
<td>Death and the Dead (Necrophobia)</td>
<td>You are terrified by the idea of death. Make a self-control roll in the presence of any dead body (animals don’t count, but portions of human bodies do). Roll at -4 if the body is that of someone you know, or -6 if the body is unnaturally animated in some way. A ghost (or apparent ghost) also requires a roll at -6.</td>
<td>-10 points.*</td>
</tr>
<tr>
<td>Dirt (Mysophobia)</td>
<td>You are deathly afraid of infection, or just of dirt and filth. Make a self-control roll when you must do something that might get you dirty. Roll at -5 to eat any uncustomed food. You should act as “finicky” as possible.</td>
<td>-10 points.*</td>
</tr>
<tr>
<td>Dogs (Cynophobia)</td>
<td>This includes all canines: foxes, wolves, coyotes, wild dogs, etc.</td>
<td>-5 points.*</td>
</tr>
<tr>
<td>Enclosed Spaces (Claustrophobia)</td>
<td>A common, crippling fear. You are uncomfortable any time you can’t see the sky—or at least a very high ceiling. In a small room or vehicle, you feel the walls closing in on you . . . You need air! This is a dangerous fear for someone who plans to go underground.</td>
<td>-15 points.*</td>
</tr>
</tbody>
</table>
**Fire (Pyrophobia):** Even a burning cigarette bothers you if it comes within five yards. **-5 points.**

**Heights (Acrophobia):** You may not voluntarily go more than 15 feet above ground, unless you are inside a building and away from windows. If there is some chance of an actual fall, self-control rolls are at **-5. -10 points.**

**Insects** (Entomophobia): You are afraid of all "bugs." Large or poisonous ones give -3 to self-control rolls. Very large ones, or large numbers, give -6. Avoid hills of giant ants. **-10 points.**

**Loud Noises** (Brontophobia): You avoid any situation where loud noises are likely. A sudden loud noise requires an immediate self-control roll. A thunderstorm is a traumatic experience for you! **-10 points.**

**Machinery** (Technophobia): You can never learn to repair any sort of machine and refuse to learn to use anything more complicated than a crossbow or bicycle. Any highly technological environment calls for a self-control roll; dealings with robots or computers require a roll at -3, and hostility from intelligent machines requires a roll at -6. **-5 points at TL4 or below, -15 points at TL5 or above.**

**Magic** (Manaphobia): You can never learn to use magic, and you react badly to any user of magic. Make a self-control roll whenever you are in the presence of magic. This roll is at -3 if you are to be the target of friendly magic, and -6 if you are the target of hostile magic. (The magic does not have to be real, if you believe in it!) **-15 points in a setting where magic is common, -10 if it is known but uncommon, -5 if “real” magic is essentially unknown.**

**Monsters** (Teratophobia): Any “unnatural” creature sets off this fear. You have -1 to -4 on the self-control roll if the monster seems very large or dangerous, or if there are a lot of them. Note that the definition of “monster” depends on experience. An American Indian would consider an elephant monstrous, while an African pygmy would not! **-15 points.**

**Number 13** (Triskaidekaphobia): You must make a self-control roll whenever you have to deal with the number 13 – visit the 13th floor, buy something for $13.00, etc. Roll at -5 if Friday the 13th is involved! **-5 points.**

**Oceans** (Thalassophobia): You are afraid of any large body of water. Ocean travel, or even air travel over the ocean, is basically impossible for you, and encounters with aquatic monsters are also upsetting. **-10 points.**

**Open Spaces** (Agoraphobia): You are uncomfortable whenever you are outside, and actually become frightened when there are no walls within 50 feet. **-10 points.**

**Psionic Powers** (Psionophobia): You are afraid of those with known psionic powers. An actual exhibition of power in your presence requires a self-control roll. You do not voluntarily allow anyone to use a psionic power on you. The power does not have to be real – all that matters is that you believe it is! **-15 points if psi powers are common, -10 if they are uncommon, -5 if they are essentially unknown.**

**Reptiles** (Herpetophobia): You come unglued at the thought of reptiles, amphibians, and similar scaly slimies. A very large reptile, or a poisonous one, gives -2 to self-control rolls; a horde of reptiles (such as a snake pit) gives -4. **-5 points.**

**Sex** (Coitophobia): You are terrified by the idea of sexual relations or the loss of your virginity. **-10 points.**

**Sharp Things** (Aichmophobia): You are afraid of anything pointed. Swords, spears, knives, and hypodermic needles all give you fits. Trying to use a sharp weapon, or being threatened with one, requires a self-control roll at -2. **-15 points at TL5 or below, -10 at TL6 or above.**

**Spiders** (Arachnophobia): **-5 points.**

**Strange and Unknown Things** (Xenophobia): You are upset by any sort of strange circumstances, and in particular by strange people. Make a self-control roll when surrounded by people of another race or nationality; roll at -3 if the people are not human. If you lose control, you might well attack strangers out of fear. **-15 points.**

**Sun** (Helioaphobia): **-15 points.**

**Weapons** (Hoplophobia): The presence of any sort of weaponry is stressful. Trying to use a weapon, or being threatened with one, requires a self-control roll at -2. **-20 points.**

---

**DISADVANTAGES**

---

**Post-Combat Shakes**

**-5 points**

You are shaken and sickened by combat, but only after it’s over. Make a self-control roll at the end of any battle. It is up to the GM to determine when a battle has truly ended, and he may apply a penalty if the combat was particularly dangerous or gruesome. If you fail, roll 3d, add the amount by which you failed your self-control roll, and look up the result on the Fright Check Table (p. 360). For instance, if your self-control number is 12 but you rolled a 14, roll 3d+2 on the table. The result from the table affects you immediately!

**Pyromania**

**-5 points**

You like fires! You like to set fires, too. For good roleplaying, you must never miss a chance to set a fire, or to appreciate one you encounter. Make a self-control roll whenever you have an opportunity to set a fire.

**Quadriplegic**

**-80 points**

You are paralyzed in all your arms and legs, or lack limbs entirely. You can neither manipulate objects nor move yourself without assistance. You suffer all the bad effects of Paraplegic (see Lame, p. 141) and No Manipulators (see No Fine Manipulators, p. 145). If the GM is enforcing a disadvantage limit, Quadriplegic counts against the limit – but you may reduce ST and DX by up to four levels each without the resulting disadvantage points counting against the limit (points gained from further reductions count normally).

For rules governing prosthetic limbs and surgical cures, see Lame (p. 141) and One Arm (p. 147) for legs and arms, respectively.

**Reprogrammable**

**-10 points**

You can be programmed to obey a master. If you have Slave Mentality (p. 154), you must obey slavishly and remain strictly within the letter of your master’s commands. If you lack Slave Mentality, you may interpret his orders creatively, as long as you
remain within either their letter or spirit (your choice). If you are nonsen- 
tient (IQ 0), you have no interest in doing anything but following your 
programming!

You may have both Duty and Reprogrammable. If so, you must do 
your best to fulfill both obligations. Should the two come into conflict, 
your programming always comes first.

This trait is most appropriate for golems, mindless undead, robots, and 
similar automata. It is rarely suitable for PCs, and the GM may choose to 
forbid it entirely.

**Reputation**

see p. 26

A negative reputation counts as a disadvantage. Note it as such on your 
character sheet!

**Restricted Diet**

-10 to -40 points

You require a specialized food or fuel that is hard to come by. Unlike 
Dependency (p. 130), you do not take damage if you go without . . . you just 
can’t eat or refuel, which will eventually incapacitate you. Point value 
depends on the rarity of the item you consume:

*Rare:* Dragon’s blood, exotic nutrient mixture, weapons-grade uranium. 
-40 points.

*Occasional:* Virgin’s blood, rocket fuel, babies, radioactives. -30 points.

*Common:* Human flesh, gasoline, liquid hydrogen. -20 points.

*Very Common:* Fresh meat, any hydrocarbon fuel (gasoline, diesel, etc.), electric batteries, fresh blood. -10 points.

Restricted Diet is appropriate for normal humans with chronic gas- 
trointestinal disorders.

**Special Limitations**

*Substitution:* You can try to con- 
sume a food or fuel similar to the one 
you require. For instance, a cyborg 
that requires exotic nutrients could try 
ordinary human food, or a machine 
that requires gasoline could try diesel. 
This sustains you, but you must make a HT roll after each meal or refueling. 
Failure means your HT attribute drops by one until you receive appro- 
priate medical or mechanical 
attention. Critical failure means an 
incapacitating reaction (GM’s deci- 
sion): severe immune response, 
engine failure, etc. Those who lack 
this limitation but for some reason 
attempt substitution derive no suste- 
nance at all and must still make the 
HT roll above; treat success as failure 
and failure as critical failure. -50%.

**Restricted Vision**

-15 or -30 points

You have an unusually narrow field 
of vision. A normal character can see a 
120° arc in front of him without turn- 
ing his head, and has 30° of peripher- 
al vision to either side, giving him a 
180° “arc of vision” for observation 
and ranged attacks. On a battle map, 
this means he has three “front” hexes, 
two “side” hexes (“left” and “right”), 
and a single “back” hex. Your vision is 
considerably more restricted. This 
comes in two levels:

*No Peripheral Vision:* Your arc of 
vision is a 120° wedge to the front. On a 
map, your “left” and “right” hexes 
become “back” hexes – that is, you 
have three “back” hexes, and get no 
defense against attacks originating 
from these hexes! -15 points.

*Tunnel Vision:* Your arc of vision is 
a 60° wedge to the front. On a map, 
your only “front” hex is the one 
directly ahead of you. The hexes to 
either side of this are “side” hexes: you 
are at -2 to defend against attacks 
from these hexes, and can only attack 
into those hexes with a Wild Swing. 
everything else is a “back” hex, as 
above. -30 points.

**Revulsion**

-5 to -15 points

You have an incapacitating super-
natural reaction to an ordinarily 
innocuous substance. If you touch or 
breathe the substance, you must 
make a HT roll. On a failure, you are at -5 to all skills and 
attributes for the next 10 minutes. If you ingest the substance, you are at -5 
to attributes and -10 to all skills and Sense rolls for 10 minutes. Point 
value depends on the rarity of the sub-
stance:

*Occasional* (leather, soap): -5 points.

*Common* (smoke, wood): -10 points.


This reaction is physical in nature. 
For mental aversions, see *Dread* 
(p. 132).
Sadism -15 points*

You delight in cruelty . . . mental, physical, or both. Make a self-control roll whenever you have an opportunity to indulge your desires and know you shouldn’t (e.g., because the prisoner is one who should be released unharmed). If you fail, you cannot restrain yourself. Those who become aware of your problem react at -3 unless they are from a culture that holds life in little esteem.

This is a particularly “evil” trait, more appropriate to villainous NPCs than to heroic PCs. The GM may completely prohibit Sadism if he does not want anyone roleplaying it in his campaign.

It is possible, though despicable, to possess both Bully (p. 125) and Sadism.

Secret -5 to -30 points

A Secret is an aspect of your life or your past that you must keep hidden. Revelation would result in lasting negative consequences. The point value depends on the severity of those consequences:

Serious Embarrassment: If this information gets around, you can forget about ever getting a promotion, getting elected, or marrying well. Alternatively, revelation of your Secret might simply attract unwelcome public attention. -5 points.

Utter Rejection: If your Secret is revealed, it will change your whole life. Perhaps you will lose your job and be rejected by friends and loved ones. Perhaps admirers, cultists, long-lost relatives, or the press will harass you. -10 points.

Imprisonment or Exile: If the authorities uncover your Secret, you’ll have to flee, or be imprisoned for a long time (GM’s discretion). -20 points.

Possible Death: Your Secret is so terrible that you might be executed by the authorities, lynched by a mob, or assassinated (by the Mafia, CIA, etc.) were it revealed. You would be a hunted man. -30 points.

Frequency of Appearance

In general, a Secret appears in a particular game session if the GM rolls a 6 or less on 3d before the adventure begins. However, as for all other disadvantages of this type, the GM need not feel constrained by the appearance roll. If he thinks that the Secret should come into play, it does!

When a Secret appears in play, it is not automatically made public. The GM will give you a chance to prevent your Secret from being revealed. This might require you to cave in to blackmail or extortion, steal incriminating documents, or even silence the person who knows the Secret. Regardless of the solution, however, it’s only temporary – the Secret will appear again and again until either you buy it off with earned character points or it is finally revealed.

Effects of Revelation

If a Secret is made public, there is an immediate negative effect ranging from serious embarrassment to possible death, depending on the severity of the Secret (see above). There is also a lasting effect: you suddenly acquire new, permanent disadvantages – or lose advantages – worth points equal to twice what the Secret was worth! These new disadvantages replace the Secret on your character sheet, and reduce your point value accordingly.

The GM chooses the new disadvantages and lost advantages, which should always be appropriate to the Secret. Most Secrets turn into Enemies (p. 135), negative Reputations (p. 26), and Social Stigmas (p. 155), or reduce or remove advantages described under Wealth and Influence (pp. 25-30). Some could even turn into mental or physical disadvantages.
Selfish ✿ -5 points*

You are self-important and status-conscious, and spend much of your time striving for social dominance. Make a self-control roll whenever you experience a clear social slight or "snub." On a failure, you lash out at the offending party just as if you had Bad Temper (p. 124) – likely resulting in a bad reaction (+3 to the target's reactions toward you) and putting you in an awkward social situation.

Selfish NPCs react to perceived slights at a penalty:

<table>
<thead>
<tr>
<th>Self-Control Number</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>-5</td>
</tr>
<tr>
<td>9</td>
<td>-4</td>
</tr>
<tr>
<td>12</td>
<td>-3</td>
</tr>
<tr>
<td>15</td>
<td>-2</td>
</tr>
</tbody>
</table>

Selfless ✿ -5 points*

You are altruistic and self-sacrificing, and put little importance on personal fame and wealth. You must make a self-control roll to put your needs – even survival – before those of someone else. A Selfless race will have a "hive mentality."

Semi-Upright ✿ ✿ -5 points

You have a semi-upright posture, like a chimpanzee. You can stand up more-or-less comfortably, allowing you to use your forelimbs to bash enemies, hold babies, or even manipulate objects. You can manage a clumsy gait while upright (-40% to Move), but you must use all of your limbs to run at full Move. If you have DX 12 or more, you can carry a small object or two while walking.

Sense of Duty ✿ -2 to -20 points

You feel a strong sense of commitment toward a particular class of people. You will never betray them, abandon them when they're in trouble, or let them suffer or go hungry if you can help. This is different from a Duty (p. 133), which is imposed upon you. A Sense of Duty always comes from within.

If you are known to have a Sense of Duty, the GM will adjust the reactions of others by +2 when rolling to see whether they trust you in a dangerous situation. However, if you go against your Sense of Duty by acting against the interests of those you are supposed to be looking out for, the GM will penalize you for bad roleplaying.

The GM will assign a point value to your Sense of Duty based on the size of the group you feel compelled to aid:

- Individual (the President, your wingman, etc.): -2 points.
- Small Group (e.g., your close friends, adventuring companions, or squad): -5 points.
- Large Group (e.g., a nation or religion, or everyone you know personally): -10 points.
- Entire Race (all humanity, all elves, etc.): -15 points.
- Every Living Being: -20 points.

You cannot claim points for a Sense of Duty toward Allies, Dependents, or Patrons. The point costs of these traits already take such a bond into account.

You can take a Sense of Duty toward adventuring companions. If you do, you must share equipment with and render aid to the other members of your adventuring party, and go along with majority decisions. The GM might make this mandatory in games where the party needs to get along. This gives everyone a “free” 5 points to spend... but if you start backstabbing, running off on your own, etc., the GM is free to overrule your actions and point to these bonus points as the reason why.

Shadow Form ✿ -20 points

See p. 83. If you cannot turn this ability off, it is a disadvantage.

Short Attention Span ✿ -10 points*

You find it difficult to concentrate on a single task for longer than a few minutes. Make a self-control roll whenever you must maintain interest in something for an extended period of time, or whenever a distraction is offered. If you fail, you automatically fail at the task at hand. The GM might give you a small bonus to the self-control roll in situations where concentration is crucial, such as when your survival is at stake.
Short Lifespan

-10 points/level

Your lifespan is much shorter than the human norm. Each level of this disadvantage halves your lifespan (round down). This affects the age at which you reach maturity, the ages at which aging rolls begin and increase in frequency, and the interval between aging rolls; see the table (above right). No more than four levels are possible. Short Lifespan is often found in conjunction with Self-Destruct (p. 153).

Shyness

-5, -10, or -20 points

You are uncomfortable around strangers. Roleplay it! This disadvantage comes in three levels; you can buy it off one level at a time.

Mild: You are uneasy with strangers, especially assertive or attractive ones. You have -1 on skills that require you to deal with people, including Acting, Carousing, Diplomacy, Fast-Talk, Intimidation, Leadership, Merchant, Panhandling, Performance, Politics, Public Speaking, Savoir-Faire, Sex Appeal, Streetwise, and Teaching. -5 points.

Severe: You are very uncomfortable around strangers, and tend to be quiet even among friends. -2 the skills listed above. -10 points.

Crippling: You avoid strangers whenever possible. You may not learn the skills listed above at all, and are at -4 on default rolls on such skills. -20 points.

Skinny

see p. 18

Slave Mentality

-40 points

You have no initiative, and become confused and ineffectual without a “master” to give you orders. You must make an IQ roll at -8 before you can take any action that isn’t either obeying a direct order or part of an established routine. As well, you automatically fail any Will roll to assert yourself or resist social influence except in circumstances where the GM rules that success might be possible, in which case you roll at -6.

This doesn’t necessarily imply low IQ or Will. You might be intelligent enough to obey the command, “Program the computer to detect quarks,” but if you were starving and found $10, you would have to roll vs. IQ-8 to decide to pick up the money and go buy food without being told to do so. Similarly, you might be strong-willed enough to make all your Fright Checks in the presence of terrifying monsters, yet roll at Will-6 to resist the unsuitable manipulations of an obvious con man.

This disadvantage is rarely appropriate for PCs, and the GM may choose to forbid it entirely.

Sleepwalker

-5 points*

You walk in your sleep (“somnambulate”). This is merely annoying or embarrassing under most circumstances (unless you fall down the stairs), but it can be very dangerous to sleepwalk while encamped in hostile territory!

Sleepwalking is merely annoying or embarrassing under most circumstances, but it can be very dangerous to sleepwalk while encamped in hostile territory!

If sleepwalking would matter during an adventure, the GM will make a self-control roll for you whenever you go to sleep. If you fail, you sleepwalk sometime during the night. You wake up after walking for 1d minutes, or if someone awakens you. The GM will make DX rolls to see if you trip while going down stairs or walking over rough ground – if this happens, you wake up suddenly and are mentally stunned.

You are considered to be in a hypnotic state while sleepwalking, and thus are very susceptible to telepathic influences. If you possess supernatural abilities, you might use these while sleepwalking (e.g., if you have Warp, you might “sleepwarp” instead).

Sleepy Variable

This is a racial trait. Members of the race need to sleep more than the human norm of 1/3 of the time. Point value depends on the fraction of the time they must spend asleep:

<table>
<thead>
<tr>
<th>Time Spent Asleep</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 of the time</td>
<td>-8 points</td>
</tr>
<tr>
<td>2/3 of the time</td>
<td>-16 points</td>
</tr>
<tr>
<td>3/4 of the time</td>
<td>-20 points</td>
</tr>
<tr>
<td>7/8 of the time</td>
<td>-26 points</td>
</tr>
</tbody>
</table>

The race’s precise schedule is a “special effect.” For instance, a race that sleeps 3/4 of the time might be awake and active for three days straight and then sleep for a full nine days.
**Slow Eater ★★★** -10 points

You spend a lot of your time eating. Each meal takes about two hours, as opposed to about 1/2 hour for most humans. This reduces the time available for study, long tasks, and travel on foot by 4 1/2 hours per day.

**Slow Healing ★★★** -5 points/level

Your body heals very slowly. Each level (maximum three levels) doubles the interval between HT rolls to regain lost HP: roll every two days for Slow Healing 1, every four days for Slow Healing 2, and every eight days for Slow Healing 3. Take Unhealing (p. 160) if you heal even more slowly. Each level also doubles the time allowed between Physician rolls when under the care of a competent physician (see Medical Care, p. 424).

Normal humans may take no more than one level of Slow Healing.

**Slow Riser ★★★** -5 points

You are not a “morning person.” For one hour after you awaken from any sleep longer than a one-hour nap, you have -2 on all self-control rolls and -1 to IQ and IQ-based skills. Furthermore, whenever the GM assesses attribute penalties for missed sleep, you suffer an extra -1.

**Social Disease ★★★** -5 points

You have contracted a contagious, antibiotic-resistant bacteria, retrovirus, or similar disease. This is only transmitted by close, unprotected physical contact. Those who know about it react to you at -1 and automatically resist your seduction attempts. The disease isn’t fatal – at least not immediately – but may produce physical symptoms (left to the imagination of the player or GM).

**Social Stigma ★★★★★★★** -5 to -20 points

You belong to a race, class, sex, or other group that your society deems inferior. To be worth points, this must be obvious from your physical appearance (a visible brand, tattoo, or magical mark counts), dress, manner, or speech; or easily learned by anyone who cares to check up on you (only valid in societies with free and easy access to information); or the result of public denouncement (e.g., by a powerful leader or media figure) that ensures that everyone you meet knows that you, personally, belong to the disdained group.

A Social Stigma gives you a reaction penalty (-1 per -5 points of Social Stigma), restricts your social mobility, or both. Examples include:

**Criminal Record:** You have been convicted of a crime that your society considers serious. You may be prohibited from legally acquiring certain items (e.g., weapons), taking certain kinds of employment, receiving security clearances, or even traveling outside your country. Many noncriminals who learn of your past react at -1; police, judges, vigilantes, and other law-and-order types usually react at -2. If you are also wanted, take an appropriate Enemy. -5 points.

**Disowned:** Your family has publicly snubbed you. This is only worth points in settings where family ties play a significant social role, and never applies to those who voluntarily part ways with their family. This Social Stigma comes in two levels:

- You would normally be an heir in your culture, but someone else has been named in your stead. This is embarrassing, but you may still count yourself as part of the family. This gives -1 on reaction rolls. -5 points.
- The head of your family – or your entire clan – has wholly and publicly disowned you. This gives -2 on reaction rolls. -10 points.

**Excommunicated:** Your church has cast you out. Followers of your faith react to you at -3. This is only a disadvantage if you are excommunicated by a powerful and widespread religion (most likely state-backed) that plays a significant role in day-to-day life. -5 points.

If your religion has true supernatural power, and you are surrounded by an aura that conveys your shame to co-religionists, angels, and anyone else who would care, no matter how well you disguise yourself, your Social Stigma is worth twice as much. -10 points.

**Ignorant:** You have not learned a skill required of all responsible adults in your society (that is, you have no points in the skill). Others look down upon you as a slacker or a fool. This gives -1 on reactions for each “expected” skill you lack, up to a maximum of four skills. This is only worth points in highly structured societies, or in primitive ones where individuals depend on one another for survival. -5 points/skill.

**Minor:** You are under age by your culture’s standards. You suffer -2 on reaction rolls whenever you try to deal with others as an adult; they might like you, but they do not fully respect you. You might also be barred from nightclubs, vehicle operation, war parties, guild membership, etc., depending on the culture and setting. You must buy off this trait when you reach “legal age” (usually 18) for your time and place. -5 points.

**Minority Group:** You are a member of a minority that the dominant culture around you regards as “barbarians” or “inferior.” You get -2 on reaction rolls made by anyone except your own kind. In an area, profession, or situation where your minority is especially rare, you get -6 on reaction rolls made by your own kind. -10 points.

**Monster:** You are a large carnivore, magical abomination, or other being that is hated or feared regardless of actual appearance or disposition. This gives you -3 on all reaction rolls, and you are liable to be hunted on sight. However, you get +3 to Intimidation rolls in situations where you have the upper hand (GM’s opinion). Examples: a bear or a vampire. -15 points.

**Second-Class Citizen:** You belong to a group that receives fewer rights and privileges than “full citizens.” This gives -1 on all reaction rolls except from others of your own kind. Examples: a woman in 19th-century America, or members of some religions. -5 points.

**Subjugated:** You are a member of a slave nation or race. Within the overlords’ culture, you have no rights, and suffer the negative effects of Second-Class Citizen and Valuable Property. If you manage to escape to freedom, you acquire the entire overlord nation or race as an Enemy. -20 points.

---

**DISADVENTAGES**
**Uneducated:** You are from a class, race, or subculture that lacks a cultural repository of wisdom, eschews formal schooling, and takes a dim view of activities that do not relate directly to survival or procreation. You receive -1 to reactions from more sophisticated folk in any situation where your lack of schooling would be apparent, and you may not start with any "book-learned" skills (GM's discretion; most IQ/Hard skills qualify). You may buy off this trait once you have lived in "civilized" parts for long enough (GM's decision). -5 points.

**Valuable Property:** Your society regards you as somebody's property rather than as a "legal person." This takes the form of limited freedom or lack of intellectual respect more than as a reaction modifier. *Examples:* a woman in 18th-century America or 16th-century Japan. -10 points.

Social Stigmas must bind those who take them. For example, a medieval Japanese lady must pay for her 10-point bonus by giving up her freedom of movement in many cases, and must defer to older male relatives when they are present. A black slave in 19th-century America is allowed to learn very little and own almost no property, and has little freedom of any kind unless he manages to escape. (If he does escape, he has traded his Social Stigma for a powerful Enemy!)

It is possible to have multiple Social Stigmas, provided they do not significantly overlap (GM's discretion). For instance, a teenager who drops out of school and joins a street gang could believably end up with Minor, Uneducated, and Criminal Record.

**Space Sickness 🌌**

-10 points

You are miserable in free fall. You can never learn Free Fall skill; you must always roll at default. In addition, you are at -4 on your HT roll to avoid "space adaptation syndrome" (see p. 434) – and if you fail the first HT roll, the only way for you to recover is to return to normal gravity.

This trait is only allowed in campaigns that feature regular space travel.

**Split Personality 🧠**

-15 points*

You have two or more distinct personalities, each with its own set of behavior patterns. They may interpret their memories differently, and even use different names.

For each personality, select a "package" of mental disadvantages and up to five quirks. The GM may also permit variations in IQ, Perception, Will, and mental advantages, where these would make sense. Each package of mental traits must be worth the same number of points. When calculating the value of your character, count the "package price" once – not once for each personality. All your personalities have the same physical traits and skills (although some personalities might not use certain skills), and share any mental trait that is not part of one of these packages.

*Example:* Bob Smith has three personalities. "Col. Smith" is a stern disciplinarian with Delusion ("I am a military officer") [-10]. Code of Honor (Soldier's) [-10], and the quirk "Stands on ceremony" [-1]. "Bobby" is a party animal with -2 to Will [-10]. Compulsive Carousing (6) [-10], and the quirk "Sleeps all day and goes out at night" [-1]. "Smitty" is a troublemaker with Overconfidence (12) [-5], Trickster [-15], and the quirk "Steals for fun" [-1]. All three personalities share all of Bob's other traits. Each package totals -21 points. Bob's player claims the -21 points once. With -15 points for Split Personality (12), the total point value is -36 points.

You must make a self-control roll in any stressful situation (but no more than once per hour of game time). On a failure, one of your other personalities emerges, and you behave according to its mental disadvantages and quirks. If there are several possibilities, the GM should either choose a personality appropriate to the situation or roll randomly.

All your personalities are somewhat shallow and affected, which gives -1 to reactions at all times. Those who witness a personality change will feel (possibly with justification) that you are a dangerous nutcase, and react at -3.

**Squeamish 🧠**

-10 points*

You dislike "yucky stuff": little bugs and crawly things, blood and dead bodies, slime, etc. When exposed to such things, you react just as if you had a Phobia; see Phobias, p. 148. Note that you do not suffer from the standard fears of insects, reptiles, dirt, and the dead! What bothers you isn't huge bugs or reptiles, ordinary "clean" dirt, and ghosts; it's nasty creepy things, filth, and bits of grue.

**Status**

see p. 28

Status below 0 is a disadvantage. Almost everyone reacts negatively to you!

**Stress Atavism 🧠**

Variable*

This disadvantage is normally available only to characters who are members of races "uplifted" from an animal state.

You temporarily "regress" when frightened, angered, fatigued, or injured. Make a self-control roll in those situations. On a failure, you behave like an animal, acting on impulse and instinct.

Once the stressful situation has passed, make a self-control roll every minute. If friends comfort you, roll at +2. If one of these people has Animal Empathy or Empathy, apply an additional +2. On a success, the attack ends and you return to normal. If you pass out from fatigue or injury before you succeed, you recover automatically when you wake up.

Point value depends on the severity of the attacks:

- **Mild:** You have trouble speaking, and must roll vs. IQ to utter a sentence. You cannot operate complicated machinery, although you may attack wildly with weapons (-4 to hit). -10 points.*

- **Moderate:** You suffer from all of the above problems, and have trouble understanding commands from others as well: roll vs. IQ to understand a sentence spoken by someone else. If you are attacked or challenged, you must make a self-control roll to avoid acting "on instinct." -15 points.*
Severe: You cannot speak or understand others, or use tools (except possibly as clubs), and automatically act on instinct at all times. You behave like your primitive ancestors! -20 points.*

Stress Atavism may result in additional troublesome behavior. Pick a suitable mental disadvantage, halve its value (drop all fractions), and add this point cost to the above costs before applying the self-control multiplier.

**Stubbornness** 💀 -5 points

You always want your own way. Make yourself generally hard to get along with – roleplay it! Your friends may have to make a lot of Fast-Talk rolls to get you to go along with perfectly reasonable plans. Others react to you at -1.

**Stuttering** 💀 -10 points

You suffer from a stammer or other speech impediment. This gives -2 on any reaction roll where conversation is required, and -2 to Diplomacy, Fast-Talk, Performance, Public Speaking, Sex Appeal, and Singing. Certain occupations (interpreter, newsreader, etc.) are always closed to you.

**Supernatural Features** 💀

Variable

You have disturbing features that mark you as a demon, vampire, or other supernatural being. You can pass for a normal mortal to casual observers, but closer inspection reveals that you are not quite right. This might give away your secret to the trained eye.

Supernatural Features differ from Unnatural Features (p. 22) in that they aren’t usually obvious; they only become apparent under a specific set of circumstances. When they are noticed, though, they result in a reaction penalty. They also give those who know what to look for a bonus to any skill roll (against Hidden Lore, Occultism, etc.) made to identify your true nature.

Supernatural Features can accompany appearance levels Hideous through Transcendent (see Physical Appearance, p. 21). You cannot get points for Supernatural Features if you are Monstrous or Horrific, however. If you look that scary, you’re not hiding any secrets!

---

**No Body Heat:** You are cold to the touch. -1 on reaction rolls made by those who touch you, shake your hand, kiss you, etc.; +1 on all rolls to deduce your secret. -5 points (-1 point if you can gain warmth temporarily; e.g., after feeding, for a vampire).

**No Reflection:** You produce no reflection. You do not show up in mirrors, still water, and similar reflective surfaces, and technological devices such as cameras do not display your image. In some places and times, people will assume that you have no soul! -2 on reaction rolls made by those who notice; +2 on all rolls to deduce your secret. -10 points.

**No Shadow:** You produce no shadow, regardless of the intensity or direction of the light source. -2 on reaction rolls made by those who notice; +2 on all rolls to deduce your secret. -10 points.

**Pallor:** You look like a corpse, with bloodless skin, sunken eyes, etc. -2 on reaction rolls made by anyone who can see you without makeup in good light; +2 on all rolls to deduce your secret. -10 points (-5 points if you can gain the flush of life temporarily; e.g., after feeding, for a vampire).
Supersensitive 🧠

-15 points

You are telepathically sensitive to the presence of others all the time. You experience a constant, irritating buzz of low-level psychic noise. This does not imply any kind of useful telepathic ability – the thoughts and emotions you receive remain just below the threshold of conscious understanding.

If there are any sapient beings (IQ 6+) with 20 yards, you suffer -1 to DX and IQ. This becomes -2 for 10 or more people, -3 for 100 or more, -4 for 1,000 or more, and so on. If DX or IQ drops below half its original score because of this penalty, you collapse and can take no action until the "noise" goes away. Machine intelligences and individuals behind telepathic shielding (psionic, technological, or otherwise) do not bother you.

There is one beneficial side effect to Supersensitive: the psychic noise you receive warns you if there are people within 20 yards, and the noise level tells you roughly how many. The noise is too diffuse to let you determine their locations, however.

Susceptible 🧫

Variable

You are extremely sensitive to a particular class of noxious items or substances; e.g., disease or poison. You have a penalty to all HT rolls to resist the negative effects of these things. You do not suffer extra damage, however; for that, see Vulnerability (p. 161).

If you are exposed to trace quantities of an item to which you are Susceptible – a dose so tiny that it would not affect most people – you must roll against HT+1, modified by your usual penalty for this disadvantage. If you fail, you suffer half the effects (fatigue, injury, attribute loss, period of incapacitation, etc.) you would suffer from a full dose. For instance, Susceptible to Poison would require a roll if you ingested highly diluted industrial waste in drinking water, while Susceptible to Disease would require a roll if you received a "live" vaccine (one that contains weakened microbes). Should there be any doubt as to exposure or effects, the GM’s decision is final.

A Trademark is an action separate from capturing the crooks, committing the crime, etc. Destroying files on a computer is not a Trademark; trashing them by substituting a “7” for each “5” is.

Timesickness 🧫

-10 points

Time travel, dimension travel, and teleportation make you ill. You cannot have psionic talents, magic spells, or technological skills that have to do with this kind of travel, nor can you learn the Body Sense skill. You must make a HT roll whenever you journey through time or across dimensions, and whenever you teleport. On a failure, you are effectively stunned for 1d hours (doubled on a critical failure!). On a success, you are only stunned for 1d\(\times 10\) minutes.

Timesickness is only allowed if dimension travel, teleportation, or time travel occur regularly in the campaign. The GM may wish to permit a variation on this trait in settings with faster-than-light hyperdrives ("Hypersickness") or jump drives ("Jump Sickness").
Total Klutz
see Klutz, p. 141

Trademark 🪔 -5 to -15 points

You have a special symbol – something that you leave at the scene of action, as a way of "signing your work." The classic fictional example is the carved initial "Z" of Zorro.

Simple: Your Trademark takes very little time to leave and cannot be used to trace your identity, but you absolutely must leave it. You cannot leave the scene until you do, even if your enemies are breaking down the door. A typical example is something left at the scene – a playing card, a small stuffed animal, etc. – as long as it can't be traced and takes little time. -5 points.

Complex: As above, but leaving your Trademark measurably increases your chances of being caught – initial carving, notes, traceable clues, etc. – it's the particular way that it is done. Leaving this sort ofTrademark takes a minimum of 30 seconds. Anyone searching the scene receives +2 to Criminology and Forensics rolls to trace or identify you. -10 points.

Elaborate: Your trademark is so elaborate – dousing the captured thugs with a certain cologne, painting the entire crime scene pink, writing a long poem to the police – that it virtually ensures your eventual capture. The GM may give investigators clues without a successful Criminology or Forensics roll! -15 points.

You may have only one Trademark. Multiple actions (e.g., binding your victims with purple phone wire, painting a frog on the wall, and wrecking every computer in the building) simply give you a higher level of Trademark – they are not multiple Trademarks.

Note also that a Trademark is an action separate from capturing the crooks, committing the crime, etc. Destroying files on a computer is not a Trademark; trashing them by substituting a "7" for each "5" is.

Trickster 🪔 -15 points*

You crave the excitement of outwitting dangerous foes. This is not ordinary practical joking. Playing simple tricks on innocent or harmless folk is no fun at all – it has to be perilous! There may be no need for this at all (in fact, there probably isn't), but you need the thrill of a battle of wits and dexterity.

Make a self-control roll each day. If you fail, you must try to trick a dangerous subject: a skilled warrior, a dangerous monster, a whole group of reasonably competent opponents, etc. If you resist, you get a cumulative -1 per day to your self-control roll until you finally fail a roll!

Truthfulness 🪔 -5 points*

You hate to tell a lie – or you are just very bad at it. Make a self-control roll whenever you must keep silent about an uncomfortable truth (lying by omission). Roll at -5 if you actually have to tell a falsehood! If you fail, you blurt out the truth, or stumble so much that your lie is obvious. You have a permanent -5 to Fast Talk skill, and your Acting skill is at -5 when your purpose is to deceive.

Uncontrollable Appetite 🪔 -15 points*

You consume something that you must obtain from other sapient beings through force or guile, and you have difficulty controlling your appetites. You must specify what it is you crave. This could be blood, "life force," sex, or anything else the GM permits.

Whenever you have an opportunity to indulge, you must make a self-control roll. Roll at -2 if someone deliberately tempts you, or if the item you feed on is available in large quantities within range of your senses. If feeding would restore lost HP, this roll is at -1 per missing HP. If you fail, you must feed. Make a second self-control roll to stop feeding once you have had your fill. If you fail, you go into frenzy and overindulge, which could kill your victim.
**Unfit**  
-5 or -15 points

You have worse cardiovascular health than your HT alone would indicate. This comes in two levels:

**Unfit:** You get -1 to all HT rolls to remain conscious, avoid death, resist disease or poison, etc. This does not reduce your HT attribute or HT-based skills! As well, you lose FP at twice the normal rate. -5 points.

**Very Unfit:** As above, but the penalty to HT rolls is -2. In addition, you recover FP at only half the normal rate. You may not purchase any level of Resistant (p. 80). -15 points.

**Unhealing**  
-20 or -30 points

You cannot heal naturally. You get no daily HT roll to recover lost HP, and you cannot recuperate from crippling injuries on your own. The First Aid skill can stop your bleeding, but neither it nor the Physician skill can restore missing HP. Technologies that accelerate natural healing (including herbs, drugs, etc.) are useless. This trait comes in two levels:

**Partial:** You can heal naturally if a rare condition is met (e.g., when you are immersed in blood or bathed in lava). You can also heal yourself by stealing HP from others using Vampiric Bite (p. 96), magic, or psionics. -20 points.

**Total:** You can never heal naturally, and you cannot steal HP from others. -30 points.

Depending on your nature, you might be able to regain lost HP and the use of crippled limbs unnaturally through surgery, repairs (if you’re a machine), or exotic means (healing spells, alchemy, psionics, etc.).

**Unique**  
-5 points

You exist only in one timeline. If a time paradox occurs, you have no memory of it. If it is particularly severe, you are likely to vanish. In most settings, you would be unaware of this danger until it happened . . . and then nobody would even remember you! Thus, this disadvantage is usually inappropriate for PCs.

**Unluckiness**  
-10 points

You have rotten luck. If the plot of the adventure calls for something bad to happen to someone, it's you. The GM may not kill you outright with "bad luck," but anything less than that is fine.

In both cases, this disadvantage applies only to FP lost to exertion, heat, etc. It has no effect on FP "spent" to power psi or magic spells.

**Unhealing**  
-20 or -30 points

You cannot heal naturally. You get no daily HT roll to recover lost HP, and you cannot recuperate from crippling injuries on your own. The First Aid skill can stop your bleeding, but neither it nor the Physician skill can restore missing HP. Technologies that accelerate natural healing (including herbs, drugs, etc.) are useless. This trait comes in two levels:

**Partial:** You can heal naturally if a rare condition is met (e.g., when you are immersed in blood or bathed in lava). You can also heal yourself by stealing HP from others using Vampiric Bite (p. 96), magic, or psionics. -20 points.

**Total:** You can never heal naturally, and you cannot steal HP from others. -30 points.

In an alternate-world campaign, being Unique means that you do not exist in any form in an alternate world, even one very much like your own. This deprives you of the chance to befriend "yourself" when you visit such a world. There is one benefit, though: you are effectively Zeroed (p. 100) at no point cost in any alternate world.

Unique is only a disadvantage in campaigns in which paradoxes or changes in history – erasing past events or whole timelines – are possible. See Temporal Inertia (p. 93) for the opposite of this trait.

**Unsense**  
-5 points

In an alternate-world campaign, being Unique means that you do not exist in any form in an alternate world, even one very much like your own. This deprives you of the chance to befriend "yourself" when you visit such a world. There is one benefit, though: you are effectively Zeroed (p. 100) at no point cost in any alternate world.

In both cases, this disadvantage applies only to FP lost to exertion, heat, etc. It has no effect on FP "spent" to power psi or magic spells.

**Unhealing**  
-20 or -30 points

You cannot heal naturally. You get no daily HT roll to recover lost HP, and you cannot recuperate from crippling injuries on your own. The First Aid skill can stop your bleeding, but neither it nor the Physician skill can restore missing HP. Technologies that accelerate natural healing (including herbs, drugs, etc.) are useless. This trait comes in two levels:

**Partial:** You can heal naturally if a rare condition is met (e.g., when you are immersed in blood or bathed in lava). You can also heal yourself by stealing HP from others using Vampiric Bite (p. 96), magic, or psionics. -20 points.

**Total:** You can never heal naturally, and you cannot steal HP from others. -30 points.

In an alternate-world campaign, being Unique means that you do not exist in any form in an alternate world, even one very much like your own. This deprives you of the chance to befriend "yourself" when you visit such a world. There is one benefit, though: you are effectively Zeroed (p. 100) at no point cost in any alternate world.

Unnatural Features  
see p. 22

**Unusual Biochemistry**  
-5 points

You can subsist on human food, but your biochemistry is sufficiently different from that of humans that drugs intended for humans don’t work or have unpredictable effects. Drugs that are specific to your biochemistry work normally, but cost 10 times as much as usual.

When you receive a drug intended for humans, roll 1d:

1-3 ~ Normal effect.
4-5 ~ Normal effect, plus an additional harmful effect of the GM’s choosing: lose 1d FP (sickness and nausea), suffer an amplified version of the drug’s usual negative side effects, etc.

6 ~ No effect at all.

**Very Fat**  
see p. 19

**Very Unfit**  
see Unfit, above

**Vow**  
-5 to -15 points

You have sworn an oath to do (or not to do) something. Whatever the oath, you take it seriously; if you didn’t, it would not be a disadvantage. This trait is especially appropriate for knights, holy men, and fanatics.

The point value of a Vow should be directly related to the inconvenience it causes you. The GM is the final judge. Some examples:
**Vulnerability Table**

<table>
<thead>
<tr>
<th>Rarity of Attack</th>
<th>Wounding Multiplier</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rare</strong></td>
<td>×2</td>
<td>-10 points</td>
</tr>
<tr>
<td></td>
<td>×3</td>
<td>-15 points</td>
</tr>
<tr>
<td></td>
<td>×4</td>
<td>-20 points</td>
</tr>
<tr>
<td><strong>Occasional</strong></td>
<td>×2</td>
<td>-20 points</td>
</tr>
<tr>
<td></td>
<td>×3</td>
<td>-30 points</td>
</tr>
<tr>
<td></td>
<td>×4</td>
<td>-40 points</td>
</tr>
<tr>
<td><strong>Common</strong></td>
<td>×2</td>
<td>-30 points</td>
</tr>
<tr>
<td></td>
<td>×3</td>
<td>-45 points</td>
</tr>
<tr>
<td></td>
<td>×4</td>
<td>-60 points</td>
</tr>
<tr>
<td><strong>Very Common</strong></td>
<td>×2</td>
<td>-40 points</td>
</tr>
<tr>
<td></td>
<td>×3</td>
<td>-60 points</td>
</tr>
<tr>
<td></td>
<td>×4</td>
<td>-80 points</td>
</tr>
</tbody>
</table>

**Use the categories under Limited Defenses (p. 46) to assess rarity. The GM has the final say on the rarity of a given attack form. You may not take more than two types of Vulnerability without GM permission.**

- **Example:** A werewolf with Vulnerability (Silver ×4) is nicked with a silver knife for 1 point of cutting damage. The GM multiplies this by 4 for Vulnerability, giving 4 points of damage, and then multiplies by 1.5 for a cutting attack. The final injury is 6 HP.

Point value depends on the wounding multiplier and the rarity of the attack:

**Vulnerability**

You take extra damage from a particular attack form. Whenever this type of attack hits you, the GM applies a special wounding multiplier to damage that penetrates your DR. Regular wounding multipliers (for cutting, impaling, etc.) further multiply the damage.

**Example:** A werewolf with Vulnerability (Silver ×4) is nicked with a silver knife for 1 point of cutting damage. The GM multiplies this by 4 for Vulnerability, giving 4 points of damage, and then multiplies by 1.5 for a cutting attack. The final injury is 6 HP.

**Weak Bite 🐦**

-2 points

Your jaw is not structured to make full use of your strength while biting. Calculate biting damage normally, then apply an extra -2 per die. This trait is common for large herbivores (e.g., horses), uncommon for small herbivores and omnivores, and very rare for carnivores.

**Weakness 🐦**

Variable

You suffer injury merely by being in the presence of a particular substance or condition (which cannot be a food item or something equally easy to avoid). This injury comes off your HP directly, regardless of your DR or defensive advantages. The more quickly you take damage, the more points your Weakness is worth:

<table>
<thead>
<tr>
<th>Frequency of Damage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1d per minute</td>
<td>-20 points</td>
</tr>
<tr>
<td>1d per 5 minutes</td>
<td>-10 points</td>
</tr>
<tr>
<td>1d per 30 minutes</td>
<td>-5 points</td>
</tr>
</tbody>
</table>

Multiply the base value to reflect the rarity of the damaging substance or condition:

**Common (e.g., smoke, nearby magic, horses, loud noises): ×2.**

**Very Common (e.g., sunlight, living plants): ×3.**

**Weirdness Magnet 🐦**

-15 points

Strange and bizarre things happen to you with alarming frequency. You are the one demons stop and chat with. Magic items with disturbing properties find their way to you. The only talking dog on 21st-century Earth comes to you with his problems. Dimensional gates sealed for centuries crack open just so that you can be bathed in the energies released... or perhaps the entities on the other side invite you to tea.

Nothing lethal happens to you, at least not immediately, and occasionally some weirdness is beneficial. But most of the time it is terribly, terribly inconvenient. People who understand what a Weirdness Magnet is (and that you are one) react to you at -2. The exceptions are parapsychologists, fringe cultists, unhinged conspiracy theorists, and thrill-seekers, who follow you around!
Workaholic

-5 points

You tend to drive yourself past your limits, and find it hard to relax and turn away from your work. You always work at least half again as long as a normal working day. This often results in missed sleep (see Missed Sleep, p. 426). Most people regard you with respect at first (+1 to reaction rolls), but you eventually suffer -1 or -2 to reactions – especially from friends and loved ones who rarely get to spend time with you.

Wounded

-5 points

You have an open wound that will not completely heal, for whatever reason (botched surgery, backfired healing spell, etc.). You are not missing any HP, but your wound serves as a path for infection and toxins, and may complicate new injuries.

A foe who knows about your wound may deliberately target it, at -7 to hit. Such attacks have a wounding multiplier of 1.5 (that is, you take 50% more damage). Blood agents that reach your wound serve as if carried on a weapon that broke your skin. You must carefully dress your wound each day (requires a First Aid or Physician roll) or get -3 to all HT rolls to resist infection in a plague-ridden area.

At the GM’s option, you may acquire a wound like this in play due to torture, scalping, etc. Certain wounds have other effects; for instance, scalping would cost you a level of appearance.

Xenophilia

-10 points*

You are instinctively fascinated and attracted by strangers and aliens, no matter how dangerous or frightening they appear to be. Make a self-control roll whenever you meet someone (or some thing) like this. If you fail, you assume that this person is interested in interacting with you socially. A xenophile finds himself offering drinks to glaring foreign soldiers, making passes at cute vampires, and shaking tentacles with Things Man Was Not Meant To Know while his companions are pointing weapons or running the other way . . .

As partial compensation, you get a bonus to Fright Checks when meeting strange creatures

<table>
<thead>
<tr>
<th>Self-Control Number</th>
<th>Bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>+4</td>
</tr>
<tr>
<td>9</td>
<td>+3</td>
</tr>
<tr>
<td>12</td>
<td>+2</td>
</tr>
<tr>
<td>15</td>
<td>+1</td>
</tr>
</tbody>
</table>

NPCs with this trait will react to exotic PCs at a similar bonus.

Quirks

A “quirk” is a minor feature that sets you aside from others. It has a negative point value, but it is not necessarily a disadvantage. For instance, a major trait like Greed is a disadvantage. But if you insist on being paid in gold, that’s a quirk.

You may take up to five quirks at -1 point apiece . . . and if you do, you will have five more points to spend. You can also “buy off” a quirk later on by paying 1 point, but as a rule, you shouldn’t do that. Quirks might have a small cost, but they are a big part of what makes a character seem “real”!

Quirks can be either mental or physical. This distinction implies for quirks exactly what it implies for advantages and disadvantages.

Mental Quirks

Mental quirks are minor personality traits. They are a contract between you and the GM: “I agree to roleplay these character foibles. In return, you agree to give me a few extra points to spend.” However, you must roleplay them. If you take the quirk “Dislikes heights,” but blithely climb trees and cliffs whenever you need to, the GM
will penalize you for bad roleplaying. The points you lose this way will cost you much more than you earned for taking the quirk. So don’t choose a quirk you aren’t willing to roleplay!

This doesn’t mean the GM should be inflexible about mental quirks. A player should be allowed to change a quirk if something happens during play to justify a noticeable change in his character’s personality. The GM should also allow players to leave a few of their five “quirk slots” open during character creation and fill them in after the first couple of play sessions. The most interesting quirks often emerge as the result of roleplaying!

To qualify as a mental quirk, a personality trait must meet one of two criteria:

- It requires a specific action, behavior, or choice on your part from time to time. This need not take hours, or be especially inconvenient, but it must be something that you can act out in the course of the game; it cannot be totally passive.
- It gives you a small penalty very occasionally, or to a narrow set of actions. Negotiate the game effects with the GM. You may take almost any mundane mental disadvantage at quirk level, in which case the rules for that disadvantage are used as guidelines, although the effects will be much less severe.

Example: “Wears black” is not a valid quirk – it is completely passive, and there are no negative side effects. “Dresses like the stereotypical necromancer” is a permissible quirk if the player and GM agree that it gives -1 to reactions from unusually pious folk.

Attentive
You tend to stick to one task until it’s done. You get a +1 bonus when working on lengthy tasks, but -3 to notice any important interruption!

Broad-Minded
A trivial form of Xenophilia (p. 162). You get along well with other races and species, and strange looks rarely bother you.

Careful
A quirk-level version of Cowardice (p. 129). You are naturally cautious, always on the lookout for danger. You dedicate extra time and money to preparations before venturing into a dangerous situation.

Chauvinistic
An extremely low level of Intolerance (p. 140). You are always aware of differences in sex, skin color, etc. even if you do not actually react poorly to others. Thin-skinned individuals might occasionally react to you at -1 as a result.

Code of Honor
You may take a minor Code of Honor (p. 127) as a quirk. For instance, you might insist on exhibiting “gentlemanly” behavior toward all females, or spurning “chauvinistic” behavior from all males.
Congenial
This is a milder version of Chummy (p. 126). You like company and you work well with others. You always choose group action over individual action.

Dislikes
You can have any of the Phobias on p. 148 at the level of a mere “dislike.” If you dislike something, you must avoid it whenever possible, but it does not actually harm you as a Phobia would. Dislikes don’t have to be watered-down Phobias. There is a whole world full of things to dislike: carrots, cats, neckties, violence, telephones, telephone solicitors, income tax . . .

Distractible
Quirk-level Short Attention Span (p. 153). You are easily distracted, and don’t do well on long-term projects. You are at -1 when rolling to accomplish long tasks.

Dreamer
You have a -1 on any long task, because you tend to spend time thinking of better ways to do it, rather than working.

Dull
You are not quite Hidebound (p. 138), but you tend to stick with tried and true methods.

Habits or Expressions
Saying “Jehoshaphat!” or “Bless my collar-button” constantly . . . or carrying a silver piece that you flip into the air . . . or never sitting with your back to the door.

Humble
A weak form of Selfless (p. 153). You tend to put the concerns of others, or of the group, before your own.

Imaginative
You are a font of ideas, and are more than willing to share them with others! They may or may not be good ideas, of course . . .

Incompetence
You are inept at one specific skill. You cannot learn that skill, and your default is at an extra -4. You cannot be incompetent in a single specialty of a skill; if you are incompetent with Guns, for instance, you are incompetent with all guns. The GM may disallow Incompetence if the skill would be irrelevant to a given character, or is unlikely to play a role in the campaign.

Likes
If you like something, you will seek it out whenever possible. Gadgets, kittens, shiny knives, ceramic owls, fine art . . . whatever. This is not a compulsion – just a preference.

Minor Addiction
You may take Addiction (p. 122) as a quirk, if you are addicted to a drug that causes psychological dependency and works out to 0 points under the Addiction rules.

Nosy
A lesser version of Curious (p. 129). You are always poking your nose into corners and everyone else’s business (which is likely to result in a small reaction penalty once in a while).

Obsessions
You may take an almost-rational and not especially unusual Obsession (p. 146) as a quirk, to reflect a minor goal. For instance, you hope to get just enough money to buy a farm (or boat, or spaceship, or castle) of your own.

Personality Change
This is quirk-level Split Personality (p. 156). You suffer from a full-blown mental disadvantage, but only in circumstances that are normally under your control; e.g., Bully when you drink too much, or Pyromania when you cast your Create Fire spell.

Proud
This is Selfish (p. 153) at quirk level. Individual success, wealth, or social standing concerns you greatly. NPCs with this quirk react at -1 to orders, insults, or social slights.

Responsive
A mild case of Charitable (p. 125). You are able to imagine the feelings and motivations of others – and all other things being equal, you are inclined to help them.

Staid
You may take this very low level of Incurious (p. 140) as a quirk. You are likely to ignore matters that don’t immediately affect you.

Trademark
A quirk-level Trademark (p. 159) takes almost no time to leave, cannot be used to trace your identity, and can be overlooked when inconvenient.

Example of Character Creation (cont’d)
Now it’s time to define Dai’s quirks – five minor character traits that help to define his personality. We choose the following:

1. “Dislikes deep water.” Thieves’ Guild enforcers threw the young Dai off a pier, and he nearly drowned. To this day, he is leery of deep water.
2. “Loves high places.” Given Dai’s gifts, he can get to some very high places indeed. When he cases a joint, he always wants a view from the top.
3. “No drugs or alcohol.” Dai is no Puritan, but growing up on the streets he saw too many people destroy themselves that way.
4. “Sensitive about his height.” Dai is self-assured, but he cannot deny one physical shortcoming: he isn’t very tall. This is a topic best avoided in conversation . . .
5. “Showoff.” Dai isn’t quietly overconfident. He has more than his fair share of natural talents, and is all too happy to demonstrate them.

Dai’s quirks are worth -1 point apiece, or -5 points total. As a result, his point total becomes 203 points.
Uncongenial
A lesser version of Loner (p. 142). You prefer to be alone. You always choose individual action over group action.

Vow
A trivial Vow (p. 160) – e.g., never drink alcohol, treat all ladies with courtesy, or pay 10% of your income to your church – is a quirk.

**PHYSICAL QUIRKS**

Physical quirks are physical disadvantages that are only mildly or rarely limiting. They do not require roleplaying, but they give specific, minor penalties in play.

Unlike mental quirks, you cannot normally change physical quirks – that would make no more sense than exchanging One Eye for One Hand, under most circumstances. Also, you must define physical quirks when you create your character; you cannot use them to fill open “quirk slots” once the campaign begins.

Acceleration Weakness
You are susceptible to the bad effects of extreme acceleration, and get -3 to HT rolls to avoid them.

Alcohol Intolerance
Alcohol “goes right to your head.” You become intoxicated much more quickly than normal. You get -2 on any HT roll related to drinking.

**NEW DISADVANTAGES**

The GM is welcome to develop new disadvantages. The guidelines given under *New Advantages* (p. 117) apply here as well – but note that it is easier to abuse disadvantages than advantages. A badly designed advantage might be too powerful, but it costs points, so it isn’t a free lunch. On the other hand, a disadvantage that does not restrict the character gives away points. It is a free lunch! Remember the “golden rule” of disadvantage design:

A “disadvantage” that does not limit the character is not a disadvantage.

Bowlegged
You are bowlegged. This doesn’t normally affect Move, but you have -1 to Jumping skill. This quirk may elicit a -1 reaction from those who think it looks funny.

Cannot Float
You always sink in water. This might be too powerful, but it costs points. So it isn’t a free lunch. Remember the “golden rule” of disadvantage design.

**MODIFYING EXISTING DISADVANTAGES**

You can turn existing disadvantages into new ones using the processes recommended for advantages: rename, redefine, combine, modify, and fine-tune. For instance, you could combine the modified disadvantage Weakness (Sunlight; 1d/30 minutes; Variable, -40%) [-9] with the quirk Distinctive Features [-1] and rename it “Albinism,” giving you a new disadvantage worth -10 points. There are a few additional points to note when doing this kind of thing.

Some existing disadvantages are essentially “user-defined.” This property makes them particularly useful for building “new” disadvantages. The most versatile traits of this kind are Addiction, Code of Honor, Compulsive Behavior, Delusions, Dependency, Destiny, Disciplines of Faith, Dread, Fanaticism, Increased Life Support, Intolerance, Maintenance, Obsession, Odius Personal Habits, Phobias, Restricted Diet, Revulsion, Sense of Duty, Susceptible, Unnatural Features, Vows, Vulnerability, and Weakness.
When combining multiple disadvantages to create new ones, remember that advantages can be added to the mix, reducing the value of the composite disadvantage. For instance, a positive Reputation can be associated with a "good" personality trait (such as Honesty or Sense of Duty) that is considered a disadvantage in GURPS because it restricts the hero's choice of actions. If the restrictions outweigh the reaction bonus, the overall trait is still a disadvantage.

Finally, when you apply limitations (pp. 110-116) to a disadvantage, remember that they reduce the points gained from the disadvantage. For instance, if you apply an Accessibility limitation worth -40% to a -15-point disadvantage, it becomes a -9-point disadvantage. See the "special limitations" throughout this chapter for examples of suitable limitations. (A few disadvantages have special enhancements that increase disadvantage value, but these are less common.)

**Brand-New Problems**

The guidelines for creating totally new disadvantages are similar to those for designing entirely new advantages (p. 118):

1. **Situational penalties to attributes.** Assume that each -1 to an attribute is worth a basic -10 points for ST or HT, or -20 points for DX or IQ, and then reduce the final cost to reflect the limited circumstances under which the penalty applies. For instance, Susceptible to Poison (-2) is -2 to HT (base cost -20 points), reduced to 40% its normal value because it applies only to rolls to resist poison – which are common enough but still a specialized use of HT – for a net value of -8 points.

2. **Penalties to skill rolls.** Handle skill penalties using the Incompetence quirk (p. 164). This gives -1 point for each -4 to a specific skill. These skill penalties are not symmetrical with the skill bonuses given on p. 118. This is intentional! It reflects the reality that most players select skills for which their characters have an aptitude and ignore those at which their characters are inept. The Incompetence penalty can be changed to -3 or -5 without much effect on game balance, but it must apply to a reasonably common skill to be worth points at all.

Price a blanket penalty to an entire group of related skills exactly as if you were pricing a Talent (p. 89), but with minus sign in front of the cost. This makes a penalty to a group of skills a far more serious disadvantage than a penalty to one skill. This reflects the fact that it is difficult to work around inaptitude with every skill in a large, useful category.

3. **Penalties to reaction rolls.** React penalties use the Reputation rules on p. 26. As explained for new advantages, these modifiers need not be actual Reputations – they could as easily be due to looks, a supernatural aura, etc.

4. **Unique disabilities.** You can only price unique disadvantages by comparison. Look at comparable disadvantages in the system and assign a similar point value, and then adjust it if the new disadvantage is more or less limiting than the existing one.

**Finalizing the Cost**

The final cost of a disadvantage equals the sum of the costs of its component parts, modified for rarity as the GM sees fit. A rare disadvantage is sometimes worth more points because it is less likely to be treatable, or because it is more likely to generate shock and disgust on a bad reaction roll. A common disadvantage may be worth fewer points by the same logic – that is, it is easy to circumvent using technology, or its social ramifications are mitigated by others' indifference.

In general, though, the point value of a disadvantage won't be that of the "opposite" advantage with a minus sign in front. This is mainly because most traits in GURPS are asymmetric, skewed toward the human norm and biased toward adventuring heroes. For instance, One Arm is a serious disadvantage worth -20 points because having only one arm severely limits skill use, while Extra Arms are a mere 10 points apiece because additional arms rarely benefit most skills. It is also important to realize that for adventurers, there are many qualities where either extreme is an effective disadvantage (for instance, Curious and Incurious) or advantage (consider Common Sense and Daredevil).
A "skill" is a particular kind of knowledge; for instance, judo, physics, auto mechanics, or a death spell. Every skill is separate, though some skills help you to learn others. Just as in real life, you start your career with some skills and can learn more if you spend time training.

A number called "skill level" measures your ability with each of your skills: the higher the number, the greater your skill. For instance, "Shortsword-17" means a skill level of 17 with the shortsword. When you try to do something, you (or the GM) roll 3d against the appropriate skill, modified for that particular situation. If the number you roll is less than or equal to your modified score for that skill, you succeed! But a roll of 17 or 18 is an automatic failure. For more on skill rolls, modifiers, success, and failure, see Chapter 10.

Each skill is qualified in several ways to indicate what basic attribute represents talent with that skill, how easy the skill is to learn, any special restrictions on who can learn the skill, and whether the skill is broad or narrow in focus.

**CONTROLLING ATTRIBUTE**

Each skill is based on one of the four basic attributes or, more rarely, on Perception or Will. Your skill level is calculated directly from this "controlling attribute": the higher your attribute score, the more effective you are with every skill based on it! If your character concept calls for many skills based on a given attribute, you should consider starting with a high level in that attribute, as this will be most cost-effective in the long run.

**Choosing Your Beginning Skills**

Like attributes and advantages, skills cost points. You should spend at least a few of your starting character points on skills. It would be extraordinarily unusual for anyone – even a young child – to have no skills at all!

Your starting skills must suit your background. The greater your Wealth and Status, the more leeway the GM will allow you in skill choice – the rich and powerful can arrange to learn the most surprising things. You cannot start with inappropriate skills, however. The GM is free to forbid any skill that simply would not be available to someone of your background. For instance, a stone-age hunter could not be a jet pilot, a Victorian gentleman would need an excellent explanation (and an Unusual Background) to start out as a skilled sorcerer; and a futuristic adventurer would have difficulty finding training in "archaic" weapon skills . . . though a military background would help.
**ST-based** skills depend wholly on brawn, and are very rare. ST determines the power you can bring to bear with DX-based skills far more often than it affects skill levels directly.

**DX-based** skills rely on coordination, reflexes, and steady hands. This is representative of athletic and combat skills, and most vehicle-operation skills.

**IQ-based** skills require knowledge, creativity, and reasoning ability. This includes all artistic, scientific, and social skills, as well as magic spells.

**HT-based** skills are governed by physical fitness. This includes any activity influenced by hygiene, posture, or lung capacity.

**Perception-based** skills involve spotting subtle differences. This is typical of skills used to detect clues and hidden objects.

**Will-based** skills hinge on mental focus and clarity of thought. Most allow one to resist mental attacks, bring about an altered mental state, or focus “inner strength.”

### DIFFICULTY LEVEL

Some fields demand more study and practice than others. GURPS uses four “difficulty levels” to rate the effort required to learn and improve a skill. The more difficult the skill, the more points you must spend to buy it at a given skill level.

**Easy** skills are things that anyone could do reasonably well after a short learning period – whether because they are second nature to most people or because there isn’t a whole lot to learn.

**Average** skills include most combat skills, mundane job skills, and the practical social and survival skills that ordinary people use daily. This is the most common difficulty level.

**Hard** skills require intensive formal study. This is typical of most “academic” skills, complex athletic and combat skills that require years of training, and all but the most powerful of magic spells.

**Very Hard** skills have prodigious scope, or are alien, counterintuitive, or deliberately shrouded in secrecy. The most fundamental of sciences, and many potent magic spells and secret martial-arts techniques, are Very Hard.

### TECHNOLOGICAL SKILLS

Certain skills are different at each tech level (see Technology Level, p. 22). These “technological skills” are designated by “/TL.” This means that when you learn the skill, you must learn it at a specific tech level (TL). Always note the TL when you write down such a skill; e.g., “Surgery/TL4” for the TL4 version of Surgery skill. Surgery/TL4 (cut his arm off with an axe) is nothing like Surgery/TL9 (graft on a replacement arm from his clone)!

You learn technological skills at your personal TL. You may also choose skills from a lower TL. You can only learn skills from a higher TL in play – and only if you have a teacher and the skill is not based on IQ. To learn IQ-based technological skills from a higher TL, you must first raise your personal TL.

Technological skills rely on language, tool use, or both. This means that only sapient characters – those with IQ 6 or higher – may learn them. Exception: Robots and the like can have IQ 5 or less and perform such skills by running programs . . . but of course programming isn’t learning.

### TECHNICAL MODIFIERS

Technological skills work best with the specific artifacts and techniques of their own TL. When you work with equipment or concepts of a TL different from that of your skill, you suffer a penalty to your skill roll.

#### IQ-Based Technological Skills

IQ-based technological skills represent a studied technical understanding of the specific methods and tools common at a particular TL. There is a penalty to your skill roll when you use these skills with the equipment of a higher TL (which relies on scientific and engineering principles unknown to you) or a lower TL (which depends on principles that were, at best, a “historical footnote” during your training).

<table>
<thead>
<tr>
<th>Equipment’s TL</th>
<th>Skill Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill’s TL+4 or more</td>
<td>Impossible</td>
</tr>
<tr>
<td>Skill’s TL+3</td>
<td>-15</td>
</tr>
<tr>
<td>Skill’s TL+2</td>
<td>-10</td>
</tr>
<tr>
<td>Skill’s TL+1</td>
<td>-5</td>
</tr>
<tr>
<td>Skill’s TL</td>
<td>0</td>
</tr>
<tr>
<td>Skill’s TL-1</td>
<td>-1</td>
</tr>
<tr>
<td>Skill’s TL-2</td>
<td>-3</td>
</tr>
<tr>
<td>Skill’s TL-3</td>
<td>-5</td>
</tr>
<tr>
<td>Skill’s TL-4</td>
<td>-7</td>
</tr>
<tr>
<td>Per extra -1 to TL</td>
<td>-2</td>
</tr>
</tbody>
</table>

#### Other Technological Skills

Technological skills based on attributes other than IQ let you use technology; they do not assume any real understanding of the science or engineering behind the tools. For instance, a TL5 gunslinger accustomed to firing a Colt Peacemaker might find a TL7 Colt Python a bit strange, but he would have little difficulty shooting it.

For skills like this, apply a flat penalty of -1 per TL of difference between the skill and the equipment. For instance, a TL5 gunman would be at -2 to shoot a TL7 revolver. It is irrelevant whether the equipment is more or less advanced – a TL7 policeman would be at -2 to fire a TL5 revolver, too.
Grouped Skills

A set of distantly related skills that use identical rules may appear under a single heading to avoid repetition. If a skill description does not say that you must specialize, and indicates that it represents a collection of skills, then the subentries represent stand-alone skills – not specialties. Use only the name of the relevant subentry when you refer to such skills.

Example: Hand-to-hand weapon skills are grouped under Melee Weapon (p. 208), but if you learn to use a shortsword, write "Shortsword," not "Melee Weapon (Shortsword)."

PREREQUISITES

Some skills have other skills as prerequisites. This is the case when an advanced skill is based on, and in some ways an outgrowth of, a basic one. To study the advanced skill, you must have at least one point in the prerequisite skill.

Certain skills also require that you know a prerequisite skill at a minimum skill level. Where this is the case, you must spend the points required to learn the prerequisite skill at the specified level before you can learn the advanced skill.

A few skills have advantages as prerequisites. In order to learn such a skill, you must possess the required advantage. If you do not have the advantage, and cannot acquire it in play, you can never learn that skill.

SPECIALTIES

An entry on the skill list may represent an entire category of closely related skills that share a single skill name. Examples include Armoury (p. 178) and Survival (p. 223). Skills like this are marked with a dagger (†) in the list on pp. 174-228. The skills within such a category are called "specialties." When you buy a general skill of this kind, you must specify which specialty you are learning. On your character sheet, note the name of the specialty in parentheses after the general skill name; e.g., "Armoury (Small Arms)" or "Survival (Arctic)."

You may learn skills like this any number of times, with a different specialty each time, because each specialty is a different skill. There is usually a favorable "default" between specialties (see Skill Defaults, p. 173), which may let you purchase additional specialties more cheaply.

Optional Specialties

Many IQ-based skills – notably "academic" skills such as Literature and Physics – have countless subfields but do not require you to select a specialty. As written, if you learn a skill like this, you are a generalist, knowledgeable about every aspect of the skill. However, you may opt to specialize in a single, narrow area. You may only do this with an Average or harder IQ-based skill, and only if the GM agrees that the chosen subfield is logical given the skill and your TL.

Familiarity

Any skill used to operate equipment – e.g., Beam Weapons/TL11 (Pistol) or Driving/TL7 (Automobile) – takes a penalty when you are faced with an unfamiliar type of item. For instance, if you were trained on a laser pistol, a blaster pistol would be "unfamiliar." Assume that an unfamiliar piece of equipment gives -2 to skill except where an individual skill description specifies otherwise.

In general, if you have the skill to use a piece of equipment, you are considered familiar with a new make or model after you have had eight hours of practice with it. Some skills require more or less practice than this, so be sure to read the skill description.

There is no limit to the number of types of gun, car, plane, etc. you can become familiar with. Each of these items is called a "familiarity." If you have at least six familiarities for a given skill, the GM may roll against your skill when you pick up a new piece of equipment. On a success, you are already familiar with something similar and may use the new device at no penalty. The GM may also rule that a new item is so similar to a known one that it is familiar – for instance, two similar models of Colt revolver should be considered identical.

Equipment from another tech level will usually be unfamiliar. This gives both TL and familiarity modifiers. Practice can eliminate unfamiliarity penalties, but to shed TL penalties, you must relearn the operation skill at the equipment's TL. Exception: Improved or obsolete versions of items with which you are already familiar do not give unfamiliarity penalties.

Familiarity for Beginning Characters

Starting characters may specify two familiarities per point spent on a skill. For instance, if you have four points in Guns (Pistol), you can be familiar with up to eight handguns.

Both specialization and familiarity come into play with many skills, but they are not the same thing. Driving (Automobile) is a specialty of Driving: it is a separate skill from Driving (Locomotive), and to know both, you must pay points for both. "Volkswagen Bug" is a familiarity of Driving (Automobile): you can select it for free as one of your starting familiarities.
When you choose an optional specialty, write down the skill and its specialty just as if you were selecting a required specialty. You learn the specialized skill as if it were one level easier. Unless otherwise noted, prerequisites are unchanged. The general skill defaults to the specialized one at -2; roll against this whenever you must answer questions outside your field. Any skill that defaults to the general skill also defaults to all of its optional specialties, but at an additional -2.

Example: Chemistry is IQ/Hard and does not require a specialty. You could learn the optional specialty Chemistry (Analytical) as if it were one level easier; or IQ/Average. Your general Chemistry skill would default to Chemistry (Analytical)-2. Metallurgy, which normally defaults to Chemistry-5, would default to Chemistry (Analytical)-7.

Buying Skills

In order to learn or improve a skill, you must spend character points. When you spend points on a skill, you are getting training to bring that skill up to a useful level. Skills are easy to learn at first – a little training goes a long way! But added improvement costs more.

The point cost of a skill depends on two things: its difficulty and the final skill level you wish to attain. Use the Skill Cost Table (below) to calculate a skill's point cost.

The first column shows the skill level you are trying to attain, relative to the skill's controlling attribute – DX for DX-based skills, IQ for IQ-based skills, and so forth. For instance, if your DX were 12, a level of "Attribute-1" would be DX-1, or 11; "Attribute+0" would be DX, or 12; and "Attribute+1" would be DX+1, or 13.

The next four columns show the character point costs to learn skills of different difficulties – Easy, Average, Hard, and Very Hard – at the desired skill level. Harder skills cost more points to learn!

Example: A warrior with DX 14 wishes to learn Shortsword (DX/Average) at level 17. Since skill 17 is equal to his DX+3, he goes to the "Attribute+3" row. Then he reads along the row to the "Average" column to find the point cost: 12 points.

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>Easy</th>
<th>Average</th>
<th>Hard</th>
<th>Very Hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute-3</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Attribute-2</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Attribute-1</td>
<td>–</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Attribute+0</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Attribute+1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Attribute+2</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Attribute+3</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Attribute+4</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Attribute+5</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>Extra +1</td>
<td>4+4</td>
<td>4+4</td>
<td>4+4</td>
<td>4+4</td>
</tr>
</tbody>
</table>

There is no limit (except lifespan) to the amount of improvement possible with any skill. However, the useful maximum for most skills is between 20 and 30. Problems to challenge a greater skill are rare!

Improving Your Skills

There are two direct ways to increase your skills in play: spend the bonus points you earn for successful adventuring on new or better skills, or dedicate game time to study, which gives you points you can use to add or improve the skills you studied. In either case, the cost to improve a skill is the difference between the cost of the desired skill level and the cost of your current skill level. For more information, see Chapter 9.

Free Increases in Skills

There is one way to increase many skills at once: pay the points to improve an attribute (see Chapter 9). If you do this, all your skills based on that attribute go up by the same amount, at no extra cost. For instance, if you raise DX by one level, all of your DX-based skills also go up by one level. Further improvements are based on the new DX value.

You can also base skills on "defaults" from other skills; see Defaulting to Other Skills (p. 173). Any skill bought up from such a default is likely to enjoy a free increase when you raise the skill to which it defaults.

Skill Notation

When you write down a skill with a single specialty, either required or optional, do so in the form “Skill Name (Specialty)”; e.g., Artist (Painting). If such a skill has multiple qualifiers, follow these guidelines:

Technological skills: Place the tech level after the skill name and before the specialty; e.g., Engineer/TL8 (Civil).
Skills with both required and optional specialties: If a skill that requires you to specialize also allows an optional specialty, write the required specialty before the optional specialty and separate the two with a comma; e.g., Artist (Painting, Oil).
Skills that require two specialties: In the rare case where a skill requires you to select two specialties, separate them with a slash; e.g., Geography/TL7 (Physical/Earth-like).
Meaning of Skill Levels

So you have Literature-9, Savoir-Faire-22, and Shortsword-13. What does that mean? What is good, bad, and average? That’s very important when you create a character. It’s also important if you’re converting characters from another system into GURPS, or vice versa. There are two equally valid – but different – ways to make skill-level comparisons.

Your base skill measures your odds of success at an “average” task in a stressful situation where the consequences of failure are significant.

Probability of Success

The easiest way to get a feel for your skill levels is to look at your odds of success. To use a skill, you must roll 3d against your skill level. This is called a “success roll” (see Chapter 10). For instance, if your skill is 13, you must roll 13 or less on 3d to succeed. The table below shows the probability of success at each skill level – that is, your chance of rolling less than or equal to a given number on 3d. Note that skill levels can be over 18, but a roll of 17 or 18 is automatically a failure. Nobody succeeds 100% of the time!

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>Probability of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.5%</td>
</tr>
<tr>
<td>4</td>
<td>1.9%</td>
</tr>
<tr>
<td>5</td>
<td>4.6%</td>
</tr>
<tr>
<td>6</td>
<td>9.3%</td>
</tr>
<tr>
<td>7</td>
<td>16.2%</td>
</tr>
<tr>
<td>8</td>
<td>25.9%</td>
</tr>
<tr>
<td>9</td>
<td>37.5%</td>
</tr>
<tr>
<td>10</td>
<td>50.0%</td>
</tr>
<tr>
<td>11</td>
<td>62.5%</td>
</tr>
<tr>
<td>12</td>
<td>74.1%</td>
</tr>
<tr>
<td>13</td>
<td>83.8%</td>
</tr>
<tr>
<td>14</td>
<td>90.7%</td>
</tr>
<tr>
<td>15</td>
<td>95.4%</td>
</tr>
<tr>
<td>16+</td>
<td>98.1%</td>
</tr>
</tbody>
</table>

Base Skill vs. Effective Skill

Your unmodified skill level is called your base skill. It measures your odds of success at an “average” task under adventuring conditions – in other words, in a stressful situation where the consequences of failure are significant. Some examples:

- Battles and chase scenes.
- Races against the clock.
- Situations where your health, freedom, finances, or equipment is at risk.

The GM may modify your skill level to reflect the difficulty of a task. Your final skill level, after applying all modifiers for the task at hand, is your effective skill for that task.

In nonadventuring situations when you have lots of time to prepare and face minimal risk, the GM may give you +4 or more to skill. (The GM might even declare such actions successful instead of wasting time on a skill roll; see When to Roll, p. 343). Ordinary people almost always receive this bonus at mundane tasks, even if they are working from default skill!

Example: An airline pilot has Piloting-12 – normally a 74% chance of success. For day-to-day flying, however, he rolls at +4. This makes his effective skill 16, for a 98% chance of success.

On the other hand, especially tough adventuring situations can result in penalties. See Culture (p. 23), Language (p. 23), Tech-Level Modifiers (p. 168), Familiarity (p. 169), Equipment Modifiers (p. 345), and Task Difficulty (p. 345) for some common modifiers. Be sure to take these factors into account when buying your skills.

Relative Skill Level

Skill level reflects a combination of talent and training. For instance, a DX 17 warrior has a lot of raw talent. He could quickly learn Shortsword-17, as this is only DX level for him. A DX 10 fighter would need considerably more practice to become that skilled, as Shortsword-17 is DX+7 level for him.

Such details are often unimportant; two warriors with Shortsword-17 are equally good at smiting foes, regardless of whether their skill is due to talent or training. However, there are times when you need (or want) to know the difference.

It is easy to compare talent – just look at the controlling attribute for the skill. In the example above, the DX 17 swordsman is clearly more talented than the DX 10 fighter.

To compare training, you must look at relative skill level. You can calculate it quickly by subtracting controlling attribute from skill level. In our example, the DX 17 warrior has a relative skill level of 0, while the DX 10 fighter has a relative skill level of +7, and is better trained.

Relative skill level becomes important when using the next two rules; therefore, you might opt to note it in parentheses after your skill level; e.g., “Shortsword-17 (+7).”
Choosing Your Skill Levels

Gauging what skill levels you need to survive is no easy task. Determining how much skill is realistic can be tricky as well. When creating a PC (or an NPC), bear the following guidelines in mind.

Ordinary Folks

For an “average” person, it is reasonable to assume attributes between 9 and 11, and from 20 to 40 points in “life skills” (varying with education and dedication). Most people spread these points fairly evenly over roughly a dozen skills. This will result in skill levels between 8 and 13. Skills used to earn a living tend toward the upper end of this range (12 or 13), while little-used skills and those originating from long-forgotten college courses are at the lower end (8 or 9).

Experts

Once your skill level reaches 14, additional levels of skill don’t improve your odds of success much. Furthermore, it can cost a lot of points to acquire higher skill levels. If you are an adventurer, though, the investment is worthwhile, to help you overcome the penalties for difficult tasks. For instance, if you have Lockpicking-23, ordinary locks are no easier for you – you fail on a 17 or 18, no matter what. But when you run into a hard lock that gives -6 to skill, your effective skill is 17 and you still only fail on a 17 or 18!

Masters

If you are a “master” in your field, you might be tempted to increase your skill levels ad infinitum. However, a true master has a detailed understanding of every aspect of his calling, best represented by stopping at a masterful level (20 to 25) in the “main” skill and branching out into several “subsidiary” skills. An extreme level (anything over 25) in one skill tends to be excessive and unbelievable – and is frequently less useful than a lesser level combined with one or more subsidiary skills.

Example: Instead of improving Karate skill to 30, a kung fu master would be better off using those points to buy Karate at 25 and decent levels of Acrobatics, Judo, Meditation, etc.

Masters should also consider putting some points into advantages that negate skill penalties for adverse conditions. For instance, a kung fu master might buy Trained By A Master (reducing his penalties for multiple attacks and parries) and Combat Reflexes (improving his chances of defending himself), extending his capabilities in ways that high skill alone cannot.

To encourage players to develop their characters laterally instead of sinking all their points into just one or two skills, the GM might wish to consider limiting PCs to skill levels somewhere in the 20-25 range.

Using Skills Without Attributes

The GM will sometimes find it useful to ask for a skill roll based on an attribute other than the controlling one for a skill. This is realistic; few skills really depend just on brains, just on agility, etc. To make a roll like this, simply add the relative skill level to the attribute you wish to use and make a success roll against the total.

Example: A warrior with DX 10, IQ 14, and Shortsword-17 has a relative skill level of +7 in Shortsword. If the GM asked for an IQ-based Shortsword roll, the swordsman would roll against 14 + 7 = 21 instead of his Shortsword skill of 17.

Some skill descriptions present situations where skill rolls using other attributes would be appropriate. The GM is encouraged to dream up more! A few examples:

• DX-based rolls against IQ-based repair skills to reach into tight corners; ST-based rolls against these skills to manhandle engine blocks and other heavy parts into place.

• IQ-based rolls against DX-based combat skills to feint an opponent, formulate tactics, or perform minor maintenance on weapons; ST-based rolls against these skills to disarm someone using brute strength rather than finesse.

• IQ-based rolls against DX-based vehicle-operation skills to recall traffic regulations, remember to change the oil, or identify the make and model of a vehicle; HT-based rolls against these skills to stay awake at the wheel.

Your relative skill level will sometimes modify ST for a specific task (e.g., kicking in doors). Only modify ST if your relative skill level is positive – you get a bonus for high skill, but you never get a penalty for low skill.

Using Skills With Other Attributes

The GM might occasionally want two people with identical training to have similar odds of success regardless of their attributes, in a situation where training really does matter more than innate talent. In this case, just add relative skill level to a flat number – usually 10 – and roll against the result.

Example: Two accountants are vying for a promotion. One is talented, with IQ 14 and Accounting-18 (+4). The other is dull but experienced, with IQ 8 and Accounting-15 (+7). The GM decides to handle this as a Quick Contest: each accountant must attempt his Accounting roll, and the one who succeeds by the most will get the promotion. However, the boss cares about seniority above all, so the GM applies relative skill level – which reflects experience – to a flat base of 10. This leaves IQ out of the picture! The talented accountant rolls against 10 + 4 = 14, while his rival rolls against 10 + 7 = 17. Sometimes, life isn’t fair . . .
Most skills have a “default level”: the level at which you use the skill if you have no training. A skill has a default level if it is something that everybody can do . . . a little bit. As a general rule, a skill defaults to its controlling attribute at -4 if Easy, -5 if Average, or -6 if Hard. There are exceptions to this, but not many.

Example: The “default” for Broadsword (DX/Average) is DX-5. If your DX is 11, and you have to swing a broadsword without training, then your “default” skill at Broadsword is 11 - 5 = 6. You need a roll of 6 or less to hit.

Some skills have no default level. For instance, Alchemy, Hypnotism, and Karate are complex enough that you cannot use them at all without training.

Regardless of your default skill level, you do not get the special benefits of a skill – especially combat bonuses such as improved damage, special defenses, and unpenalized off-hand use – when you use a skill at default. To enjoy these benefits, you must spend at least one point on the skill.

The Rule of 20
If a skill defaults to a basic attribute that is higher than 20, treat that attribute as 20 when figuring default skill. Superhuman characters get good defaults, but not super ones.

Who Gets a Default?
Only individuals from a society where a skill is known may attempt a default roll against that skill. For instance, the default for Scuba skill assumes you are from a world where scuba gear exists and where most people would have some idea – if only from TV – of how to use it. A medieval knight transported to the 21st century would not get a default roll to use scuba gear the first time he saw it!

Defaulting to Other Skills
Some skills default to another skill instead of or as well as an attribute.

Example: Broadsword defaults to Shortsword-2, because the two skills are very similar: A Shortsword skill of 13 gives you a “default” Broadsword skill of 11.

Double Defaults
A skill can’t default to another skill known only by default. If Skill A defaults to Skill B-5, and Skill B defaults to IQ-5, does Skill A default to IQ-10? No.

Improving Skills from Default
If your default level in a skill is high enough that you would normally have to pay points for that level, you may improve the skill past its default level by paying only the difference in point costs between your new level and your default level.

Example: Suppose you have DX 12 and Shortsword at 13. Since Broadsword defaults to Shortsword-2, your default Broadsword skill is 11. Skill 11 is equal to DX-1 for you. This would have cost 1 point had you bought it directly. The next level (DX) costs 2 points. The difference is 1 point; to raise your Broadsword skill from its default level of 11 (DX-1) to 12 (DX), you need only pay 1 character point. You do not have to pay the full 2 points for DX level!

If you increase a skill, skills that default to it go up as well. However, if you have spent points to improve these defaults, you may not see an increase when you raise the skill to which they default. This is best illustrated with our running example:

Example: Suppose you spend the point to raise Broadsword to 12 (DX). Now you spend 4 more points on Shortsword, improving that skill from 13 to 14 (from DX+1 to DX+2). Does your Broadsword skill also go up a level? No. Your new default from Shortsword is now 12 (Shortsword at 14, minus 2), but to go from level 12 to level 13 (from DX to DX+1) with Broadsword costs 2 points, and you’ve only spent 1 point on Broadsword. Keep track of that point, though. When you spend one more point on Broadsword, it goes up a level, too.

When two skills default to one another and you have improved both, you may switch the “direction” of your default if this would give you better skill levels. Redistribute the points spent on both skills as needed. You may never decrease either skill level this way, however; you must always spend enough points to keep each skill at its current level.

Example: Keeping Shortsword at 14, you spend a total of 22 points on Broadsword, improving your skill from its default of 12 (DX) to 18 (DX+6). You’d like to default Shortsword from Broadsword now, rather than vice versa. Taking the 8 points you spent on Shortsword and the 22 points you spent on Broadsword, you have 30 points to work with. First, buy Broadsword at 18 (DX+6) for 24 points. Then default Shortsword from Broadsword, getting 16 (that is, Broadword-2). Finally, spend the remaining 6 points on Shortsword. This will be enough to raise Shortsword skill to 17 (and 2 more points will make that 18).

This feels like an abstract number shuffle, but it works. You’re no better off than if you had started out with Broadsword skill, and you aren’t penalized for learning Shortsword first.
SKILL LIST

The skill list is sorted alphabetically by skill name. Each entry gives the following information:

Name: The skill's name. Technological skills are noted as such; e.g., “Machinist/TL.” Skills marked with a dagger (†) require you to choose a specialty (see Specialties, p. 169).

Type: The skill's controlling attribute and difficulty level; e.g., “IQ/Average.”

Defaults: The attributes or other skills to which the skill defaults if you have not studied it. Where there is more than one possible default, use the most favorable. Some skills have no default – you cannot attempt to use these skills if you don't know them.

Prerequisites: Traits you must possess before you can spend points on the skill. If the prerequisite is another skill, you must have at least one point in that skill. Not all skills have prerequisites.

Description: An explanation of what the skill is for and how it works in play.

Modifiers: A list of common bonuses and penalties for use of the skill. The GM decides whether a particular modifier applies in a given situation. If an advantage or disadvantage permanently modifies base skill level rather than simply giving a bonus or a penalty for a specific task, add this permanent modifier to the skill level listed on your character sheet.

Accounting

Defaults: IQ-6, Finance-4, Mathematics (Statistics)-5, or Merchant-3.

This is the ability to keep books of account, to examine the condition of a business, etc. A successful Accounting roll (requires at least two hours of study, and possibly months to audit a large corporation) can tell you whether financial records are correct, and possibly reveal evidence of forgery, tampering, and similar criminal activity.

Modifiers: The time modifiers under Time Spent (p. 346) often apply; the Talents (p. 89) of Business Acumen and Mathematical Ability both provide a bonus.

Acrobatics

Defaults: DX-6.

This is the ability to perform gymnastic stunts, roll, take falls, etc. This can be handy on an adventure, as tightrope walking, human pyramids, and trapeze swinging all have useful applications. Each trick requires a separate skill roll, at whatever penalties the GM sees fit. If you are performing stunts on a moving vehicle or mount, roll against the lower of Acrobatics and the appropriate Driving or Riding skill.

You may substitute an Acrobatics roll for a DX roll in any attempt to jump, roll, avoid falling down, etc. As well, you may attempt an Acrobatic Dodge in combat – a jump or roll that avoids an attack in a flashy way (see Acrobatic Dodge, p. 375). Finally, a successful Acrobatics roll will reduce the effective distance of any fall by five yards (see Falling, p. 431).

Two special versions of Acrobatics are also available:

- Aerobatics: The ability to execute tight turns, loops, power dives, etc. in flight. You must be able to fly to learn this skill – although how you fly (magic, wings, jet pack, etc.) is irrelevant. Natural fliers might find flight to be as effortless as humans find walking, but they must still learn Aerobatics in order to engage in complex aerobatics. Add +2 to skill if you have 3D Spatial Sense (p. 34).

- Aquabatics: The ability to engage in underwater acrobatics. Prerequisites: Swimming, or the Amphibious advantage (p. 40) or the Aquatic disadvantage (p. 145).

Acrobatics, Aerobatics, and Aquabatics default to one another at -4. Add +1 to these three skills if you have Perfect Balance (p. 74).

Acting

Defaults: IQ-5, Performance-2, or Public Speaking-5.

This is the ability to counterfeit moods, emotions, and voices, and to lie convincingly over a period of time. A successful Acting roll lets you pretend to feel something that you do not. The GM may also require an Acting roll whenever you try to fool someone, play dead in combat, etc.

Impersonation is a special type of acting. To impersonate someone, you must first successfully disguise yourself (see Disguise, p. 187) – unless your victims cannot see you!

Note that Acting is not the same Fast-Talk (the art of the “quick con”) or Performance (the skill of screen and stage acting).

Modifiers: +1 for every point of IQ you have over the person you are trying to fool (or the smartest one in the group), or -1 for every point of difference if your victim is smarter than you; -3 for Low Empathy (p. 142); -1 to -4 for Shyness (p. 154); -5 for Truthfulness (p. 159), but only if you are trying to deceive someone. For impersonation only: -5 if you are not well acquainted with your subject; -5 if those you wish to fool are acquaintances of the subject (-10 for close acquaintances).

Administration

Defaults: IQ-5 or Merchant-3.

This is the skill of running a large organization. It is often a prerequisite for high Rank (p. 29). A successful Administration roll gives you a +2 reaction bonus when dealing with a bureaucrat, and allows you to predict the best way to go about dealing with a bureaucracy.

Alchemy/TL

see Crewman, p. 185

Airshipman/TL

see Alchemy, p. 185

Alchemy/TL

Defaults: None.

This is the study of magical transformations and transmutations. In a magical game world, an alchemist would be able to identify concoctions with magical effects (“elixirs”), such as
love potions and healing unguents, and prepare them from suitable ingredients. This is a mechanical process, using the mana inherent in certain things; therefore, those without Magery can learn and use Alchemy, and Magery confers no benefit.

**Animal Handling†**

Default: IQ-5.

This is the ability to train and work with animals. You must specialize in a category of animals – the more intelligent the animals, the narrower the category. Examples of interest to adventurers: Big Cats (jaguars, lions, tigers, etc.), Dogs, Equines (horses and donkeys), and Raptors (eagles, falcons, and hawks). The default between specialties is -2 within the same order (e.g., Dogs to Big Cats), -4 across orders (e.g., Dogs to Equines), and -6 for larger differences (e.g., Dogs to Raptors).

To train an animal, make an Animal Handling roll once per day of training. A failed roll means the animal learned nothing; a badly failed roll means you are attacked. The time it takes to train an animal depends on the beast’s intelligence and tractability (see Chapter 16).

When working with a trained animal, roll against skill for each task you set the animal. This roll is at -5 if the animal is not familiar with you, -5 if the circumstances are stressful to the animal, and -3 or more if the task is a complex one. To put on an entertaining circus act, snake-charming show, etc., you must make a separate Performance roll!

This skill can also (sometimes) be used to quiet a wild, dangerous, or untrained animal. This roll is at -5 if the creature is wild or very frightened, or -10 if it is a man-eater or man-killer.

Finally, this skill gives an advantage in combat against animals within your specialty. If you have Animal Handling at level 15, an animal’s attack and defense rolls are at -1 against you, because you can predict its behavior. At skill 20, the animal’s rolls are at -2.

**Anthropology†**

Defaults: IQ-6, Paleontology (Paleoanthropology)-2, or Sociology-3.

This is the ability to train and work with animals. An anthropologist is knowledgeable in the ways of primitive (and not-so-primitive) societies. An Anthropology roll might explain, or even predict, unusual rituals and folk customs. This skill requires specialization by species (if left unspecified, assume the anthropologist’s own species). Specialties usually default to one another at -2 to -5, although there may be no default for completely alien species.

### Optional Rule: Wildcard Skills

The professor who has studied every science, the swordsman who can fight with any blade . . . cinematic fiction is full of heroes who know a little bit about everything in one broad area. The time required to list every last skill such a hero might need, and the difficulty of figuring out which skills to take (and which to use), might discourage many gamers from playing cinematic experts. Such broad expertise doesn’t exist in real life, but it is all part of the fun in cinematic games!

A solution to this problem is “wildcard skills” or “bang skills”: skills that cover extremely broad categories of ability. The names of these skills end in an exclamation point in order to distinguish them from normal skills; e.g., “Science!” is the skill of “all science.” *Wildcard skills include and replace all specific skills within their area.* For instance, a hero could attempt a Science! roll whenever the adventure calls for a roll against Chemistry, Physics, or another science skill.

Wildcard skills that cover mainly intellectual pursuits are IQ-based, while those that pertain chiefly to physical actions are DX-based. Such skills have no default; to use them, you must spend points on them. Buy wildcard skills as Very Hard skills, but at triple the usual point cost. For instance, it would normally cost 8 points to buy an IQ/Very Hard skill at IQ level, so Science! skill at IQ level would cost 24 points.

The GM might choose to limit wildcard skills to those with a suitable Unusual Background – perhaps “Cinematic Hero.” This Unusual Background should never be available to sidekicks and random thugs! To give each hero a well-defined dramatic niche, the GM might wish to limit PCs to one or two wildcard skills apiece (preferably those that emerge naturally from their character stories).

Some examples:

- **Detective!** (IQ). Replaces Criminology, Detect Lies, Electronics Operation (Security and Surveillance), Forensics, Interrogation, Law, Observation, Research, Savoir-Faire (Police), Search, Shadowing, Streetwise, etc.
- **Gun!** (DX). Replaces all specialties of Beam Weapons, Gunner, Guns, and Liquid Projector, as well as all related Fast-Draw skills. Make an IQ-based roll for Armoury pertaining to these weapons.
- **Science!** (IQ). Replaces Astronomy, Bioengineering, Biology, Chemistry, Engineer, Geology, Mathematics, Metallurgy, Meteorology, Naturalist, Paleontology, Physics, Psychology, etc.
- **Sword!** (DX). Replaces Broadsword, Force Sword, Jitte/Sai, Knife, Main-Gauche, Rapiere, Saber, Shortsword, Smallsword, and Two-Handed Sword, as well as related Fast-Draw skills. Use in place of such skills as Acrobatics and Jumping for physical stunts while fighting.

Wildcard skills are useful for omnifaceted characters. Someone who can pick up and play any instrument, or sight-read any choral work, would have the Music! skill. If he’s gifted with several instruments and can pick up others easily (but does have to learn them first), that’s the Musical Ability Talent.
Aquabatics
see Acrobatics, p. 174

Archaeology
IQ/Hard
Default: IQ-6.

This is the study of ancient civilizations. An archaeologist is at home with excavations, old potsherds, inscriptions, etc. An Archaeology roll lets you answer questions about ancient history, or identify artifacts and dead languages. It might even reveal information relating to the occult; e.g., Ancient languages. It might even reveal information relating to the occult; e.g., Ancient...
your horse at 3 a.m., or to find the best ambush spot along a stretch of road. "Secret" or obscure information might give a penalty, require a Hidden Lore skill (p. 199), or simply be unavailable – GM's decision. For instance, Area Knowledge of Washington, D.C. gives you the location of the Russian Embassy, but not the KGB's current safe house.

The information covered by Area Knowledge often overlaps such skills as Current Affairs, Geography, Naturalist, and Streetwise. The difference is that Area Knowledge works for a single area: you know the habits of this tiger or gang boss, but have no special insight into tigers or gangs in general.

You can learn Area Knowledge for any sort of area. The larger the territory, the less "personal" and more general your knowledge becomes. Almost everyone will have Area Knowledge of some type. The "canonical" area classes are:

**Neighborhood:** For an urban area: the residents and buildings of a few city blocks. For a rural area: the inhabitants, trails, streams, hiding places, ambush sites, flora, and fauna of a few hundred acres.

**Village or Town:** All important citizens and businesses, and most unimportant ones; all public buildings and most houses.

**City:** All important businesses, streets, citizens, leaders, etc.

**Barony, County, Duchy, or Small Nation:** General nature of its settlements and towns, political allegiances, leaders, and most citizens of Status 5+.

**Large Nation:** Location of its major cities and important sites; awareness of its major customs, ethnic groups, and languages (but not necessarily expertise); names of folk of Status 6+; and a general understanding of the economic and political situation.

**Planet:** As for a large nation, but more general; knowledge of people of Status 7+ only.

**Interplanetary State:** Location of major planets; familiarity with all known races (but not necessarily expertise); knowledge of people of Status 7+; general understanding of the economic and political situation.

**Galaxy:** Location of the capitals of interplanetary states and the homeworlds of major races; general awareness of all major races; knowledge of individuals of Status 8; general understanding of relations between interplanetary states.

Area Knowledge for anything larger than a galaxy would be meaninglessly vague.

Your IQ-4 default applies to any of these classes, as long as you have lived in the area. Defaults are limited by "common knowledge" at your tech level! A TL0 hunter would have a default for every level up to "Village or Town," while a TL8 student would have defaults up to "Planet" level. You must live in an interplanetary or interstellar state to have defaults for levels above "Planet."

In some game worlds, Area Knowledge specialties may exist for parallel realities and other dimensions – Area Knowledge (Cyberspace), Area Knowledge (Dream Realms), etc. The knowledge such skills provide is left to the GM's judgment.
Armoury/TL†

IQ/Average

Defaults: IQ-5 or Engineer (same)-4.

This is the ability to build, modify, and repair a specific class of weapons or armor. (It does not include skill at design; for that, see Engineer, p. 190.) A successful roll lets you find a problem, if it isn’t obvious; a second roll lets you repair it. Time required is up to the GM.

You must specialize in one of the following fields:

Battlesuits: All kinds of powered armor, along with any built-in weaponry.

Body Armor: Any kind of unpow- ered personal armor (but not shields). Also defaults to Smith (Bronze)-3 at TL1, to Smith (Iron)-3 at TL2-4, and to Machinist-3 at TL5+.

Force Shields: Any kind of force screen or deflector – be it personal or vehicular. This is the same skill as Electronics Repair (Force Shields).

Heavy Weapons: All weapons used with the Artillery and Gunner skills.

Missile Weapons: Man-portable, pre-gunpowder projectile weapons of all kinds – bows, crossbows, slings, etc.

Small Arms: All weapons used with the Beam Weapons and Guns skills. Also defaults to Machinist-5 at TL5+.

Vehicular Armor: All kinds of armored vehicle hulls.

Most specialties default to one another at -4 – but above TL4, there is no default between Armoury specialties dealing with armor and Armoury specialties dealing with weapons. The technologies covered by each specialty vary with TL. For instance, Armoury (Small Arms) covers black-powder small arms at TL4, repeating small arms that fire cartridges at TL6, “smart” infantry weapons at TL8, and portable beam weapons at TL10.

The GM should strictly enforce penalties for unfamiliarity. Armoury/TL10 (Small Arms) might cover both beam weapons and portable railguns, but going from one to the other gives you -2 to skill until you familiarize yourself with all the differences.

Modifiers: -2 for an unfamiliar item within your specialty (e.g., plate armor when you’re used to mail); equipment modifiers (p. 345).

Artillery/TL†

IQ/Average

Defaults: IQ-5.

This is the ability to use a heavy weapon, such as a trebuchet or a howitzer, for indirect fire – that is, to put fire onto a target area via a high ballistic arc or similar path. For direct fire, use Gunner skill (p. 198). Roll against Artillery skill to bombard the target.

Loaders can make ST-based Artillery rolls to improve the rate of fire of certain crew-served heavy weapons. See the appropriate weapon description for details.

You must specialize by weapon type. The available specialties vary by TL, but include one or more of:

Beams: Any kind of heavy energy weapon that is fired from orbit, bounced off a mirror, or otherwise used against targets you cannot see.

Bombs: All kinds of unpowered, free-falling munitions.

Cannon: Any kind of heavy projectile weapon – bombard, howitzer, naval gun, etc.

Catapult: Any kind of indirect-fire mechanical siege engine, such as a trebuchet.

Guided Missile: Any kind of seeking or remotely piloted missile.

Torpedoes: Any kind of powered underwater projectile.

There is no default between specialties, some of which (e.g., Torpedoes) cover weapons that bear little or no resemblance to true artillery. Artillery is a single skill only because all the weapons it covers use the same rules.

The weapons covered by each specialty will vary by TL. For instance, Artillery (Cannon) would cover primitive bombards at TL3, brass cannon at TL4, breech-loading howitzers at TL6, and orbital railguns at TL9+.

Familiarity is crucial here! Artillery (Cannon) covers both 81mm infantry mortars and 406mm naval guns, but going from one to the other will give -2 for weapon type (81mm vs. 406mm), -2 for fire-control (visual spotting vs. fire-direction center), and -2 for mount (bipod vs. naval turret), for a total of -6 to skill until you familiarize yourself with all the differences.
Note that Forward Observer skill (p. 196) is generally required to designate targets for Artillery skill.

**Artists**

**Default:** IQ-6.

This skill represents talent at a visual art. A successful roll might let you create a recognizable likeness of a person or an object, or a work beautiful enough to sell (the GM should not allow a default roll for this use!). Time required is up to the GM.

Artist is based on IQ, but there are many situations in which the GM could logically ask for a DX-based roll, in which case modifiers for High Manual Dexterity (p. 59) or Hammer-Fisted (p. 138) would apply. In rare cases, even a ST-based Artist roll might make sense – for instance, to work with a physically tough material.

You must specialize in an art form. Common specialties include:

- **Body Art:** Tattooing, piercing, and scarification. Both this specialty and Painting suffice for henna or temporary tattoos, but cosmetic surgery requires Surgery skill (p. 223).
- **Calligraphy:** Beautiful and decorative handwriting. You need not be literate!
- **Drawing:** All forms of charcoal, ink, pastel, and pencil work.
- **Illumination:** Decorating written text with miniature paintings and pictures.
- **Illusion:** Creating believable or evocative illusions. Prerequisite: magical or psionic illusion ability of some kind.
- **Interior Decorating:** Creating pleasing building interiors by selecting appropriate paints, fixtures, and furniture. Default: Architecture-3.
- **Painting:** All forms of painting, whether on paper, canvas, or a wall, and whether with tempera, oil-based paint, or something more exotic (like blood).
- **Pottery:** Working with various sorts of ceramics – especially clay.
- **Scene Design:** Designing sets for the stage. Default: Architecture-3.
- **Sculpting:** Creating three-dimensional art from ivory, stone, metal, etc.
- **Woodworking:** All forms of fine woodwork, including cabinet-making and decorative carving. Default: Carpentry-3.

Calligraphy, Drawing, Illumination, and Painting default to one another at -2, and to or from Body Art at -4. Interior Decorating, Scene Design, and Woodworking default among themselves at -4. All other Artist specialties default to one another at -6.

An artist of any kind can take a further optional specialty (p. 169) in a particular medium or technique.

Many Artist specialties are used to earn a living rather than to create fine art, and some people regard them as “craft” skills, not “art” skills. It is up to you whether you focus on beauty, realism, or functionality.

**Modifiers:** Equipment modifiers (p. 345); -2 if the medium is unfamiliar (e.g., tempera when you are used to oils); -5 if the medium is difficult (e.g., marble, for a sculptor).

**Astronomy/TL**

**Default:** IQ-6.

**Prerequisite:** Mathematics (Applied).

This is the study of stars and other extraplanetary objects. An astronomer could answer questions about the Sun, the planets of the solar system, etc. An amateur who can locate stars and use a telescope, but not perform involved calculations, has an optional specialty (p. 169): Astronomy (Observational). This specialty does not require Mathematics as a prerequisite.

**Autohypnosis**

**Default:** Meditation-4.

This skill allows you to tap reserves of inner strength by entering a trance-like state. It requires a concentration period of (20 - skill) seconds, minimum one second. You cannot talk or move during the initiation of the trance state. A successful skill roll allows you to do one of the following:

- **Improve Concentration:** You get +2 to skill to perform a specific, lengthy mental task (e.g., break a code or write a computer program), but -2 to all unrelated IQ, Perception, and skill rolls. The task must be a relatively sedate one, done in a quiet place (library, lab, monastery, or placid wilderness).
- **Increase Will:** You get +2 to Will (+5 on a critical success) for one hour. This applies to all attempts to resist interrogation, torture, or magical or psionic attack. This roll is at -2.
- **Negate Pain/Fatigue:** Cancels the negative effects of being reduced to less than 1/3 of your FP or HP (but not the fatigue or injury itself). This roll is at -4, and you may only make one attempt per hour.

**Axe/Mace**

see Melee Weapon, p. 208

**Beam Weapons/TL**

**Default:** DX-4.

This is the ability to use beam small arms. You must specialize by weapon type:

- **Pistol:** Any handgun that fires an energy or particle beam.
- **Projector:** Any energy weapon that emits an area-effect cone or field.
- **Rifle:** Any long arm that fires an energy or particle beam.

These specialties default to one another at -4. Treat specific beam types (blaster, laser, stunner, etc.) as familiarities. Other modifiers are as per Guns (p. 198). In settings with both beam and projectile weapons, the Pistol and Rifle specialties of Beam Weapons default to the similarly named Guns specialties at -4, and vice versa.

See Artillery (p. 178) and Gunner (p. 198) for heavier beam weapons.
**Bicycling**

**Defaults:** DX-4 or Driving (Motorcycle)-4.

This is the ability to ride a bicycle long distances, at high speeds, in rallies, etc. Roll at +4 if all you want to do is struggle along without falling off. An IQ-based Bicycling roll allows you to make simple repairs, assuming tools and parts are available.

**Bioengineering/TL†**

**Defaults:** Biology-5.

This is the ability to engineer living organisms with specific characteristics, or to create biotechnological products. You must specialize:

- **Cloning:** The creation and growth of clones.
- **Genetic Engineering:** The manipulation and modification of genes.
- **Tissue Engineering:** The manufacture of organs and tissues.

These specialties default to each other at -4.

**Biology/TL†**

**Defaults:** IQ-6 or Naturalist-6.

This is the scientific study of the structure, behavior, and habitats of living organisms. You must specialize in the life of a particular planet type (see box). If you do not specify a planet type, your native planet type is assumed. The IQ default applies only to the planet type you grew up on. The default between different planet-type specialties is -4.

At TL6+, most biologists have an optional specialty (p. 169) as well. The most common options are biochemistry (the study of the chemical reactions that sustain life), botany (the study of plants), ecology (the study of environments), genetics (the study of heredity and genomes), marine biology (the study of ocean life), microbiology (the study of microscopic organisms), and zoology (the study of animals), but more obscure specialties are possible.

**Planet Types**

Biology, Geology (p. 198), and Meteorology (p. 209) require you to specialize by “planet type,” as does the “Physical” specialty of Geography (p. 198). If you do not specify a planet type, your native planet type is assumed – so if the campaign will never leave your home world, save space and just write “Geology,” “Biology,” etc. GURPS sorts planets into six broad categories for these purposes.

- **Earthlike:** Essentially, all habitable worlds.
- **Gas Giants:** Jupiter/Uranus types.
- **Hostile Terrestrial:** Venus types.
- **Ice Dwarfs:** Comets and small moons composed almost entirely of snow or ice.
- **Ice Worlds:** Rock worlds covered by a frozen “ocean.”
- **Rock Worlds:** Most moons, asteroids, etc.

Unless otherwise specified, all planet-type specialties for a given skill default to one another at -4.

**Blind Fighting**

**Defaults:** None.

**Prerequisites:** Trained By A Master or Weapon Master.

You have learned to fight blindfolded or in absolute darkness. As a result, you can “sense” your targets without having to see them.

This skill enables you to use senses other than vision – mainly hearing, but also touch and even smell – to pinpoint exactly where your opponents are. A successful roll allows one melee attack or active defense without any penalties for lighting (even total darkness), blindness (temporary or permanent), or an invisible foe. However, attacks made in total darkness, while blind, or against invisible enemies have an extra -2 to target specific hit locations.

If you also know Zen Archery (p. 228), you can use this skill at default, +1 for wind, +2 to target specific hit locations.

**Modifiers:**
- Background noise gives a penalty: -1 for rain, -2 for heavy rain or a storm, -3 for a crowded, noisy area or heavy machinery, -4 for a full football stadium, or -5 in the middle of an artillery barrage. If you cannot hear at all, the roll is at -7, but you may still attempt a roll, as the skill is not completely based on hearing. Add your level of Acute Hearing to the roll. Add the higher of your ESP Talent (p. 256) or Telepathy Talent (p. 257).

**Blowpipe**

**Defaults:** DX-6.

This is the ability to use a blowpipe. You can use this weapon to shoot small, usually poisoned, darts. You can also use it to blow powders at targets within one yard. Treat this as a melee attack, not as a ranged attack. Such attacks are always at +2 to hit.

**Modifiers:** -2 and up for wind, if outdoors.

**Boating/TL†**

**Defaults:** DX-5 or IQ-5.

This is the ability to handle a specific type of small watercraft. For large vessels that require multiple crewmen on a “bridge,” use Seamanship (see Crewman, p. 185) and Shiphandling (p. 220).

Make a roll to get underway, to dock, and whenever you encounter a hazard. If using this skill at default,
also roll when you first enter the boat – to avoid falling in the water!

You must specialize:

- Large Powerboat: Any boat with an enclosed cabin and an inboard motor: Includes cabin cruisers, houseboats, and patrol boats. Defaults: Motorboat-2, Sailboat-4, or Unpowered-4. This specialty (only) also defaults to Seamanship-4.

- Motorboat: Any open powerboat – notably speedboats and any of the boats used with the Sailboat or Unpowered specialty when outfitted with an outboard motor. Defaults: Large Powerboat-2, Sailboat-3, or Unpowered-3.


- Unpowered: Any small watercraft that relies on muscle power, whether it is paddled, rowed, or poled. Includes canoes, rowboats, and rafts. Defaults: Large Powerboat-4, Motorboat-3, or Unpowered-3.

Modifiers: -2 for an unfamiliar boat within your specialty (e.g., a kayak when you’re used to a rowboat); -3 or worse for foul weather; navigational hazards, etc.

**Body Control**  
HT/Very Hard

Defaults: None.  
Prerequisites: Trained By A Master, Breath Control, and Meditation.

This ability lets you affect involuntary bodily functions such as heart rate, blood flow, and digestion. One use of this skill is to enter a deathlike trance, during which only those who can win a Quick Contest of Diagnosis vs. your Body Control skill even realize that you are alive. This requires (30 + skill) seconds of concentration, minimum one second.

You can also use this skill to flush poisons from your body. To do so, you must first roll against Poisons (or Alchemy, Pharmacy, etc., as appropriate) to identify the poison. You cannot attempt this roll until you know you have been poisoned. In most cases, you only discover this when the first symptoms show! A successful Body Control roll – adjusted by any modifier to the HT roll to resist the poison – flushes the poison in 1d hours, after which it has no further effect.

Finally, you may use the higher of this skill and basic HT to resist any Affliction, magic spell, or psionic attack that is normally resisted by HT.

**Body Language**  
Per/Average

Defaults: Detect Lies-4 or Psychology-4.

This is the ability to interpret a person’s facial expressions and body posture in order to gauge his feelings. You can use it like the Empathy advantage (p. 51) or Detect Lies skill (p. 187), but only on a subject you can see. You can also use it to get a rough idea of what a party member is doing or about to do in a situation where he cannot communicate with you directly (for instance, when using Stealth). You can only observe one subject at a time.

The ability to read body language in combat is a standard part of any Melee Weapon or unarmed combat skill; see Feint (p. 365).

Modifiers: All Vision modifiers; physiology modifiers (see box); +4 if your subject is Easy to Read (p. 134). Anything that makes the subject harder to “read” gives a penalty: baggy clothing gives -1, a shield or a voluminous cloak gives from -2 to -4, and a mask gives -5 (and makes it impossible to use this skill if you cannot see the rest of the body!).

**Body Sense**  
DX/Hard

Defaults: DX-6 or Acrobatics-3.

This is the ability to adjust quickly after teleportation or similar “instant movement.” A successful roll lets you act normally on your next turn. A failed roll means disorientation: you may take no action other than defense for one turn. A critical failure means you fall down, physically stunned!

Modifiers: +3 for either level of Absolute Direction (p. 34). -2 if you changed facing, or -5 if you went from vertical to horizontal or vice versa (you cannot change posture during a teleport – only orientation).

**Bolas**  
DX/Average

Defaults: None.

This is the ability to throw the bolas: a length of cord with two or more weights attached. Its primary uses are to stop herd animals and to hunt small game, but it can also entangle opponents in combat. See Special Ranged Weapons (p. 410) for bolas rules.

---

**Physiology Modifiers**

The following skills deal with the health, function, or vital points of living beings: Body Language, Diagnosis (p. 187), First Aid (p. 195), Physician (p. 213), Pressure Points (p. 215), Pressure Secrets (p. 215), and Surgery (p. 223). These skills work as written when working with members of your species. When dealing with a member of another species, apply the following modifiers:

- **Species with similar physiology:** -2 (human vs. Elf) to -4 (human vs. troll).
- **Species with very different physiology, but still from your world:** -5. This includes all normal animals.
- **Utterly alien species:** -6 or worse (GM’s option).
- **Machine:** No roll possible! These skills do not work at all on creatures with the Machine meta-trait (p. 263).

A successful roll against a suitable skill lets you avoid these penalties. This roll is usually against the relevant racial specialty of Physiology, although Biology-4 suffices for common animals.
**Bow**

**Defaults:** DX-Average

This is the ability to use the longbow, short bow, and all similar bows. It also covers the compound bow, although a person who had never seen a compound bow would suffer a -2 unfamiliarity penalty.

**Boxing**

**Defaults:** None.

This is the skill of trained punching. Roll against Boxing to hit with a punch. Boxing does not improve kicking ability – use Brawling (p. 182) or Karate (p. 203) for that.

Boxing improves damage: if you know Boxing at DX+1 level, add +1 per die to basic thrust damage when you calculate punching damage. Add +2 per die if you know Boxing at DX+2 or better! Work out damage ahead of time and record it on your character sheet.

When you defend with bare hands, Boxing allows you to parry two different attacks per turn, one with each hand. Your Parry score is (skill/2) + 3, rounded down. Boxing parries are at -2 vs. weapons other than thrusting attacks. Boxing also gives an improved retreating bonus when you parry; see Retreat (p. 377). For more on barehanded parries, see Parrying Unarmed (p. 376).

**Brain Hacking**

**see Brainwashing, below**

**Brainwashing/TL**

**Defaults:** Special.

**Prerequisite:** Psychology.

This is the “black art” of technological personality alteration and mind control. Only intelligence, military, and security services teach it – and only to individuals with suitable Rank or Security Clearance. Even then, it is rare outside police states (except perhaps during wartime).

Brainwashing encompasses many techniques – some proven, others little better than witchcraft. Depending on the setting, these might include drugs, electroshock, hypnotism, sensory deprivation, sleep deprivation, social pressure, subliminal messages, or surgery… and most likely a combination of several of these.

Regardless of the techniques employed, brainwashing is handled as a Regular Contest (not a Quick Contest) between Brainwashing skill and the victim’s Will. Roll once per day. Obviously, the brainwasher has a tremendous advantage: even if the victim wins this time, it is only a matter of time before he slips.

Results depend on how effective the GM deems brainwashing to be, but might include insanity, personality alteration, or suggestions that can be triggered by future events. In game terms, the victim can acquire almost any mental quirk or disadvantage.

In settings where neural interfaces exist, it might be possible to “hack” the victim’s brain using a computer. This takes only a fraction of a second per attempt! Brain Hacking should be treated as its own skill, with Computer Hacking instead of Psychology as a prerequisite.

This skill normally has no default, however, GMs who wish to explore the gory details can specify the techniques used in their campaign and have Brainwashing default to one or more of Electronics Operation (Medical)-6, Hypnotism-6, Interrogation-6, Pharmacy-6, Psychology-6, or Surgery-6, as appropriate.

**Brawling**

**Defaults:** None.

This is the skill of “unscientific” unarmed combat. Roll against Brawling to hit with a punch, or Brawling-2 to hit with a kick. Brawling can also replace DX when you attack with teeth, claws, horns, or other “natural weapons.”

Brawling improves damage: if you know Brawling at DX+2 level or better, add +1 per die to basic thrust damage when you calculate damage with Brawling attacks – punches, kicks, claws, bites, etc. Work out damage ahead of time and record it on your character sheet.

Brawling includes the ability to use the blackjack or sap. An attack with such a fist load is considered a punch at +1 to damage.

When you defend with bare hands, Brawling allows you to parry two different attacks per turn, one with each hand. Your Parry score is (skill/2) + 3, rounded down. Brawling parries are at -3 vs. weapons other than thrusting attacks. For more on barehanded parries, see Parrying Unarmed (p. 376).

**Breaking Blow**

**Defaults:** None.

**Prerequisite:** Trained By A Master.

This skill allows you to find the weakest spot in any object when making a barehanded attack. Each attack requires a separate Breaking Blow roll. Roll against skill after you hit. Breaking Blow costs 1 FP per attempt, whether or not you hit.

On a success, your attack gains an armor divisor of (5) against any braced, inanimate, homogenous target (see Injury to Unliving, Homogenous, and Diffuse Targets, p. 380), and you may treat the target as it were Fragile (Brittle) (p. 136) for this one attack.

In a cinematic game, you are not limited to inanimate targets. Your armor divisor affects any artificial armor or force field (not natural DR), and you may treat homogenous opponents as if they were Fragile (Brittle)!

On a failure, your attack gains no special benefits. On a critical failure, you do the damage to your own hand or foot.

**Breath Control**

**Defaults:** None.

This is the ability to breathe at maximum efficiency. On a successful skill roll, you can increase the time you can hold your breath for any reason (e.g., underwater) by 50%, or regain one FP in only two minutes (you cannot combine this with magic spells that restore FP).
**Broadsword**  
see Melee Weapon, p. 208

**Camouflage**  
IQ/Easy

Defaults: IQ-4 or Survival-2.

This is the ability to use natural materials, special fabrics and paints, etc. to hide yourself, your position, or your equipment. To see through your camouflage, an observer must win a Quick Contest of Vision or Observation skill (p. 211) vs. your Camouflage skill.

Depending on the circumstances, successful camouflage might hide its subject entirely or merely blur its outlines to make it harder to hit (-1 to attacker's skill). Camouflage will not improve your Stealth roll, but if you fail a Stealth roll while camouflaged, those who heard you must still see through your camouflage to see you.

Modifiers: Equipment modifiers (p. 345). Apply a penalty equal to the Size Modifier of a large object (e.g., -5 for a tank with SM +5). This makes it difficult to camouflage large objects, but remember that distant observers suffer large Vision penalties for range – see Vision (p. 358).

**Captivate**  
see Enthrallment, p. 191

**Carousing**  
HT/Easy

Default: HT-4.

This is the skill of socializing, partying, etc. A successful Carousing roll, under the right circumstances, gives you a +2 bonus on a request for aid or information, or just on a general reaction. A failed roll means you made a fool of yourself in some way; you get a -2 penalty on any reaction roll made by those you caroused with. If you do your carousing in the wrong places, a failed roll can have other dangers!

Modifiers: Equipment modifiers (p. 345); +3 for buying drinks or other entertainment for your fellow carousers; -3 for Killjoy (p. 140); -3 for Low Empathy (p. 142); -1 to -4 for Shyness (p. 154).

**Carpentry**  
IQ/Easy

Default: IQ-4.

This is the ability to build things out of wood. A successful roll lets you do one hour's worth of competent carpentry. A failed roll means the work was bad. The GM may require DX-based Carpentry rolls for certain kinds of fine work.

Modifiers: Equipment modifiers (p. 345); +5 if you are being supervised or assisted by someone with skill 15 or better.

**Cartography/TL**  
IQ/Average

Defaults: IQ-5, Geography (any) -2, Mathematics (Surveying)-2, or Navigation (any)-4.

This is the ability to create and interpret maps and charts. Roll against this skill to map any location as you move through it. At TL7+, this skill includes knowledge of computer mapping techniques and generating maps from sensor information.

**Chemistry/TL**  
IQ/Hard

Default: IQ-6 or Alchemy-3.

This is the study of matter. A chemist can identify elements and simple compounds (but not necessarily drugs, magical substances, etc.). Given proper equipment, he could conduct complex analyses and syntheses.

**Climbing**  
DX/Average

Default: DX-5.

This is the ability to climb mountains, rock walls, trees, the sides of buildings, etc. See Climbing (p. 349) for details.

Modifiers: +2 for Brachiator (p. 41); +3 for Flexibility or +5 for Double-Jointed (p. 56); +1 for Perfect Balance (p. 74); a penalty equal to encumbrance level (e.g., -1 for Light encumbrance).
**Cloak**

**Defaults:** DX/Average

This is the skill of using a cloak or a cape as a weapon. It covers the use of two types of cloak: the waist-length “light cloak” (any cloak, cape, or coat weighing less than 5 lbs.) and the full-length “heavy cloak” (any cloak weighing 5 lbs. or more).

Offensively, you can use a cloak to entangle an opponent – see *Special Melee Weapon Rules* (p. 404) for details. You can also snap a cloak in your opponent’s face or simply use it to block his vision, either of which counts as a Feint maneuver.

Defensively, a cloak works much like a shield. It provides a Defense Bonus (+1 if light, +2 if heavy) and gives a Block defense equal to (skill/2) + 3, rounded down. A cloak is not as robust as a shield, though! A light cloak has only DR 1 and 3 HP, while a heavy cloak has DR 1 and 5 HP.

**Combat Art or Sport**

**Defaults:** Special.

You can opt to learn most combat skills in nonlethal forms aimed at either exhibition (Combat Art skill) or competition (Combat Sport skill).

Combat Art skills emphasize graceful movements and perfect stances. Since these skills still give a default to full-fledged, lethal combat skills (see below), they are a logical choice for Pacifists who want some combat ability.

Combat Sport skills concentrate on speed of movement and nondamaging attacks. A failed skill roll means a foul that might disqualify you from a tournament! You can make an IQ-based roll against Combat Sport to recall tournament rules, but to become a qualified judge or referee, learn the relevant Games skill (p. 197).

Combat Art and Sport skills are DX-based, with the same difficulty level and defaults as the corresponding combat skill. A combat skill, its Art form, and its Sport form default among themselves at -3. For instance, Staff Art and Staff Sport skills of 12, while an athlete with Staff Sport at 15 would have Staff and Staff Art skills at 12 by default.

**Computer Hacking/TL**

**Defaults:** None.

**Prerequisite:** Computer Programming.

This is the skill of gaining illegal access to a computer system – usually using another computer over a communications network. A successful Computer Hacking roll allows you to gain surreptitious access to a system, or to find (or change) information on a system you have already broken into. On a critical failure, you fail to gain access and leave some sort of incriminating evidence of your attempt.

This skill is cinematic, and simulates the way computer intrusion works in many movies and novels. It does not exist in realistic settings! Realistic “hackers” should learn a combination of Computer Operation (to exploit OS loopholes and run intrusion software), Computer Programming (to write intrusion software), Cryptography, Electronics Operation (Communications or Surveillance), Electronics Repair (Computers), Fast-Talk (to convince legitimate users to reveal passwords), Research (to find documented security holes), and Scrounging (to “dumpster dive” for manuals, passwords on discarded sticky notes, etc.).

**Modifiers:** Equipment modifiers (p. 345). -1 to -10 if you have been away from the field for a long time and have not had a chance to become familiar with the changes. Security measures give a penalty, from -1 for the cheapest commercial security software to -15 for the latest technology. Some measures resist your intrusion attempt; treat this as a Quick Contest of Hacking vs. the effective skill of the defenses.

**Computer Operation/TL**

**Defaults:** IQ-4.

This is the ability to use a computer: call up data, run programs, play games, etc. It is the only computer skill needed by most end users. Learn Computer Programming (below) to write software and Electronics Repair (Computers) (p. 190) to troubleshoot hardware.

This skill only exists in game worlds with computers. Individuals from settings without computers cannot even use it by default until they have had time to gain familiarity with computers! In settings where it is possible to “jack” your brain into a computer, Computer Operation includes the ability to use a neural interface, but new users initially suffer a -4 penalty for unfamiliarity (see *Familiarity*, p. 169).

**Modifiers:** -2 or more for an unfamiliar computer, operating system, or program.
Connoisseur†

IQ/Average

Defaults: IQ-5 and others.

This skill represents an educated understanding of art and luxury items. It is vital to art dealers, critics, master thieves, and anyone who wishes to appear cultured. A successful roll lets you predict what critics will think of a piece of art, assess how much it will fetch on the market (+1 to Merchant skill when trading it), or impress the culturally literate (may give +1 to Savoir-Faire or reaction rolls, at the GM’s option).

You must specialize. Specialties include Dance, Literature, Music, Visual Arts, and Wine. Each specialty defaults to skills used to study or create the art at -3: Connoisseur (Literature) defaults to Literature, Poetry, or Writing at -3; Connoisseur (Music) defaults to Group Performance (Conducting), Musical Composition, or Musical Instrument at -3; and so on.

Modifiers: Cultural Familiarity modifiers (p. 23); -3 for Killjoy (p. 140).

Cooking

IQ/Average

Defaults: IQ-5 or Housekeeping-5.

This is the skill of being a chef – you do not need it to heat water and open boxes, or to cook rat-on-a-stick over your campfire. A successful skill roll allows you to prepare a pleasing meal. Many chefs have an optional specialty (p. 169), such as baking, beverage making, or a particular variety of ethnic cuisine (e.g., Chinese or Martian).

Counterfeiting/TL

IQ/Hard

Defaults: IQ-6 or Forgery-2.

This is the art of duplicating banknotes and coins. It is only taught by the underworld and government agencies (although this is rare outside of rogue states, except in wartime). Time required varies from days to weeks (GM’s option). The GM secretly rolls against your Counterfeiting skill for each “batch” of money.

A critical success means that the fakes in that batch are as good as the real thing.

An ordinary success means that your work is good but not perfect. Whenever you try to pass the counterfeiting money, the GM makes a second skill roll for you, with all the same modifiers. If this roll fails, the recipient spots your handiwork. To successfully pass bogus currency to someone who has reason to be suspicious, you must win a Quick Contest of Counterfeiting vs. the highest of his Perception, Forensics, and Merchant.

Any failure on the initial Counterfeiting roll means that the first person to receive the money immediately realizes that it is bogus. Critical failure – on the initial roll or any subsequent roll – has other ramifications: the recipient is an undercover cop, an armed and angry citizen, etc.

Modifiers: Equipment modifiers (p. 345). Materials – ink, paper, presses, etc. – stolen from the legitimate mint can give from +1 (a few rolls of paper) to +10 (actual plates or molds). You must have a sample of the real thing or you cannot make the attempt at all!

Crewman/TL

IQ/Easy

Default: IQ-4.

This is the ability to serve as crew aboard a specific type of large vehicle. It includes familiarity with “shipboard life,” knowledge of safety measures, and training in damage control (the use of emergency equipment to control flooding, fight fires, patch the hull, and so forth). Make a skill roll for basic map or chart reading, practical meteorology, or to recall laws and regulations that pertain to your vehicle.

This skill also lets you steer the vessel. It is easier than Piloting, Submarine, and similar skills because it only includes knowledge of how to steer. Specialists handle such activities as plotting courses and operating sensors. These experts report to the captain, who in turn tells you how to maneuver. Make a DX-based skill roll whenever you take the helm – but note that your effective skill cannot exceed your captain’s Shiphandling skill (p. 220).

The average Crewman skill of an entire crew can be used as a measure of overall crew quality. The GM rolls against average skill whenever the vehicle arrives or departs, in unfavorable conditions, or in battle. Failure and critical failure results depend on the circumstances.

Connoisseur represents an educated understanding of art and luxury items. It is vital to art dealers, critics, master thieves, and anyone who wishes to appear cultured.

There is a separate skill for each class of vessel:

Airshipman/TL: The skill of handling ballast, gas valves, mooring lines, etc. on a blimp, zeppelin, or other large airship.

Seamanship/TL: The skill of operating anchors, hatches, mooring lines, pumps, sails, windlasses, etc. aboard a large surface ship (but not a submarine).

Submariner/TL: The skill of handling pressure doors, pumps, valves, etc. aboard a submarine or in an undersea base.
Criminology/TL

IQ/Average

Defaults: IQ-5 or Psychology-4.

This is the study of crime and the criminal mind. A successful skill roll allows you to find and interpret clues, guess how criminals might behave, etc. Though this skill does not actually default to Streetwise, the GM might allow a Streetwise roll instead in certain situations – especially to predict or outguess a criminal.

Modifiers: -3 for Low Empathy (p. 142).

Crossbow

DX/Easy

Defaults: DX-4.

This is the ability to use all types of crossbows, including the pistol crossbow, prod (which fires pellets or stones), repeating crossbow, and high-tech compound crossbow.

Cryptography/TL

IQ/Hard

Defaults: Mathematics (Cryptography)-5.

This is the ability to create and defeat encryption systems, codes, and ciphers. It is of use in wartime, espionage, and even business dealings. It covers all the techniques of your TL, which can range from unsophisticated substitution ciphers to state-of-the-art tactical encryption schemes.

Knowledge of a specific system, code, or cipher depends on your Security Clearance (p. 82) and allegiances (national, administrative, or both). In many settings, some level of Security Clearance is a prerequisite to learning this skill at all.

Treat an attempt to break an unknown code as a Quick Contest of Cryptography skill between the code-breaker and code-maker. The code-breaker must win to break the code. Repeated attempts are possible, but each attempt takes a day. The code-maker rolls only once, when he first creates the code.

Those with Cryptography skill may take an optional specialty (p. 169) in making or breaking codes. (The code-breaking specialty is often called "cryptanalysis").

Cryptography normally has no IQ default, with two exceptions. Anyone can devise a trivial code or cipher by making an IQ-5 roll. This won't stall a professional for long, of course. Likewise, anyone can make an IQ-5 roll to attempt to break such a trivial code (but not a code devised by someone with Cryptography skill), using the Quick Contest system described above.

Modifiers: Mathematical Ability (p. 90). A computer with appropriate software gives a bonus (provided you know Computer Operation skill): +1 for a home computer, +2 for a minicomputer, +3 or +4 for a mainframe, and +5 or more for a supercomputer.

The code-breaker is at +5 if he has a sample of the code with translation, and -5 if the message to be decoded is shorter than 25 words. The code-maker receives a bonus for the time taken to create the code: consult the Size and Speed/Range Table (p. 550), look up the time in days in the Range/Speed column (substituting "days" for "yards"), and use the corresponding bonus.

Current Affairs/TL†

IQ/Easy

Defaults: IQ-4 or Research-4.

This is the ability to assimilate quickly whatever qualifies as "news" in your world, and to recall it as needed.

You must specialize in one of the following areas:

Business: Exchange rates, investment performance, etc.

Headline News: Usually bad news, such as assassinations, plagues, and wars.

High Culture: Information on galleries, operas, symphonies, and so forth.

People: The names of and gossip on celebrities, heads of state, and the like.

Politics: Election results, international treaties, etc.

Popular Culture: Hit songs, cool fashions, and hot products, among other things.

Regional: News of all kinds for a specific region (pick one). This is the definitive "town crier" skill at low TLs.

Science & Technology: New discoveries and inventions.

Sports: Scores for recent matches, names of star athletes, etc.

Travel: Where the "beautiful people" are going this year, and how much it all costs.

These specialties default to one another at -4. It is hard to bone up on one kind of news without learning about all the others!

On a successful Current Affairs roll, the GM will inform you of any news within your specialty that pertains to the current adventure (possibly including clues, on a good roll) or give you a small skill bonus (e.g., a success on Current Affairs (Sports) might give +1 to Gambling skill when betting on a boxing match).
Modifiers: -1 per day that you have been unable to access news media; -3 if you only have one source; +1 or more for “inside” access to the news (a subscription to an ordinary wire service is worth +1, while a job at an intelligence agency might give +3 or more).

**Dancing**  
**Default:** DX-Average

This is the ability to perform dances appropriate to your own culture, and to learn new dances quickly. Note that certain physical handicaps make this skill effectively impossible!

Exotic dances abound in fiction and history: blade dancing, bull dancing, fire dancing, snake dancing, etc. The GM may decide that each is a separate DX/Average skill that defaults to Dancing-5.

Modifiers: Cultural Familiarity modifiers (p. 23); -5 if the dance is unfamiliar (a dance is familiar once you have successfully performed it three times).

**Detect Lies**  
**Defaults:** Perception-6, Body Language-4, or Psychology-4.

This is the ability to tell when someone is lying to you. It is not the same as Interrogation (p. 202); Detect Lies works in a casual or social situation. When you ask to use this skill, the GM rolls a Quick Contest of your Detect Lies skill vs. your subject’s IQ (or Fast-Talk or Acting skill). If you win, the GM tells you whether the subject is lying. If you lose, the GM may lie to you about whether you were lied to... or just say, “You can’t tell.”

Modifiers: +1 for Sensitive or +3 for Empathy (p. 51), or -3 for Low Empathy (p. 142); +4 if your subject is Easy to Read (p. 134). If the subject is of a different species, the GM may assess a penalty — see Physiology Modifiers (p. 181).

**Diagnosis/TL**  
**Defaults:** IQ-6, First Aid-8, Physician-4, or Veterinary-5.

This is the ability to tell what is wrong with a sick or injured person, or what killed a dead person. A successful roll gives some information about the patient’s problem — limited to realistic knowledge for your tech level. It might not determine the exact problem (if the GM feels the cause is totally beyond your experience, for instance), but it always gives hints, rule out impossibilities, etc. No Diagnosis roll is required for obvious things, like open wounds and missing limbs!

Modifiers: Equipment modifiers (p. 345); physiology modifiers (p. 181); -5 for internal injuries; -5 or more for a rare disease.

**Diplomacy**  
**Default:** IQ-Hard

This is the skill of negotiating, compromising, and getting along with others. You may substitute a Diplomacy roll for any reaction roll in a noncombat situation, as described under Influence Rolls (p. 359). Unlike other Influence skills, Diplomacy never gives a worse result than if you had tried an ordinary reaction roll. Failure with Fast-Talk or Sex Appeal alienates the subject, but Diplomacy is usually safe.

A successful roll also allows you to predict the possible outcome of a course of action when you are negotiating, or to choose the best approach to take.

If you know Diplomacy at level 20 or better, you get a +2 bonus on all reaction rolls!

Modifiers: +2 for Voice (p. 97); -3 for Low Empathy (p. 142); -1 for Oblivious (p. 146); +1 to +4 for Shyness (p. 154); -2 for Stuttering (p. 157).

**Disguise/TL†**  
**Default:** IQ-Average

This is the art of altering your appearance using clothing, makeup, and prosthetics. You do not need this skill to don a quick disguise — e.g., to put on a lab coat when you enter a laboratory – but such disguises only fool the inattentive! A good disguise requires a Disguise roll and 30 minutes to an hour of preparation.

Roll a Quick Contest of Disguise skill vs. the Perception of each person your disguise must fool. Individuals with Criminology or Observation skill may substitute those skills for Perception when rolling to penetrate a disguise. The GM may allow other skills to be of use — for instance, Physician skill might help spot a rubber nose.

When combining Acting (p. 174) with Disguise (that is, when you must change your face and your personality), you need only make one roll for each person or group — but it must be the harder of the two rolls.

If there is more than one sapient species in your world, you must specialize by race — Disguise (Human) is nothing like Disguise (Bug-Eyed Monster). Disguise specialized in your own species is the most common form; just list this as “Disguise” on your character sheet. Disguise skills for physically similar species default to one another at -2 to -4.

Modifiers: Equipment modifiers (p. 345). +4 for Elastic Skin (p. 51). You are at -1 to -5 to disguise yourself as someone very different from you (GMs discretion). Distinctive appearance also gives a penalty — see Build (p. 18), Unnatural Features (p. 22), and specific disadvantages (e.g., Hunchback, p. 139) for details. Differences in Size Modifier usually make Disguise impossible.

You can also learn Disguise (Animals) to deceive nonsapient creatures. This involves wearing animal skins, smearing your body with musk or dung, etc. There is no default between this and other Disguise specialties. Use the following modifiers instead of those given above.

Modifiers: +2 if approaching from downwind; -1 for each animal over one of the same type being approached (+1 for every 10 in the case of herd animals); -1 to -3 if the skins are old or in poor condition. Make a Naturalist roll to recall the habits of the animal being imitated; success gives +1 to +3, while failure gives -1 to -3.

**Diving Suit/TL**  
see Environment Suit, p. 192
Dreaming

**Will/Hard Default:** Will-6.

This is the skill of controlling and remembering your dreams. A successful skill roll lets you experience vivid dreams about a subject of your choosing. Use the Fortune-Telling (Dream Interpretation) skill to interpret your dreams. In some game worlds, this might be a useful divinatory technique (GM's decision).

A Dreaming roll can also help you recall a previously forgotten piece of information, or something you witnessed but did not consciously note. This technique is much less reliable than Eidetic Memory (p. 51), though. The GM will describe your dreams to you, working clues into the narrative. It is up to you, the player, to spot these hints!

Finally, you can use this skill to combat malign supernatural influences on your dreams. Resolve this as a Quick Contest between your Dreaming skill and your harasser's skill at dream control. If you win, you shut out the external influence.

Driving/TL†

**DX/Average Default:** DX-5 or IQ-5.

This is the ability to drive a specific type of ground vehicle.

Make an IQ-based Driving roll for basic map reading, to diagnose simple malfunctions, or to recall rules of the road.

You must specialize:

- **Automobile:** Any vehicle with three or more wheels that weighs less than 5 tons and does not move on rails. **Defaults:** Heavy Wheeled-2 or other Driving at -4.
- **Construction Equipment:** Any kind of bulldozer, crane, plow, etc. **Defaults:** other Driving at -5.
- **Halftrack:** Any vehicle that moves on tracks and either wheels or skids. **Defaults:** Tracked-2 or other Driving at -4.
- **Heavy Wheeled:** Any vehicle with three or more wheels that weighs 5 tons or more and does not move on rails. **Defaults:** Automobile-2 or other Driving at -4.

- **Hovercraft:** Any kind of air-cushion vehicle. **Defaults:** other Driving at -5.
- **Locomotive:** Any vehicle that moves on conventional or maglev rails. **Defaults:** other Driving at -5.
- **Mecha:** Any kind of legged, bouncing, rolling, or slithering vehicle. ** Defaults:** Battlesuit-3 or other Driving at -5.
- **Motorcycle:** Any powered one- or two-wheeled vehicle, including those with sidecars. Large motorcycles often have a Minimum ST, just like a weapon (see p. 270). **Defaults:** Bicycling-4.
- **Tracked:** Any vehicle that moves on tracks. **Defaults:** Halftrack-2 or other Driving at -4.

Note that the ability to “drive” a team of animals is not Driving, but Teamster (p. 225).

Modifiers: -2 or more for bad driving conditions; -2 or more for a vehicle in bad repair; -2 for an unfamiliar control system (e.g., an automatic when you are used to a manual); -4 or more for a vehicle of an unfamiliar type within your specialty (e.g., a race car when you are used to stock cars).
Dropping

DX/Average

Defaults: DX-3 or Throwing-4.

This is the skill of dropping heavy objects on your foes while flying. Treat this as a ranged attack made from above. Learn Dropping if you wish to drop boulders and similar projectiles on individual opponents while on the wing. Use Artillery (Bombs) to attack areas with explosive ordnance, etc.

Economics

IQ/Hard

Defaults: IQ-6, Finance-3, Market Analysis-5, or Merchant-6.

This is the study of the theory of money, markets, and financial systems. It is mainly an academic skill, but a successful skill roll allows you to predict the economic impact of events in the game world: the assassination of a political figure, the demolition of a power plant, the introduction of a new invention, etc. Adventurers with intelligence and military backgrounds may specialize by game world, but might include:

- Financial Analysis (Comm): All forms of electronic communications technology: radios, satellite uplinks, laser communicators, etc. Includes knowledge of any standard, current communications codes appropriate to your background. These do not require a skill roll – although attempts to understand or use an unfamiliar code do require a roll. At TL5-7, this includes telegraphy: you can send or receive 2 words per minute (wpm) per point of skill at TL5, 3 wpm per point of skill at TL6-7.
- Electronic Warfare (EW): All signals-intelligence and jamming equipment, including electronic countermeasures (ECM) and electronic counter-countermeasures (ECCM). In most game worlds, only intelligence agencies and the military teach this specialty – and only to individuals with suitable Military Rank (p. 30) or Security Clearance (p. 82).
- Force Shields: Portable, vehicular, base, and starship force shields and deflectors.
- Matter Transmitters (MT): All matter transmitters and teleporters. Critical failures can be disastrous, especially when transmitting living beings!
- Media: All forms of audio, film, and video editing equipment. If three-dimensional video (“holographics”) or sensory recordings (“sensies”) exist in the setting, this specialty includes the ability to operate the relevant equipment. Treat different media as mutually unfamiliar technologies.
- Medical: All manner of electronic diagnostic and life-support equipment.
- Parachronic: Technological means of travel between dimensions or timelines.
- Psychotronics: Psionic technology, such as telepathic shields and amplifiers.
- Scientific: Laboratory electronics and survey gear. You are automatically familiar with the equipment used with any scientific skill on which you have spent at least one point.
- Security: Both operating and circumventing all forms of alarms, security sensors, and area-surveillance technology.
- Sensors: Most forms of long-range detection gear, from air-defense radar to starship sensor suites. Certain highly specialized sensors (such as sonar, below) have their own specialties.
- Sonar: All types of acoustic detection and ranging gear (normally used underwater).
- Surveillance: All forms of concealable or remote surveillance gear: “bugs,” hidden cameras, long-range microphones, wiretaps, etc.
- Temporal: All manner of time machines. Critical failures can be disastrous for the time travelers! Make separate rolls to “lock onto” and transfer the travelers.

These specialties default to one another at -4; however, the GM is free to rule that in his campaign, there is no default between exotic specialties (Parachronic, Psychotronics, etc.) and mundane ones (Media, Security, etc.). The technologies covered by a particular specialty vary with TL. For instance, Electronics Operation (Comm) covers telecommunications at TL5, telephones and radios at TL6, and digital communications systems at TL8 . . . and might cover faster-than-light or telepathic communicators at higher TLs.

Familiarity (p. 169) is crucial here! Electronics Operation/TL8 (Sensors) covers both thermographs on fighter jets and ground-penetrating radars on satellites, but going from one to the other gives you -2 for type (thermograph to radar) and -2 for implementation (jet to satellite), for a net -4 to skill until you familiarize yourself with all the differences.

Modifiers: Equipment modifiers (p. 345); -2 for an unfamiliar technology of a known type (e.g., radar when you are used to thermograph) or an unfamiliar implementation of a familiar technology (e.g., air-defense radar when you are used to weather radar); -1 to -10 if you have been away from the field for a long time (this varies by field) and have not had a chance to become familiar with the changes.
**Skills for Design, Repair, and Use**

When choosing technological skills for your character, it can be helpful to bear in mind that such skills govern three distinct classes of activity:

*Design.* An inventor, gadgeteer, or mad scientist requires skills that let him design and build new inventions, redesign existing ones, and deduce the function of (and reverse-engineer!) unknown technologies. The key skill here is Engineer – specialized in the inventor’s fields of interest – but Bioengineering (for biotechnology) and Computer Programming (for software) are equally appropriate.

*Repair.* A craftsman or technician needs skills that enable him to troubleshoot and repair known devices, perform major overhauls and upgrades, install new equipment, and customize existing gear. The most important skills of this type are Armoury, Electrician, Electronics Repair; Machinist, and Mechanic.

*Use.* A detective, soldier, spy, or similar professional needs skills that let him operate specialized equipment, conduct routine maintenance on his gear, and identify common makes and models (and their strengths and weaknesses). Such skills include Computer Operation, Electronics Operation, Environment Suit, Explosives, vehicle skills (Crewman, Driving, Shiphandling, etc.), and weapon skills (Artillery, Guns, etc.).

These skills form “design-repair-use triads”; e.g., Engineer (Electronics)-Electronics Repair-Electronics Operation for electronic devices, Engineer (Vehicle)-Mechanic-Driving for vehicles, and Engineer (Small Arms)-Armoury-Guns for firearms. Cinematic adventurers with great depth of knowledge often have all three skills in a triad!

### Electronics Repair/TL†

**IQ/Average**

**Defaults:** IQ-5, Electronics Operation (same)-3, or Engineer (Electronics)-3.

This is the ability to diagnose and repair known types of electronic equipment. Time required for each attempt is up to the GM. You *must* specialize in one of the areas listed under Electronics Operation (above), or in Computers (Electronics Repair (Computers) defaults to Computer Operation-5). These specialties default to one another at -4.

**Modifiers:** Equipment modifiers (p. 345); -2 without plans or schematics; -2 for an unfamiliar technology or implementation (just as for Electronics Operation); -4 to modify a device away from its intended purpose.

### Engineer/TL†

**IQ/Hard**

**Defaults:** Special.

**Prerequisites:** Mathematics (Applied) at TL5+, plus others as noted.

This is the ability to design and build technological devices and systems. A successful roll lets you design a new system, diagnose a glitch, identify the purpose of a strange device, or improvise a gadget to solve a problem. Time required for each attempt is up to the GM.

Note that engineers are *designers* and *inventory*; they are not necessarily skilled at the routine operation or maintenance of the things they design! For instance, Engineer (Small Arms) lets you design a new assault rifle, but you need Armoury skill to maintain it and Guns skill to shoot it.

You *must* specialize. Possible fields include:

- **Artillery:** Designing whatever passes for artillery at your TL, from trebuchets to smart missiles. **Default:** Armoury (Heavy Weapons)-6.
- **Civil:** Planning highways, aqueducts, buildings, etc. **Default:** Architecture-6.
- **Clockwork:** Designing wind-up gadgetry – watches, mechanical men, and the like. **Default:** Mechanic (Clockwork)-6.
- **Combat:** Building or removing fortifications, trenches, etc. **Default:** Explosives (Demolition)-6.
- **Electrical:** Designing electrical systems, such as power cells and transmission lines. **Default:** Electrician-6.
- **Electronics:** Designing and building electronic apparatus, from computers to starship sensor arrays. (The specific technologies involved – vacuum tubes, transistors, photonics, etc. – will depend on the tech level.) **Default:** Electronics Repair (any)-6.
- **Materials:** Concocting new structural materials. **Prerequisites:** Chemistry or Metallurgy. **Defaults:** Chemistry-6 or Metallurgy-6.
- **Microtechnology:** Designing micro-machines. **Default:** Mechanic (Micromachines)-6.
- **Mining:** Designing underground structures. **Defaults:** Explosives (Demolition)-6 or Geology (any)-6.
- **Nanotechnology:** Designing nanomachines. **Default:** Mechanic (Nanomachines)-6.
- **Parachronic:** Designing apparatus for crossing dimensions or timelines. **Prerequisite:** Physics. **Default:** Electronics Operation (Parachronic)-6, but there is no default if your society has not discovered dimensional travel.
- **Psychotronics:** Designing psionic technology, such as telepathic shields and amplifiers. **Default:** Electronics Operation (Psychotronics)-6, but there is no default for individuals from backgrounds where psionics do not exist.
- **Robotics:** Designing robotics and cybernetics. **Default:** Mechanic (Robotics)-6.
- **Small Arms:** Designing personal firearms, such as guns and portable rocket launchers. **Default:** Armoury (Small Arms)-6.
- **Temporal:** Designing time machines. **Prerequisite:** Physics. **Default:** Electronics Operation
(Temporal)-6, but there is no default for individuals from backgrounds without time travel!

**Vehicle Type:** Designing a single, broad class of vehicle. Examples include Engineer (Automobiles), Engineer (Ships), and Engineer (Starships). Default: Mechanic (same vehicle type)-6.

Engineer specialties normally default to one another at -4; however, the GM is free to rule that in his campaign, there is no default between exotic specialties (Nanotechnology, Parachronic, Psychotronics, etc.) and more mundane ones (Civil, Combat, Mining, etc.).

**Modifiers:** Equipment modifiers (p. 345). Up to +5 to build a gadget if you can give the GM a good description of what you want it to do.

“Kill the king!” is acceptable; “Kill the king if he doesn’t accede to our demands!” is not.

**Enthrallment**

*Defaults:* None.

*Prerequisites:* Charisma 1 and Public Speaking at 12+.

Bards in fantasy can often influence others through storytelling. The GM may choose to represent this ability using the four Enthrallment skills described below. Depending on the setting, these skills might be magical, psionic, or a cinematic form of hypnosis. Each has a time requirement, FP cost, and duration, and requires two skill rolls to use.

At the outset of the tale, roll vs. Public Speaking skill; if you can’t grab your audience’s attention early on, you won’t have much of a chance of controlling them by the end. On a success, proceed to the Enthrallment skill roll; critical success gives +1 on that roll. On a failure, you may still attempt the Enthrallment roll, but at a penalty equal to your margin of failure. Critical failure means your Enthrallment attempt fails automatically.

After the time required to enthral has passed, roll a Quick Contest of your Enthrallment skill vs. the Will of each audience member. If you win, you affect your audience – see the individual skill description for effects. If you lose or tie, there is no effect. However, if you critically fail, your audience instantly turns hostile!

You may never learn these skills at a skill level higher than your Public Speaking skill.

**Audience Size:** An “audience” can be one listener or a hundred – as many as can hear the tale. However, the number of audience members that you can enthral at one sitting is limited to your Charisma level squared, to a maximum of 25 people at Charisma 5.

**Modifiers:** All four Enthrallment skills are at -3 for Low Empathy (p. 142). If the player actually tells a good tale, the GM should reward him with +1 to +3 to the Public Speaking and Enthrallment rolls!

**Captivate**

*Defaults:* None.

*Prerequisite:* Suggest at 12+.

This ability lets you give your audience a single, simple suggestion. A suggestion should have no complex grammatical clauses – just a subject, verb, and object, and at most two modifiers. “Kill the king!” is acceptable; “Kill the king if he doesn’t accede to our demands!” is not. A given subject gets +5 to resist if your suggestion goes against his personal safety, and +3 if it goes against his beliefs, convictions, or knowledge.

If you win the Quick Contest, the audience members try to act on the suggestion to the best of their abilities – each assuming that the idea was his own.

**Time:** 20 minutes of uninterrupted storytelling.

**Fatigue Cost:** 6 FP, whether successful or not.

**Duration:** 10 minutes – or longer, if you continue to talk to the audience and can make a successful Suggest roll every 10 minutes! Once the suggestion lapses, audience members only wonder why they acted the way they did if the suggestion was something they would never have done normally.

**Persuade**

*Defaults:* None.

This ability allows you to bring an audience over to your point of view, granting you a bonus to your reaction rolls with them. You may use this skill whenever a reaction roll is called for.

If you win the Quick Contest, add your margin of victory to any reaction roll those in the audience make regarding you – for any reason – to a maximum of +3 (+4 on a critical success). If you critically fail, the best possible reaction is Poor (see p. 560).

**Time:** 1 minute.

**Fatigue Cost:** 2 FP, whether successful or not.

**Duration:** Until you do something to change the audience’s opinion!

**Suggest**

*Defaults:* None.

*Prerequisite:* Persuade at 12+.

This ability lets you give your audience a single, simple suggestion. A suggestion should have no complex grammatical clauses – just a subject, verb, and object, and at most two modifiers. “Kill the king!” is acceptable; “Kill the king if he doesn’t accede to our demands!” is not. A given subject gets +5 to resist if your suggestion goes against his personal safety, and +3 if it goes against his beliefs, convictions, or knowledge.

If you win the Quick Contest, the audience members try to act on the suggestion to the best of their abilities – each assuming that the idea was his own.

**Time:** 20 minutes of uninterrupted storytelling.

**Fatigue Cost:** 6 FP, whether successful or not.

**Duration:** 10 minutes – or longer, if you continue to talk to the audience and can make a successful Suggest roll every 10 minutes! Once the suggestion lapses, audience members only wonder why they acted the way they did if the suggestion was something they would never have done normally.
Sway Emotions

**Will/Hard**

*Defaults: None.*

*Prerequisite: Persuade at 12+.*

This ability allows you to instill the audience with any one emotion. Allowed emotions include anger, boredom, depression, disgust, fear, greed, hate, jealousy, joy, love, lust, patriotism, peace, sadness, and unrest.

If you win the Quick Contest, your audience experiences the emotion you select. How they act as a result is up to the GM.

**Time:** 10 minutes of uninterrupted storytelling.

**Fatigue Cost:** 4 FP, whether successful or not.

**Duration:** One hour.

Environment Suit/TL

**Defaults:** DX-5 and others.

This is training in the use of a specific class of protective suit. Suits designed to shield the wearer from environmental or battlefield hazards frequently incorporate gadgets (such as autoinjectors and sensors) and life-support equipment. Some suits even contain motors to enhance ST or Move. As a result, you do not merely wear such gear—you operate it.

Roll against Environment Suit skill to get into or out of your suit quickly. A successful roll halves the time required. To activate a specific subsystem of a suit, or to gauge whether a suit is in good repair, make an IQ-based skill roll instead.

When rolling against DX or any DX-based skill while suited up, use the lower of your Environment Suit skill and your actual skill level. For instance, if you have DX 14, Stealth-15, and Vacc Suit-13, you will function at DX 13 and Stealth-13 while wearing a spacesuit. Particularly ungainly suits might give -1 or more to DX on top of this, regardless of skill level. On the other hand, some sleek, ultra-tech suits might not limit skills at all!

However, Environment Suit is strictly the skill of donning and operating the suit. Familiarity with and knowledge of dangerous environments is covered by other skills: Free Fall, Hazardous Materials, Survival, etc.

Each suit type requires its own skill. Examples include:

**Battlesuit/TL:** All kinds of powered battle armor and exoskeletons. Battle armor and exoskeletons are similar but not identical. If you only have experience with one, you are at -2 to operate the other until you gain familiarity (see *Familiarity*, p. 169).

**Diving Suit/TL:** All types of hard diving suits (as opposed to the wetsuits and drysuits used with Scuba skill). This includes “open dress” gear at TL5 and “hard hat” gear at TL6, both of which use a sealed helmet and supplied air, but not always a full, sealed suit. At TL7+, this skill covers true underwater “hardsuits.” The GM may require Swimming rolls to maneuver while wearing such a suit.

**Defaults:** Scuba-2.

**NBC Suit/TL:** All forms of hazardous materials (“HazMat”) gear—including sealed, unpowered body armor that can be buttoned down against nuclear-biological-chemical (NBC) threats. Without this skill, you run the risk of misusing the equipment and being exposed to contamination. To improvise NBC gear, make an IQ-based skill roll at -5 to -15 to skill.

**Vacc Suit/TL:** Any kind of spacesuit. In addition to true vacuum suits, this includes suits intended for use in high-pressure, corrosive, and poisonous atmospheres.

**Battlesuit, NBC Suit, and Vacc Suit** default among themselves at -2.

**Diving Suit** defaults to or from any other Environment Suit skill at -4.

Note that unpowered, unsealed body armor never requires an Environment Suit skill.

Erotic Art

** Defaults:** DX-5 or Acrobatics-5.

This represents general knowledge of advanced sexual technique. IQ-, HT-, and even ST-based rolls are common. Precise game effects are left to the GM’s discretion.

**Modifiers:** +3 for Flexibility or +5 for Double-Jointed (p. 56); -3 for Killjoy (p. 140).
**Exorcism**

*Will/Hard*

Defaults: Will-6, Religious Ritual (any)-3, Ritual Magic (any)-3, or Theology (any)-3.

This is the ability to drive a spirit from a possessed person or haunted location. It is not a magical skill, but a religious ritual. Exorcism is not specific to any one religion. A Malay witch doctor and a Catholic priest can both perform exorcisms; their relative effectiveness depends on the originating culture of the spirit.

The length of the ritual is 15 minutes × the spirit’s HT. Some spirits wait patiently through the ritual, anticipating the combat to come; others try to distract or even attack you before you can complete the ritual. Once the ritual is complete, roll against Exorcism skill.

If the spirit wins or ties, it retains its current status and you must wait at least a week before you can repeat the ritual. If you win, you drive the spirit from its haunt or victim. The spirit of a deceased mortal is laid to rest. For demons and similar entities, make a reaction roll. On a “Poor” or better reaction, the spirit flees in humiliation. On a “Bad” or worse reaction, the spirit immediately uses whatever resources it has to take vengeance on you and those nearby.

If the exorcism fails at any stage, make an IQ roll afterward. A success means that you learned something about the spirit that will help you in your next attempt to banish that foe, giving you +2 on later skill rolls. You may only claim this bonus once for a particular spirit.

**Modifiers:** -4 if you do not have one or more of Blessed (p. 40), Power Investiture (p. 77), or True Faith (p. 94); you might understand the ritual, but you lack holy support.

When fighting a spirit in a living host, add higher of the ST or Will of the possession victim to your Exorcism skill as he tries to “push the spirit out.”

An Expert Skill represents cross-disciplinary knowledge of a single, narrow theme. When answering factual questions on that theme, you may substitute a roll against your Expert Skill for any IQ-based roll against any skill that has a default. Expert Skills do not exempt you from Cultural Familiarity (p. 23) or Language (p. 23) requirements, and never provide the ability to do practical tasks. Experts sometimes complement Expert Skills with related Area Knowledge skills (p. 176), but you must learn these separately.

You must specialize by theme, and the GM is free to forbid any theme he feels is too broad. Some examples:

**Computer Security:** Expertise at combating computer intrusion (“hacking”). Can stand in for Computer Operation, Cryptography, or Electronics Operation to spot “holes” in the security of a computer system. Use Computer Programming to patch or exploit such holes.

**Conspiracy Theory:** The study of interlocking networks of conspiracies. Can substitute for Anthropology, Geography, History, Literature, or Occultism to answer questions about conspiracies, and can also work as Intelligence Analysis for this purpose (only). This does not include hidden inner secrets, which are the province of Hidden Lore (p. 199).
Egyptology: The study of ancient Egypt. Can function as Anthropology, Archaeology, History, Linguistics, or Occultism for that purpose.

Epidemiology: The study of the spread of disease. Can serve as Biology, Diagnosis, Forensics, Geography, or Mathematics when deducing how a disease was spread.

Hydrology: The study of a planet’s water. Can be used in place of Biology, Chemistry, Geography, Geology, or Meteorology to answer questions about precipitation, flooding, irrigation, etc.

Military Science: General expertise on military capabilities. Can substitute for Artillery, Armoury, Strategy, or Tactics to answer questions about – but not use – weapons or strategies.

Natural Philosophy: A general skill that usually replaces specific science skills (which might not even exist yet!) for scholars at TL1-4. Can be used in place of any science skill (e.g., Biology or Physics) to answer questions about how the universe is believed to work.

Political Science: The academic study of politics. Can substitute for Geography, History, Law, Politics, or Sociology when performing political analysis.

Psionics: The study of the psionic mind and brain. Can function as Biology, Diagnosis, Physician, Physiology, or Psychology when dealing with psi phenomena in living beings. Cannot substitute for Electronics Operation, Electronics Repair, and Engineer specialties that deal with psychotronics.

Thanatology: The esoteric study of death. Can stand in for Anthropology, Archaeology, Occultism, or Theology when dealing with death and the dead.

Xenology: General knowledge of the known races in your setting. Can substitute for Anthropology, History, Physiology, or Psychology to identify a member of a race different from your own, or to answer general questions about the race and its culture.

Explosives/TL† IQ/Average

Defaults: IQ-5 and others.

This is the skill of working with explosives and incendiaries. You must specialize:

Demolition: The ability to prepare and set explosives in order to blow things up. Make a roll whenever you use explosives in this way. A failure indicates an error. The gravity of the error depends on the amount by which you failed; a badly failed roll in close quarters can blow you up! Time required varies – it takes only a couple of seconds to set a prepared charge, but it might take hours to demolish a large bridge or a skyscraper. When setting an explosive trap, use this skill rather than Traps. Rolls to set a “trap” fuse (e.g., a land mine) instead of a timed fuse are at -2. Defaults: Engineer (Combat) or (Mining) at -3.

Explosive Ordnance Disposal (EOD): The ability to disarm and dispose of bombs and other explosives. When disarming a trap, roll a Quick Contest of your Explosives (EOD) skill vs. the Explosives (Demolition) skill of the person who created the device. A failure (or even a critical failure) does not necessarily mean an explosion – the GM can be much more creative than that! Sudden hissing noises, mysterious parts falling off, cramps, itches, and alarm bells are all possible in the right circumstances. It is best if the GM rolls the dice and describes the physical circumstances to the victim. Fright Checks are appropriate for the survivors of a failed EOD attempt! Prerequisite: DX 12+.

Fireworks: The skill of making pyrotechnic devices – fireworks, flares, smoke bombs, flash grenades, etc. Most of these things can be used by anyone. Default: Chemistry-3.

Nuclear Ordnance Disposal (NOD): The equivalent of Explosives (EOD) for nuclear devices. Disarming a military nuclear weapon is straightforward; disarming a homemade terrorist bomb might be more difficult. Only a critical failure verified by a second critical failure will result in a nuclear detonation. Any lesser failure will – at worst – detonate the high-explosive trigger and contaminate the immediate area with radioactive material . . . not that this is a great deal of consolation to those nearby.

Underwater Demolition (UD): The ability to prepare and set explosives underwater. This is otherwise identical to Explosives (Demolition). You usually need Scuba skill – or at least Swimming skill – to get into a position where you can use this skill.

These specialties default to one another at -4 except for Demolition and UD, which default to one another at -2, and EOD and NOD, which also default to one another at -2.

Modifiers: Equipment modifiers (p. 345): -1 to -5 for distractions (e.g., enemy fire or swarms of biting ants) or physical motion (e.g., a rocking boat or speeding bus). The time modifiers under Time Spent (p. 346) will often apply.

Falconry IQ/Average

Defaults: IQ-5 or Animal Handling (Raptors)-3.

This is the skill of “hawking”: hunting small game with a trained hawk. It includes knowledge of hunting and training techniques, as well as how to care for a falcon. Finding a wild falcon’s nest in spring requires a week’s search and a successful Falconry roll; a nest has 1d-3 chicks.

Farming/TL IQ/Average

Defaults: IQ-5, Biology-5, or Gardening-3.

This is the skill of growing things. It is usually used to earn a living, but you can also use it to answer theoretical questions about or solve problems related to agriculture.

Fast-Draw† DX/Easy

Defaults: None.

This skill lets you quickly draw a weapon from its holster, sheath, or hiding place. A successful roll means you ready the weapon instantly. This does not count as a combat maneuver; you can use the weapon to attack on the same turn. On a failure, you ready your weapon normally but may do nothing else on your turn. A critical failure means you drop the weapon!

You must specialize in one of these weapon types: Force Sword, Knife, Long Arm (rifle, shotgun, submachine gun, etc.), Pistol, Sword (any one-handed blade larger than a knife), or
Two-Handed Sword. The GM may add Fast-Draw skills for other weapons (or even tools) that one could reasonably draw quickly.

In addition to the above specialties, there are two Fast-Draw skills that allow you to reload missile weapons quickly:

Fast-Draw (Arrow): Lets you ready a single arrow, bolt, or dart instantly. This reduces the time required to reload a bow, crossbow, or blowgun by one second.

Fast-Draw/TL (Ammo): Reduces the time required to reload any kind of gun or beam weapon. The exact benefits depend on your weapon, but a successful roll always shaves at least one second off the reload time. This skill varies greatly with TL! At TL4, it covers powder-and-shot drills; at TL6+, it includes speed-loading techniques for detachable magazines; and at higher tech levels, it involves quickly replac- ing energy cells and attaching power cables.

For the Arrow and Ammo specialties, failure means you drop the entire quiver, or bolt, or accidentally discard one round of ammunition. On a critical failure, you drop the entire quiver; powder horn, ammo box, magazine, etc., scattering loose ammunition everywhere!

Modifiers: Combat Reflexes (p. 43) gives +1 to all Fast-Draw specialties; Ham-Fisted (p. 138) gives -3 per level.

Fast-Talk

IQ/Average

Defaults: IQ-5 or Acting-5.

This is the skill of talking others into doing things against their better judgment. It is not taught (intentionally, that is) in school; you study it by working as a salesman, confidence man, lawyer, etc. In any situation that calls for a reaction roll, you may make an Influence roll against Fast-Talk instead; see Influence Rolls (p. 359).

If you have Fast-Talk at level 20 or better, you get +2 on all reaction rolls where you're allowed to talk!

Note that Fast-Talk differs from Acting (p. 174). In general, Fast-Talk is used to get someone to make a snap decision in your favor; while Acting is used for long-term dissimulation.

However, there are situations in which the GM could allow a roll on either skill.

Modifiers: +2 for Voice (p. 97); -3 for Low Empathy (p. 142); -1 for Oblivious (p. 146); -1 to -4 for Shyness (p. 154); -2 for Stuttering (p. 157); -5 for Truthfulness (p. 159). The GM may ask you for details of the story you are using, rather than just let you say, "I'm using Fast-Talk." Your approach and the plausibility of the story may further modify the roll, at the GM's discretion.

Filch

Defaults: DX-5, Pickpocket-4, or Sleight of Hand-4.

This skill lets you steal objects that are sitting in plain sight . . . without being spotted. Roll against skill to shoplift, snatch documents off a desk, etc. If someone is actively watching the item you wish to snatch, you must win a Quick Contest of Filch vs. his Vision roll (or Observation skill, p. 211) to perform the theft unnoticed.

Filch only covers the theft itself. The GM might require rolls against Stealth to get close enough to make the attempt and Holdout to conceal stolen objects afterward.

Modifiers: +3 if the light is dim; +3 if you have a confederate to distract attention.

Finance

IQ/Hard

Defaults: Accounting-4, Economics-3, or Merchant-6.

This is the skill of managing money. It is a practical application of Economics (p. 189), much as Engineer skill is a practical application of Physics. A successful skill roll lets you broker a financial deal, raise capital for a new corporation, balance a budget, etc.

Modifiers: Business Acumen and Mathematical Ability both provide a bonus.

Fire Eating

Defaults: None.

This is the performance skill of extinguishing flames in your mouth without burning yourself. Make a skill roll for each item you wish to extinguish. On a success, you put out the flames. On a failure, you take 1d-3 damage (minimum 1) to your mouth.

This skill also includes fire breathing: igniting a stream of fuel blown from the mouth. At the GM’s option, you may use this as an attack (1d-3 damage).

First Aid/TL

IQ/Average

Defaults: IQ-4, Esoteric Medicine, Physician, or Veterinary-4.

This is the ability to patch up an injury in the field (see Recovery, p. 423). Make a skill roll to halt bleeding, suck out poison, give artificial respiration to a drowning victim, etc. Unusual problems must be identified using Diagnosis skill first.

Modifiers: Equipment modifiers (p. 345); physiology modifiers (p. 181).

Fishing

Per/Easy

Defaults: Perception-4.

This is the ability to catch fish – with a net, hook and line, or whatever method is used in your culture. If you have proper equipment and there are fish to be caught, a successful roll catches them. If you lack equipment, you can improvise.

Modifiers: Equipment modifiers (p. 345).

Flail

see Melee Weapon, p. 208

Flight

HT/Average

Defaults: HT-5.

Prerequisite: Flight advantage (p. 56).

This skill represents training for endurance flying. Use the better of Flight or HT when rolling to avoid fatigue due to flying. When traveling long distances, a successful Flight roll increases the distance traveled by 20%. If a group of fliers is traveling together, all must make the Flight roll in order to get the increased distance.
Flying Leap

IQ/Hard

Defaults: None.
Prerequisites: Trained By A Master or Weapon Master, and both Jumping and Power Blow.

This skill allows you to make incredible leaps. It costs 1 FP per attempt, successful or not.

On a success, you may immediately attempt a jump. Use the standard jumping rules (see Jumping, p. 352), but triple your jumping distance. On a failure, you may still attempt the jump, but you receive no bonus and make all jumping-related rolls at -5.

On a critical failure, you fall down! You may use Flying Leap to jump into someone as part of an attack. Such attacks are at an extra -2 to hit, but if you do hit, triple your ST for damage and knockback purposes. In a slam or collision, calculate Move from jumping distance as described for Super Jump (p. 89), and use this velocity to calculate damage.

Modifiers: -10 if used instantly, dropping to -5 after 1 turn of concentration, -4 after 2 turns, -3 after 4 turns, -2 after 8 turns, -1 after 16 turns, and no penalty after 32 turns.

Force Sword

see Melee Weapon, p. 208

Force Whip

see Melee Weapon, p. 208

Forced Entry

DX/Easy

Defaults: None.

This is the ability to kick in doors and windows, or demolish them with a crowbar, ram, or sledgehammer, without necessarily being adept at melee combat. Make a skill roll to hit an inanimate object with your foot or an impact weapon. Add +1 per die to basic thrust or swing damage if you have this skill at DX+1, +2 per die if you know it at DX+2 or better. Add a similar bonus (+1 or +2) to ST rolls made for forced entry. The damage bonus also applies when you use Melee Weapon skills to wreck inanimate objects out of combat.

For subtle break-ins, use Lockpicking skill (p. 206).

Forensics/TL

IQ/Hard

Defaults: IQ-6 or Criminology-4.

This is the ability to apply the principles of forensic science and criminalistics, such as the computation of bullet paths and the microscopic or chemical analysis of clues. Some disciplines require other skills. For instance, a forensic pathologist performing an autopsy would roll against Surgery skill.

Forgery/TL

IQ/Hard

Defaults: IQ-6 or Counterfeiting-2.

This is the ability to create falsified documents (identity cards, passports, etc.). It is not taught except by intelligence agencies and the underworld – although you can always study it on your own.

The time required to create a forgery ranges from days to weeks (GM decides). When you use a forged document, make your Forgery roll each time it is inspected – unless you roll a critical success on your first attempt. Failure means someone spots the forgery.

Some tasks require DX-based skill rolls, in which case modifiers for High Manual Dexterity (p. 59) or Ham-Fisted (p. 138) apply. The GM may allow Forgery to default to a suitable Artist specialty at -5 if you are doing the work entirely by hand.

Modifiers: Equipment modifiers (p. 345); +3 if you merely altered a genuine document; -5 if you did not have a sample to copy. If the GM assigns modifiers based on the severity of the inspection; a routine border check, for instance, would give a +5 bonus.

Forward Observer/TL

IQ/Average

Defaults: IQ-5, Artillery (any)-5, and others.

This is the skill of being a “spotter” for artillery. It includes locating targets (with map and compass at TL6, global positioning systems and satellite imagery at TL7+), marking targets (using smoke, a laser designator, etc.), matching ordnance to target for best effect, and calling in corrections to any fire you personally observe.

Failure means the ordnance misses the target; critical failures result in severe “collateral damage” or “friendly fire” incidents. The very worst critical failures (GM’s decision) drop the ordnance on your position!
At higher tech levels, Forward Observer is less about observing targets and more about operating specialized technology such as drones, GPS, and laser designators. To remotely pilot a drone or use a laser designator to direct “smart” munitions onto a target, make a DX-based skill roll. At TL7+, Forward Observer defaults to Electronics Operation (any)-5.

Modifiers: Equipment modifiers (p. 345): -2 if you are unfamiliar with the artillery (e.g., aircraft bombs when you are used to naval guns); -3 per 500 yards between you and the target – but divide the actual range by the magnification of any vision aid first.

People often stake vast sums on games, and it might be possible to earn a living as a professional gamer.

Free Fall

DX/Average

Defaults: DX-5 or HT-5.

This is the ability to operate in a free-fall (zero-gravity) environment. Roll against the higher of HT or Free Fall when you first enter free fall; see Space Adaptation Syndrome (p. 434) for the effects of failure. In addition, whenever you make a DX or DX-based skill roll in free fall, use the lower of Free Fall and your DX or skill. For instance, if you had Free Fall-14 and Karate-16, you would roll at 14 or less to land a punch.

Modifiers: +2 for 3D Spatial Sense (p. 34).

Freight Handling/TL

IQ/Average

Defaults: IQ-5.

Freight Handling (TL) is the skill of supervising the loading and unloading of vehicles (laborers do not require this skill – just their foreman). A successful skill roll cuts the time required by 20%. Also roll against Freight Handling skill any time there is doubt as to whether an item of cargo was lost or damaged; on a success, it made the journey intact.

Gambling

IQ/Average

Defaults: IQ-5 or Mathematics (Statistics)-5.

This is skill at playing games of chance. A successful Gambling roll can (among other things) tell you if a game is rigged, identify a fellow gambler in a group of strangers, or “estimate the odds” in any tricky situation. When you gamble against the house, make a skill roll (the GM will secretly modify this roll if the odds are poor!). When you gamble against someone else, roll a Regular Contest of Gambling (p. 197) until one of you wins.

Sleight of Hand skill (p. 221) is helpful if you want to cheat! To spot a cheat, roll a Quick Contest of your Gambling or Vision roll, whichever is higher vs. your opponent’s Sleight of Hand skill (for card or dice tricks) or IQ (for other kinds of cheating).

Modifiers: +1 to +5 for familiarity with the game being played: -1 to -5 if the game is rigged against you; -3 for Killjoy (p. 140), since you don’t care if you win or lose.

Games†

IQ/Easy

Default: IQ-4.

This is the ability to play a game well. It includes knowledge of rules, etiquette, and tournament regulations. You must specialize in a particular game; possibilities include traditional board games (such as chess, Go, hnefatafl, and mankala), card games, war games, and computer games.

Many cultures regard the ability to play one or more games skillfully as a worthwhile social accomplishment. People often stake vast sums on games, and it might be possible to earn a living as a professional gamer. Games may also be played to settle disputes. In a fantasy world, a powerful monster or wizard might even challenge a hero to a game – with his life or the lives of his companions at stake!

Knowledge of the rules of a given sport is also a Games skill, but unlike other Games skills, sports specialties only allow you to judge an event. To play, learn the associated Sports (p. 222) or Combat Sport (p. 184) skill. As a referee, roll against skill to adjudicate a match, spot a subtle foul, determine the winner in a “photo finish” situation, etc. As an athlete, you can use Games to make an Influence roll (see Influence Rolls, p. 359) when dealing with a referee or judge, but this use is always at -3 or worse.

When you take a sports specialty, specify both the sport and the league or tournament type; e.g., Games (NFL Football) or Games (Olympic Judo). The rules of different leagues within the same sport default to one another at -2.

Modifiers: Cultural Familiarity modifiers (p. 23). Long-lived games have a body of knowledge that grows through time; therefore, when gamers from different times compete, the player from later in the timeline gets +1 to effective skill.

Gardening

IQ/Easy

Defaults: IQ-4 or Farming-3.

This is the ability to care for plants on a small scale. (For large-scale crops, use Farming skill, p. 194.) A skill roll lets you grow food, medicinal herbs, attractive flowers and trees, etc.

Modifiers: -2 to -4 for an unfamiliar method (e.g., hydroponics or bonsai when you’re used to your back yard), crop (herbs, trees, and vegetables all differ), or geographical region. These three penalties are cumulative!

Garrote

DX/Easy

Default: DX-4.

This is the ability to strangle a victim with a rope or a wire. See Special Melee Weapon Rules (p. 404) for details. Note that you cannot use a garrote to parry.
Geography/TL†

IQ/Hard

Defaults: IQ-6 and others.

This is the study of the physical, political, and economic divisions of a planet, and how they interact. It is part physical science, part social science. You must specialize:

Physical: The study of the physical properties of a planetary surface. A physical geographer could answer questions about climate, terrain, and so forth. You must further specialize by planet type; see Planet Types (p. 180). Defaults: Geology (same planet type)-4 or Meteorology (same planet type)-4.

Political: The study of political regions – their borders, natural resources, industries, etc. A political geographer could answer questions about land claims, overpopulation, regional economic disparities, transportation networks, etc. Default: Economics-4.

Regional: The study of all of the above, but specific to a single region: New York, the United States, planet Earth, etc. The depth of knowledge decreases with the size of the region (see Area Knowledge, p. 176). Default: the relevant Area Knowledge skill at -6.

These specialties default among themselves at -5.

Geology/TL†

IQ/Hard

Defaults: IQ-6, Geography (Physical)-4, or Prospecting-5.

This is the science dealing with the structure of planets – their crust, mantle, and core. A geologist knows about minerals, oil, ores, etc.; about earthquakes and volcanoes; and about fossils. In the field, he can attempt to find water by using an "eye for country" (see Survival, p. 223).

You must specialize by planet type. See Planet Types (p. 180) for details.

Gesture

IQ/Easy

Default: IQ-4.

This is the ability to communicate through improvised hand signals. A successful skill roll will let you convey one simple idea to another person, or understand one simple idea he is attempting to get across to you. Gesture is not suited to complex communication, however.

Modifiers: Cultural Familiarity modifiers (p. 23) definitely apply! Different cultures develop distinct gesture vocabularies.

Group Performance†

IQ/Average

Defaults: IQ-5 and others.

This is the ability to arrange a performance and direct a group of performers in its execution – in rehearsal, in a studio, or before a live audience. A successful roll means the performance is pleasing. You must specialize in a particular performing art. All specialties have prerequisites: the specific skills listed below, plus any one of Diplomacy, Intimidation, or Leadership.

Choreography: The ability to instruct and lead a group of dancers. Prerequisite: Dancing. Default: Dancing-2.

Conducting: The ability to coordinate a group of musicians. Choirs, swing bands, symphony orchestras, etc. are different familiarities; see Familiarity (p. 169). Prerequisites: Any two Musical Instrument skills, or one Musical Instrument and Singing. Defaults: Musical Instrument-2 or Singing-2.

Directing: The ability to direct a group of actors. Film, opera, television, and theater are different familiarities. Prerequisite: Performance. Default: Performance-5.

Fight Choreography: Similar to Choreography, but for Stage Combat (p. 222) instead of Dancing. Prerequisite: Stage Combat. Default: Stage Combat-2.

Gunner/TL†

DX/Easy

Default: DX-4.

This is the ability to use a heavy weapon, usually one mounted on a tripod or a vehicle, to make a direct-fire attack – that is, to aim and fire at a target to which you have a line of sight. For indirect fire, use Artillery skill (p. 178). Roll against Gunner skill to hit the target.

Make an IQ-based skill roll to take immediate action (e.g., clear a stoppage or restart a crashed targeting computer), should your weapon fail. Loaders can make ST-based skill rolls to improve the rate of fire of certain crew-served weapons; see individual weapon descriptions for details.

You must specialize by weapon type. The available specialties vary by TL, but include one or more of:

Beams: Any kind of heavy directed-energy weapon: laser, particle beam, etc.

Cannon: Any kind of heavy projectile weapon – e.g., the main gun of a tank or an ultra-tech railgun on a starship – that fires single shots.

Catapult: Any kind of large, direct-fire mechanical bolt-thrower, such as a ballista.

Machine Gun: Any kind of heavy projectile weapon capable of firing bursts.

Rockets: Any kind of free-flight rocket fired from a mount.

These specialties default to one another at -4. The weapons covered by each specialty vary by TL. For instance, Gunner (Machine Gun) covers hand-cranked Gatling guns at TL5, automatic machine guns at TL6, autocannon at TL7, and electromagnetic machine guns at TL9+. Familiarity is crucial here! Gunner/TL7 (Machine Gun) covers both tripod-mounted machine guns and aircraft autocannon, but going from one to the other gives you -2 for weapon type (machine gun to autocannon), -2 for aiming system (open sights to HUD), and -2 for mount (tripod to hull mount), for a net -6 to skill until you familiarize yourself with all the differences.

Modifiers: All applicable ranged combat modifiers; -2 for an unfamiliar aiming system (e.g., a camera when you're used to open sights) or mount (e.g., a tripod when you're used to a turret), or for an unfamiliar weapon of a known type (e.g., .30-cal when you are used to .50s); -4 or more for a weapon in bad repair.

Guns/TL†

DX/Easy

Default: DX-4.
This is the ability to use a handheld chemical-propellant or mass-driver projectile weapon. Roll against Guns skill to hit your target.

Make an IQ-based skill roll to take immediate action (e.g., eject a dud round), should your weapon fail.

You must specialize by weapon type. The available specialties vary by TL, but include one or more of:

Grenade Launcher (GL): Any large-bore, low-powered small arm that fires a bursting projectile. Includes under-barrel grenade launchers, flare pistols, and ultra-tech “tanglers.”

Gyro: Any kind of small arm that fires miniature rockets.

Light Anti-Armor Weapon (LAW): All forms of rocket launchers and recoilless rifles.

Light Machine Gun (LMG): Any machine gun fired from the hip or a bipod.

Musket: Any kind of smoothbore long arm (usually, but not always, a black powder weapon) that fires a solid projectile.

Pistol: All kinds of handguns, including derringers, pepperboxes, revolvers, and automatics, but not machine pistols.

Rifle: Any kind of rifled long arm – assault rifle, hunting rifle, sniper rifle, etc. – that fires a solid projectile.

Shotgun: Any kind of smoothbore long arm that fires multiple projectiles (flechettes, shot, etc.).

Submachine Gun (SMG): All short, fully automatic weapons that fire pistol-caliber ammunition, including machine pistols.

Most of these specialties default to one another at -2, but defaults involving GL, Gyro, or LAW are at -4 in either direction. The weapons covered by each specialty vary by TL. For example, Guns (Rifle) covers muzzle-loaders at TL4, lever actions at TL5, and self-loaders at TL6+. In particular, ammunition varies with TL, from black powder and loose shot at TL4, to smokeless powder cartridges at TL6, to power cells and metallic slivers for TL7+ electromagnetic guns.

Familiarity is crucial here! Guns (Rifle) covers both bolt-action 12.7mm sniper rifles and 5.56mm assault rifles, but going from one to the other gives you -2 for weapon type (12.7mm to 5.56mm), -2 for action (bolt-action to self-loader), and -2 for grip (bipod to hand-held), for a total of -6 to skill until you familiarize yourself with all the differences.

Modifiers: All applicable ranged combat modifiers; -2 for an unfamiliar action (e.g., an automatic when you’re used to a revolver) or grip (e.g., a shoulder-fired antitank weapon when you’re used to a bipod), or for an unfamiliar weapon of a known type (e.g., a 5.56mm rifle when you are used to a 7.62mm rifle); -4 or more for a weapon in bad repair.

**Hazardous Materials/TL**

**Default:** IQ-5

This is the skill of transporting, storing, and disposing of hazardous materials (“HazMat”). It includes preparing the records that accompany HazMat shipments; identifying and warning labels and markings; and knowledge of countermeasures, antidotes, and containment and decontamination procedures. (To operate personal protective gear; use the NBC Suit skill, p. 192.)

You must specialize by type of HazMat. Common specialties are Biological, Chemical, and Radioactive, but more exotic options (e.g., Magical or Nanotech) may exist in some settings. Mundane specialties default to one another at -5; exotic specialties often have no default at all.

Whenever you deal with HazMat in any capacity, roll against the lower of the skill used for the task (Driving, Freight Handling, etc.) and the applicable Hazardous Materials specialty or default. Note that the IQ-5 default represents any layman’s knowledge of household hazards. HazMat professionals deliberately keep certain aspects of this skill (notably HazMat markings) obscure to avoid alarming the general public. The default does not apply when dealing with such things.

**Herb Lore**

**Default:** None.

Prerequisite: Naturalist.

This is the ability to manufacture herbal concoctions that have magical effects – healing balms, love potions, etc. It only exists in magical game worlds, where it functions much as Alchemy skill (p. 174). Unlike Alchemy, Herb Lore does not include the ability to analyze “elixirs.” On the other hand, an expert at this skill can locate magical ingredients for free in the wild by making a few Naturalist rolls, while an alchemist requires rare and expensive materials (such as alkanest, dragon’s blood, gemstones, and gold) to do his work.

**Hidden Lore**

**Default:** None.

This skill represents knowledge that is lost, deliberately hidden, or simply neglected. Whatever the reason, the general public is unaware of it. It is only available to those who study it specifically.

You must specialize in a particular body of secret knowledge. If you wish to enter play with Hidden Lore skills, you must account for this specific knowledge in your character story. The GM might even require you to purchase an Unusual Background before you can learn Hidden Lore skills. Of course, the GM is also free to forbid Hidden Lore skills to starting characters . . . or to PCs in general!
To acquire Hidden Lore in play, you must find a reliable source of relevant information. The GM may choose to tie skill increases in Hidden Lore to specific acts—such as reading moldy tomes—instead of allowing you to spend points freely. For instance, an ancient manuscript might let you spend up to eight points (and no more) on a specific Hidden Lore skill.

Remember that most Hidden Lore is secret because somebody powerful wants it kept that way. Thus, discussing or revealing your knowledge can be extremely hazardous.

Possible Hidden Lore specialties include:

**Conspiracies:** You know details about the conspiracies that underlie every aspect of society. This is factual knowledge (e.g., truths about the Illuminati), not the ability to *analyze* conspiracies. Only available in settings where vast conspiracies really do exist.

**Demon Lore:** You know the secrets of Hell, the goals of demons in the mortal world, and possibly even the names of specific demons.

**Faerie Lore:** You have detailed knowledge of the faeries and their secret kingdom(s).

**Spirit Lore:** You know about ghosts and other spirit entities—names, motivations, etc.

### Hiking

**Default:** HT-5.

This skill represents training for endurance walking, hiking, and marching. It includes knowledge of how to pace yourself in different conditions, and how best to carry a pack. Make a Hiking roll before each day’s march; on a success, increase the distance traveled by 20%. The GM may allow bonuses for good maps and good walking shoes, but not for terrain. If a party is traveling together, all must make the Hiking roll in order to get the increased distance. See Hiking (p. 351).

### History†

**Default:** IQ-6.

This is the study of the recorded past (compare Archaeology skill, p. 176). A successful skill roll lets you answer questions about history, and might (at the GM’s option) allow you to remember a useful parallel: “Ah, yes. Hannibal faced a situation like this once, and here’s what he did…” You must specialize. There are two general classes of specialty:

- A limited geographical region—no larger than a small nation—over multiple eras. *Examples:* History (Bavarian), History (Irish), or History (New York State).
- A single era (e.g., Victorian period, 20th century) and one of a broad geographical region (e.g., Europe), a culture (e.g., Muslim), or an idea (e.g., economic, esoteric, or military). *Examples:* History (20th-Century American), History (Ottoman Muslim), or History (Napoleonic Military).

The sheer variety of possible specialties makes it impossible to list all possible defaults. In general, if two specialties overlap at all, then GM should permit a default at -2 to -4.

### Hobby Skill

**Default:** DX or IQ/Easy

**IQ/Hard**

Many fields of study have little to do with adventuring or making a living—but people study them nonetheless. Each of these is a separate Hobby Skill. Those that require agility or a delicate touch (e.g., juggling, kite flying, needlepoint, and origami) are DX/Easy skills that default to DX-4, while those that focus on knowledge and trivia (e.g., comic books, rock music, science fiction, and tropical fish) are IQ/Easy skills that default to IQ-4.

A few points in a Hobby Skill can make roleplaying more fun—and possibly come in handy once in a while. You do not need a teacher to learn or improve a Hobby Skill. However, you cannot learn skills defined elsewhere in this chapter as Hobby Skills.

### Holdout

**Default:** IQ/Average

**IQ-5 or Sleight of Hand-3.**

This is the skill of concealing items on your person or on other people (usually with their cooperation). An item’s size and shape govern its concealability. Some examples:

- +4: A BB-sized jewel, a postage stamp.
- +3: A pea-sized jewel.
- +2: One lockpick, a huge jewel, a dime, a TL9+ computer disk, a letter.
- +1: A set of lockpicks, a silver dollar.
- 0: A TL8 floppy disk or CD, without case.
- -1: A dagger, a slingshot, the tiniest handgun or grenade.
- -2: An average handgun (e.g., a Luger), a grenade, a large knife.
- -3: A submachine gun, a shortsword, a short carbine.
- -4: A broadsword, an assault rifle.
- -5: A bastard sword, a battle rifle.
- -6: A crossbow, a heavy sniper rifle.

Things that move or make noise give an additional -1 or more to skill.

Clothing also modifies effective skill. A Carmelite nun in full habit (+5 to skill) could conceal a bazuoka or a battle-axe from an eyeball search. A Las Vegas showgirl in costume (-5 to skill) would have trouble hiding even a dagger. Of course, the showgirl might escape search entirely (unless the guards were bored) because “She obviously couldn’t hide anything in *that* outfit!” Full nudity is -7 to skill.

A proper concealment holster helps conceal a weapon; use the equipment modifiers on p. 345. Clothing designed specifically to hide things gives a bonus of up to +4.

To spot a concealed item, roll a Quick Contest of Search skill vs. Holdout. Search defaults to Perception-5 if you haven’t studied it. See Search (p. 219) for additional rules.

### Housekeeping

**IQ/Easy**

**Default:** IQ-4.

This is the ability to manage a household. It covers both home economics and domestic chores: cleaning, cooking (but not *haute cuisine*, which requires the Cooking skill), minor repairs (any routine maintenance task that calls for a roll against Carpentry, Sewing, or a similar skill at +4 or better), etc. The main use of Housekeeping is to qualify for the job...
of “homemaker,” but it can come in handy on adventures – for instance, to clean up evidence!

Hypnotism

Defaults: None.
Prerequisite: Trained By A Master.

This is the skill of inducing a suggestible state in another person through verbal or mechanical means. It requires five seconds and a successful skill roll to use. If you fail on a cooperative subject, you may try again. The second attempt takes five minutes, and the roll is at -5. If this attempt fails, you may not try to hypnotize the subject again that day.

A successful Hypnotism attempt puts the subject to sleep. This counts as an anesthetic for the purpose of Surgery. At the GM’s option, further Hypnotism rolls might help the subject remember something he had forgotten, while Psychology rolls might help him get over mental problems.

A hypnotized individual is extremely suggestible. Roll a Quick Contest of Hypnotism vs. the victim’s Will for each suggestion. The subject resists suggestions that threaten his life or his loved ones, or that go strongly against his character; +5. You may also give “posthypnotic suggestions,” instructing the subject to do something in response to a trigger after the hypnosis ends. The subject’s resistance roll for such suggestions takes place when he encounters the trigger. He resists at +1 to Will per week since he was hypnotized.

You cannot use Hypnotism as an attack, except in highly cinematic games. You can use it on an unaware or unwilling subject out of combat, but he resists at Will+5. If he resists the initial attempt, he is considered uncooperative, and you may not make a second attempt that day. A subject who is unfamiliar with Hypnotism might not know what you attempted, but he suspects something – possibly witchcraft!

In all cases, a hypnotic trance lasts 1d hours unless you end it sooner.

Modifiers: +2 if you send hypnotic suggestions via Telesend (see Telecommunication, p. 91), since voices in the head are harder to ignore.

Inmovable Stance

Defaults: None.

This skill allows you to anchor yourself to the ground by properly channeling your chi, using secret balancing techniques, etc. Make a skill roll whenever an attack (e.g., a shoe or the Push skill, p. 216) would result in knockback or a fall.

On a success, you neither experience knockback nor fall down. On a failure, you are knocked back but still get the usual DX roll to avoid falling down. On a critical failure, you automatically suffer full knockback and you fall down.

This skill also helps against attacks with the Judo skill (p. 203). If you fail your active defense (or choose not to defend) against a Judo throw, your attacker must win a Quick Contest of Judo vs. your Immovable Stance skill, or his throw fails.

Modifiers: -1 per yard of potential knockback; +4 for Perfect Balance (p. 74).

Innate Attack†

Default: DX-4.

This skill represents trained ability with a “built-in” ranged attack: fiery breath, super-powered energy bolts, etc. Learn it to improve your odds of hitting with Afflictions (p. 35), Bindings (p. 40), Innate Attacks (p. 61), magical jets and missiles, and similar attacks that originate from you as opposed to a weapon in your hand. Roll against skill to hit.

You must specialize:

Beam: Any energy blast, magical jet, etc. emitted from the hands. To use this skill, you must have at least one unrestrained hand (although it need not be empty).

Breath: Any attack emitted from the mouth, such as dragon’s fire or acidic sputum. To use this skill, you cannot be gagged and you must be facing your target.

Gaze: Any attack emitted from the eyes – heat vision, a petrifying stare, etc. To use this skill, you cannot be blindfolded and you must be facing your target.

Intelligence Analysis/TL

Defaults: IQ-6 or Strategy (any)-6.

This is the ability to analyze and interpret intelligence data. It allows you to deduce enemy plans and capabilities, evaluate the accuracy of information, rate the reliability of sources, etc. In most game worlds, only intelligence, military, and security services teach this skill – often only to those with a minimum level of Rank or Security Clearance.

The GM makes all Intelligence Analysis rolls in secret. On a success, he provides details about the significance and accuracy of your data, or insights into what it means in terms of enemy planning. When you encounter deliberately falsified data, the GM rolls a secret Quick Contest: your Intelligence Analysis vs. the enemy’s skill at disinformation (Forgery, Propaganda, etc.). If you win, the GM provides details on precisely what is wrong with the information. It is up to you to deduce what this means, however!

This skill has nothing to do with gathering intelligence. Use Current Affairs (p.186) and Research (p. 217) to sift through public sources; Forensics (p. 196) and Search (p. 219) to find physical clues; Observation (p. 211) for human surveillance; and Electronics Operation (p. 189) to work with the satellite imagery, communications intercepts, and related “technical means” common at TL7+.
You may take an optional specialty (p. 169) in one particular type of intelligence. A useful specialty at TL6+ is Intelligence Analysis (Traffic Analysis): identifying the purpose and organization of targets by examining intercepted communications traffic.

Modifiers: -1 to -5 for incomplete information; -3 if all your information comes from a single source; -3 for intelligence concerning an arcane scientific or bureaucratic principle, unless you have skill in that area (e.g., Engineer (Electronics) for intelligence regarding a radar installation).

**Interrogation**

**IQ/Average**

Defaults: IQ-5, Intimidation-3, or Psychology-4.

This is the ability to question a prisoner. Only intelligence agencies, police and prison services, the military, and the underworld teach this skill.

Roll a Quick Contest of Interrogation vs. the prisoner's Will for each question. This requires 5 minutes per question. If you win, you get a truthful answer. If you tie or lose, the victim remains silent or lies. If you lose by more than five points, he tells you a good, believable lie! The GM roleplays the prisoner (or, if you are the prisoner, the GM will roleplay the interrogator) and makes all die rolls in secret.

Modifiers: -5 if the prisoner's loyalty to his leader or cause is "Very Good" or "Excellent"; -3 for Low Empathy (p. 142); +2 for a lengthy interrogation (over two hours); +3 if you use severe threats; +6 if you use torture*. Increase these last two bonuses by +1 if you have the Callous disadvantage (p. 125)!

* "Torture" does not necessarily mean thumbscrews and the rack. Exposing a prisoner to the object of his phobia (see Phobias, p. 148) is an effective torture, as is a believable threat against a loved one. Note that torturing a prisoner is usually considered vile behavior; likely bringing retribution.

**Intimidation**

**Will/Average**

Defaults: Will-5 or Acting-3.

This is the skill of hostile persuasion. The essence of Intimidation is to convince the subject that you are able and willing, perhaps even eager, to do something awful to him.

You can substitute an Intimidation attempt for any reaction roll; see *Influence Rolls* (p. 359). Exception: You cannot intimidate someone who has the Unfazeable advantage!

The results of a successful Intimidation attempt depend on the target. An honest citizen probably cooperates, sullenly or with false cheer. A low-life might lick your boots (even becoming genuinely loyal). A really tough sort might react well without being frightened: "You're my kind of scum!" The GM decides, and roleplays it. If you rolled a critical success – or if the subject critically failed his Will roll – your victim must make a Fright Check in addition to the other results of the Influence roll!

**Group Intimidation**: You may attempt to intimidate up to 25 people at once, at -1 to skill per five people (or fraction thereof) in the group. Multiple intimidators can attempt to intimidate proportionally larger groups; for instance, three thugs could try to intimidate up to 75 people! Base the skill penalty on the size of the target group divided by the number of intimidators (round up). Resolve the outcome with a single Quick Contest: the highest effective Intimidation skill from among the intimidators vs. the highest modified Will in the target group.

**Specious Intimidation**: You can attempt a Quick Contest of Fast-Talk vs. the subject's IQ before your Intimidation attempt in order to appear to be intimidating when you can't back it up. If you win, you are at +3 on the subsequent Intimidation attempt, which can go a long way toward offsetting the high Will and Fearlessness of martial arts masters, world leaders, etc. If you tie or lose, however, your Intimidation attempt fails automatically, and you suffer a "Very Bad" reaction instead of just a "Bad" one!

Modifiers: +1 to +4 for displays of strength, bloodthirstiness, or supernatural powers (GM's judgment); increase this bonus by +1 if you are Callous (p. 125). Appearance (p. 21) matters: +2 if you are Hideous, +3 if Monstrous, or +4 if Horrific. Size also matters: add your Size Modifier and subtract the subject's. Appropriate Reputation modifiers (positive or negative) certainly count! You get -1 for Oblivious (p. 146) and -1 to -4 for Shyness (p. 154). Subtract the subject's Fearlessness (p. 55) from your roll. The GM may assign a +1 or -1 for especially appropriate or clumsy dialog. Requests for aid are always at -3 or worse.

**Invisibility Art**

**IQ/Very Hard**

Defaults: None.

Prerequisites: Trained By A Master, and both Hypnotism and Stealth at 14+.

This is the fabled skill, often attributed to ninja and other martial-arts masters, of being able to stand in plain sight without being noticed. It requires one second of concentration to activate. After that time, roll a Quick Contest once per second: your Invisibility Art vs. the Vision roll of each person who can see you.

Viewers must apply the current darkness penalty to their Vision roll. A viewer who is concentrating on something else or otherwise distracted is at -3; one who is specifically looking for intruders gets +3. If someone sees you and raises the alarm, by pointing and crying out, those who believe the warning get +3 on their next roll.

If you win, that person is unable to see you for one second. Otherwise, he can see you normally. Once someone notices you, he is unaffected by this skill until you can get out of sight somehow (which might be as easy as stepping into a shadow), whereupon you may try again.

Note that this skill does not work at all in combat. In particular, if you attack anyone, you will immediately become visible to everyone!

Modifiers: +3 if you use a smoke bomb or flash grenade before you attempt your roll (you appear to vanish in a cloud of smoke). Your movement modifies your skill roll rather than viewers' Vision rolls: no modifier if you stand still (Move 0), -1 if you move at a slow walk (Move 1), -2 at a fast walk (Move 2), or -5 at a run (Move 3+). If you stand perfectly still (requires a successful Breath Control or Meditation roll), you get +1.
Jeweler/TL

IQ/Hard

Defaults: IQ-6, Smith (Copper)-4, or Smith (Lead and Tin)-4.

This is the ability to work with precious metals, make jewelry, decorate weapons, etc. A successful skill roll allows you to identify a precious metal or gem, or determine the value of a precious bauble.

Jitte/Sai

see Melee Weapon, p. 208

Judo

DX/Hard

Defaults: None.

This skill represents any advanced training at unarmed throws and grapples – not just the eponymous Japanese martial art.

Judo allows you to parry two different attacks per turn, one with each hand. Your Parry score is \((\text{skill}/2) + 3\), rounded down. This parry is not at the usual -3 for parrying a weapon bare-handed, greatly reducing the likelihood of injury when you defend against an armed foe. In addition, Judo gives an improved retreating bonus when you parry; see Retreat (p. 377). For complete rules for parrying bare-handed, see Parrying Unarmed (p. 376).

On the turn immediately after a successful Judo parry, you may attempt to throw your attacker if he is within one yard. This counts as an attack; roll vs. Judo skill to hit. (Note that in an All-Out Attack, you cannot attempt two throws, but you can make one attempt at +4.) Your foe may use any active defense – he can parry your hand with a weapon! If his defense fails, you throw him.

When you throw a foe, he falls where you please. On a battle map, he lands in any two hexes near you. One of these hexes must be his starting hex, your hex, or any hex adjacent to one of those hexes. Your victim must roll against HT; a failed roll means he is stunned! If you throw him into someone else, that person must roll against the higher of ST+3 or DX+3 to avoid being knocked down.

Finally, you may use your Judo skill instead of your DX for any DX roll made in close combat except to draw a weapon or drop a shield. If you grapple a foe using Judo, and he fails to break free, you may make a Judo attack to throw him on your next turn, exactly as if you had parried his attack.

To use Judo, any hand with which you wish to parry or grapple must be empty. Because Judo relies heavily on footwork, all Judo rolls and Judo parries take a penalty equal to your encumbrance level. For instance, Heavy encumbrance would give you -3 to hit or to parry an enemy attack.

Jumping

Defaults: DX/Easy

This skill represents trained jumping ability. When you attempt a difficult jump, roll against the higher of Jumping or DX. In addition, you may use half your Jumping skill (round down) instead of Basic Move when calculating jumping distance. For instance, Jumping-14 would let you jump if you had Basic Move 7. See Jumping (p. 352).

Karate

Defaults: None.

This skill represents any advanced training at unarmed striking, not just the Okinawan martial art of karate. Roll against Karate to hit with a punch (at no -4 for the "off" hand), or Karate-2 to hit with a kick. You cannot use Karate to attack with claws, teeth, etc., or with a blackjack – use Brawling (p. 182) for that. Karate skill does let you make several special attacks, however; see Special Unarmed Combat Techniques (p. 403).

Karate improves damage: if you know Karate at DX level, add +1 per die to basic thrust damage when you calculate damage with Karate attacks: punches, kicks, elbow strikes, etc. Add +2 per die if you know Karate at DX+1 or better! Work out damage ahead of time and record it on your character sheet.

Karate allows you to parry two different attacks per turn, one with each hand. Your Parry score is \((\text{skill}/2) + 3\), rounded down. This parry is not at the usual -3 for parrying a weapon bare-handed, greatly reducing the likelihood of injury when you defend against an armed foe. In addition, Karate gives an improved retreating bonus when you parry; see Retreat (p. 377). For more on parrying bare-handed, see Parrying Unarmed (p. 376).

To use Karate, any hand with which you wish to strike or parry must be empty (but you are free to wear heavy gauntlets, brass knuckles, etc. to increase damage). Because Karate relies heavily on footwork, all Karate attacks and parries take a penalty equal to your encumbrance level. For instance, Heavy encumbrance would give you -3 to hit or to parry an enemy attack.

Knife

see Melee Weapon, p. 208

Knot-Tying

Defaults: DX-4, Climbing-4, or Seamanship-4.

This is the ability to tie a wide variety of knots quickly and efficiently. A successful skill roll lets you make a noose, tie someone up, etc. If you bind someone using this skill, he must win a Quick Contest of Escape vs. your Knot-Tying skill to free himself.

Modifiers: +1 per level of High Manual Dexterity (p. 59), or -3 per level of Ham-Fisted (p. 138).
Kusari

see Melee Weapon, p. 208

Lance

DX/Average

Defaults: DX-5 or Spear-3.
Prerequisite: Riding.

The ability to use the lance: a long, spear-like weapon wielded from horseback. This is not a Melee Weapon skill (see p. 208). You may not use a lance to parry – you must block or dodge enemy attacks.

Lasso

Defaults: None.

This is the skill of throwing the lariat: a long rope or thong with a sliding noose at one end. Its intended purpose is to snare animals, but it can also entangle opponents in combat – see Special Ranged Weapons (p. 410).

Law†

IQ/Average

Defaults: IQ-6.

This skill represents knowledge of law codes and jurisprudence. A successful roll lets you remember, deduce, or figure out the answer to a question about the law. Few legal questions have clear-cut answers, however – even an expert will hedge his advice!

You must specialize. There are two general classes of specialty:

- The laws of a particular political region (e.g., Canada or France) within a specific field (constitutional, contract, criminal, police, etc.). Examples: Law (British Criminal), Law (Canadian Constitutional), and Law (U.S. Contract).
- A specialized body of law not associated with a political region. Examples: Law (Catholic Canon), Law (International), and Law (Space).

Specialties within the same region, such as Law (British Criminal) and

Law (British Police), or field, such as Law (British Criminal) and Law (French Criminal), default to one another at -4. If both region and field differ, the default is -6 or worse.

In some times and places, a Quick Contest of Law (Criminal) between the defense and prosecution will determine the outcome of a trial. In others, Law functions as an Influence skill (see Influence Rolls, p. 359) used to sway the rulings of the judge.

Law enforcers nearly always have a point or two in Law (Police) for their region. This represents knowledge of “proper procedure” when it comes to arrests, evidence handling, interrogation, etc.

Leadership

IQ/Average

Defaults: IQ-5.

This is the ability to coordinate a group. Make a Leadership roll to lead NPCs into a dangerous or stressful situation. (PCs can decide for themselves if they want to follow you!)

You may attempt a Leadership roll in combat if you spend your turn doing nothing but giving orders and encouragement. On a success, everyone on your side who can hear you (including PCs) has +1 on all combat-related Fright Checks and morale checks, and on self-control rolls for disadvantages that would reduce combat efficiency (such as Berserk and Cowardice – or Bloodlust, if you wish to take prisoners). A critical success gives +2. The bonus lasts until your next turn, at which time you may roll again. A group can have only one leader, however! If multiple people attempt Leadership rolls, no one gets a bonus.

Note that a minimum level of Leadership is often a prerequisite for high Rank (p. 29).

Modifiers: Any bonus for Charisma (p. 41); -3 for Low Empathy (p. 142); -1 to -4 for Shyness (p. 154). -5 if the NPCs have never been in action with you; -5 if you are sending them into danger but not going yourself; +5 if their loyalty to you is “Good”; +10 if their loyalty is “Very Good.” If their loyalty is “Excellent,” you do not have to roll!
**Leatherworking**

Default: DX-4.

This is the ability to work with leather to make belts, saddles, armor, etc. A successful skill roll lets you repair or create leather goods. Make an IQ-based roll to design items that are more artistic than functional.

**Lifting**

Default: None.

This is the trained ability to use your strength to its best advantage when you lift. Roll once per lift. On a success, increase your Basic Lift by 5% per point by which you made your roll. This has no effect on encumbrance, or on how much you can carry. See *Lifting and Moving Things* (p. 353).

**Light Walk**

Default: None.

Prerequisites: Trained By A Master, and both Acrobatics and Stealth at 14+.

This skill allows you to exert very little pressure when you walk. On a successful Light Walk roll, you leave no visible tracks. Tracking rolls to follow you automatically fail unless they rely on something more than sight; thus, a human tracker would be baffled, but bloodhounds would suffer no penalty at all.

You can also attempt to walk over fragile surfaces without falling through. Maximum Move under such circumstances is 1/3 normal (GM’s decision). Thin ice would require an unmodified Light Walk roll, while rice paper would require a roll at -8!

Finally, a successful Light Walk roll can give a bonus to Stealth when your intention is to move quietly. This bonus equals half your margin of success, rounded down. Minimum bonus is +1.

**Linguistics**

Default: None.

This is the study of the principles upon which languages are based. A successful skill roll lets you identify a language from a snatch of speech or writing. As well, make a skill roll once per month when learning a language without a teacher. On a success, you learn at full speed rather than at 1/4 speed (see *Learning Languages*, p. 25).

**Literature**

Default: IQ-6.

This is the study of the great writings. A student of literature would be knowledgeable in the realms of old poetry, dusty tomes, criticism, etc. This can be useful for finding clues to hidden treasure, sunken lands, Ancient Secrets, and the like.

These specialties default to one another at -4. The weapons covered by each specialty vary by TL; e.g., Liquid Projector (Flamethrower) covers firesiphons loaded with Greek fire at TL4, while at TL6, it covers backpack tanks that project thickened fuel.

Modifiers: All applicable ranged combat modifiers; -2 for heavy weapons when you are used to portable weapons (e.g., a flamethrower mounted on a tank when you are used to a backpack model), or for an unfamiliar weapon of a known type; -4 or more for a weapon in bad repair.

**Liquid Projector/TL†**

Default: DX-4.

This is the ability to use a weapon that projects a stream of liquid or gas. Roll against Liquid Projector skill to hit your target.

Make an IQ-based Liquid Projector roll to take immediate action (e.g., patch a leak), should your weapon fail.

You must specialize by weapon type:

Flamethrower: Any weapon that projects burning liquid or gas. (This does not include plasma weapons, which are often called “flamers”; use Beam Weapons skill for those.)

Spray: Any weapon that emits a gas or atomized liquid (nerve gas, sleeping gas, etc.), including an ordinary spray can used as an improvised weapon.

Squirt Gun: Any weapon that fires a low-pressure stream of liquid at the rate of one squirt per pull of the trigger.

Water Cannon: Any weapon that fires a continuous jet of high-pressure liquid, usually but not always water, with the intent of causing knockback.

Literature can be useful for finding clues to hidden treasure, sunken lands, Ancient Secrets, and the like.
**Lockpicking/TL**  
**IQ/Average**

**Default:** IQ-5.

This is the ability to open locks without the key or combination. Each attempt requires one minute.

If you make the roll and open the lock, each point by which you succeeded shaves five seconds off the required time. (Safecracking and similar challenges can take more time, at the GM's discretion.)

Note that if the lock has a trap or alarm attached, you must make a separate Traps roll to circumvent it.

**Modifiers:** Equipment modifiers (p. 345); -5 if working by touch (e.g., in total darkness). Inside information gives a bonus at GM's discretion. If the GM requires a DX-based roll (for instance, to work with a particularly delicate mechanism), modifiers for High Manual Dexterity (p. 59) or Ham-Fisted (p. 138) will apply.

**Machinist/TL**  
**IQ/Average**

**Default:** IQ-5 or Mechanic (any)-5.

This is the skill of making and modifying mechanical parts and tools. A successful skill roll lets you build parts from raw materials, manufacture tools for use with another skill (such as Armoury or Lockpicking), or modify any simple mechanical device not explicitly covered by another skill. The GM may require an inventor to make one or more Machinist rolls before attempting an Engineer roll to assemble a gadget.

Materials and component size vary significantly with tech level. A TL5 machinist works mainly with brass and steel components that can be seen with the naked eye; a TL10 machinist might work with carbon nanotubes.

**Modifiers:** Equipment modifiers (p. 345).

**Main-Gauche**  
see **Melee Weapon**, p. 208

**Makeup/TL**  
**IQ/Easy**

**Default:** IQ-4 or Disguise-2.

This is the skill of using theatrical makeup to enhance a performer's appearance. It is not just the ability to make someone look "pretty" – you can make yourself or others look older, younger, or of a different race or nationality. At TL6+, you can use prosthetics to further enhance the effect. However, you cannot make someone look taller or shorter than he actually is.
Market Analysis

IQ/Hard

Defaults: IQ-6, Economics-5, or Merchant-4.

This is the skill of predicting the short-term behavior of bond, stock, and currency markets—usually in order to make money! It is the main job skill of professional traders and speculators. Make a skill roll to determine current market trends. On a critical success, you also learn whether a trend will continue or reverse in the future. On a failure, you get no clear answer. On a critical failure, you guess wrong.

Modifiers: The Talents (p. 89) of Business Acumen and Mathematical Ability both provide a bonus.

Masonry

IQ/Easy

Default: IQ-4.

This is the ability to build things out of brick or stone.

Modifiers: Equipment modifiers (p. 345); -3 for simple engineering (erecting scaffolding, moving large blocks of stone, etc.) rather than masonry per se.

Mathematics/TL†

IQ/Hard

Defaults: IQ-6 and others.

This is the scientific study of quantities and magnitudes, and their relationships and attributes, through the use of numbers and symbols. You must specialize:

Applied: The branch of mathematics that interacts directly with the physical sciences and engineering, dealing with mathematical models of the behavior of physical systems. Defaults: Engineer (any)-5 or Physics-5.

Computer Science: The theoretical study of data structures and computation. Roll vs. skill to answer questions about what is possible with computers. This gives you no special ability to use computers! Default: Computer Programming-5.

Cryptography: The mathematical study of codes and ciphers. This gives you a theoretical understanding of encryption schemes, including how they change with TL and why some schemes are more effective than others. To create or break codes, use Cryptography skill (p. 186). Default: Cryptography-5.

Pure: Generic “academic” mathematics. Make a skill roll to answer any math-related question not covered by another specialty. Pure mathematics encompasses dozens of obscure subfields that will never affect the game. If you must be an expert in something like “non-selfadjoint operator algebras,” you may further note an optional specialty (p. 169).

Statistics: The science of assembling and analyzing data for the purpose of calculating probabilities, constructing models, and making forecasts. Roll vs. skill to determine the odds of a particular outcome, given sufficient data about similar situations in the past.

Surveying: The science of determining the area of a portion of the Earth’s surface, the lengths and directions of the bounding lines, and the contour of the surface. Make a skill roll to determine the dimensions of any area you can see. More complex determinations require specialized equipment. Defaults: Cartography-3 or Navigation (any)-4.

These specialties default to one another at -5.

Mechanic/TL†

IQ/Average

Defaults: IQ-5, Engineer (same)-4, or Machinist-5.

This is the ability to diagnose and fix ordinary mechanical problems. A successful skill roll will let you find or repair one problem.

You must pick a specialty from within one of these four categories:

Machine Type: Any one class of nonvehicular machine. Types include Micromachines (miniature machinery, invisible to the naked eye; TL9+), Nanomachines (molecular-scale machinery; TL10+), and Robotics (robots and automated factories; TL7+).

Motive System Type: Any one type of propulsion system, regardless of vehicle type. Types include Legged, Tracked, Wheeled, Rockets, and Reactionless Thrusters.

Power Plant Type: Any one type of power plant, no matter what it powers. Types include Clockwork, Steam Engine, Gasoline Engine, Diesel Engine, Gas Turbine, Fuel Cell, Fission Reactor, Fusion Reactor, and Antimatter Reactor.

Vehicle Type: The controls, hull, motive system, power plant, transmission, and even the paint job of one specific type of vehicle listed under a vehicle-operation skill such as Driving (p. 188), Piloting (p. 214), or Submarine (p. 223).

Mechanic specialties default to one another at -4, although the GM may modify this for particularly close or distant specialties. The systems covered by each specialty vary by TL. For instance, Mechanic (Light Airplane) covers single-engine biplanes at early TL6, small private jets at TL7, and so forth.

Familiarity is very important here. For instance, Mechanic/TL7 (Light Airplane) covers both propeller-powered seaplanes and small private jets, but going from one to the other gives you -2 for an unfamiliar item (prop-powered plane to jet) and -2 for an unfamiliar implementation (seaplane to regular plane), for a net -4 to skill until you familiarize yourself with all the differences.

Modifiers: -2 for an unfamiliar item within your specialty (e.g., a barge when you’re used to battleships), or for an unfamiliar implementation (e.g., a powerboat engine when you’re used to automobile engines); equipment modifiers (p. 345).

Meditation

Will/Hard

Defaults: Will-6 or Autohypnosis-4.

This is the ability to calm the emotions, control the mind, and relax the body. To use this skill, you must concentrate for (20 - skill) seconds, minimum one second, and then roll vs. skill. On a success, you enter a trance-like state, which you can maintain for hours.

A meditative trance is required for certain rituals and is a common preparation for prayer. In addition, the GM may permit you to meditate on a particular moral dilemma. On a successful Meditation roll, the GM will “enlighten” you, providing a hint as to which course of action “feels” right.
**Melee Weapon**

**Defaults:** Special.

This is not one skill, but an entire collection of skills – one per class of closely related melee weapons. Melee Weapon skills are based on DX, and default to DX-4 if Easy, DX-5 if Average, or DX-6 if Hard. See specific skill descriptions for other defaults.

Make a Melee Weapon roll to hit an opponent in combat. You may also use these skills to parry. Your Parry defense is (skill/2) + 3, rounded down.

Melee weapons fall into broad categories on the basis of overall balance and function. When a rule refers to one of these categories, it applies to all weapons in that category and all Melee Weapon skills used to wield them. For instance, “fencing weapons” means “all weapons used with any of Main-Gauche, Rapier, Saber, or Sossmall skill.”

**Fencing Weapons**

*Fencing* weapons are light, one-handed weapons, usually hilted blades, optimized for parrying. If you have a fencing weapon, you get an improved retreatng bonus when you parry – see Retreat (p. 377). Furthermore, you have halfl the usual penalty for parrying more than once with the same hand (see Parrying, p. 376).

Note that fencing weapons are light and likely to break when used to parry a heavier weapon. They cannot parry flail weapons at all! You must be relatively mobile to capitalize on their speed and maneuverability: all attacks and parries take a penalty equal to your encumbrance level (e.g., Heavy encumbrance gives -3 to hit or to parry).

The skills in this category default to one another at -3. They also default to sword skills, as noted below.

**Main-Gauche (DX/Average):** Any weapon normally wielded with Knife or Jitte/Sai skill (see below), used in the “off” hand. With this skill, you may ignore the penalty for using the “off” hand on defense (attacks are still at -4) and the -1 for parrying with a knife. To wield a knife as a primary weapon, use Knife skill. **Defaults:** Jitte/Sai-4 or Knife-4.

**Rapier (DX/Average):** Any long (over 1 yard), light thrusting sword. Default: Broadsword-4.

**Saber (DX/Average):** Any light cut-and-thrust sword. Note that cavalry sabers are quite heavy, and use Broadsword instead. **Defaults:** Broadsword-4 or Shortsword-4.

**Smallsword (DX/Average):** Any short (up to 1 yard), light thrusting sword or one-handed short staff (such as the sticks used in the martial arts *arnis, escrima, and kali*). Default: Shortsword-4.

**Flails**

A **flail** is any flexible, unbalanced weapon with its mass concentrated in the head. Such a weapon cannot parry if you have already attacked with it on your turn. Because flails tend to wrap around the target’s shield or weapon, attempts to block them are at -2 and attempts to parry them are at -4. Fencing weapons and knives cannot parry them at all! An unarmed fighter can parry a flail, but at -4 in addition to any penalty for parrying unarmed.

The skills in this category default to one another at -3.

**Flail (DX/Hard):** Any one-handed flail, such as a morningstar or nunchaku. Default: Axe/Mace-4.

**Two-Handed Flail (DX/Hard):** Any two-handed flail. **Defaults:** Kusari-4 or Two-Handed Axe/Mace-4.

**Impact Weapons**

An **impact** weapon is any rigid, unbalanced weapon with most of its mass concentrated in the head. Such a weapon cannot parry if you have already attacked with it on your turn.

The skills in this category default to one another at -3.

**Axe/Mace (DX/Average):** Any short- or medium-length, one-handed impact weapon, such as an axe, hatchet, knobbled club, or pick. **Defaults:** Flail-4.

**Two-Handed Axe/Mace (DX/Average):** Any long, two-handed impact weapon, such as a baseball bat, battleaxe, maul, or warhammer. **Defaults:** Polearm-4 or Two-Handed Flail-4.

**Pole Weapons**

**Pole** weapons are long (usually wooden) shafts, often adorned with striking heads. All require two hands.

**Spear (DX/Average):** Any long, balanced pole weapon with a thrusting point, including spears, javelins, tridents, and fixed bayonets. **Defaults:** Polearm-4 or Staff-2.

**Staff (DX/Average):** Any long, balanced pole without a striking head. This skill makes good use of the staff’s extensive parrying surface when defending, giving +2 to your Parry score. **Defaults:** Polearm-4 or Spear-2.

**Swords**

A sword is a rigid, hilted blade with a thrusting point, cutting edge, or both. All swords are balanced, and can attack and parry without becoming unready.

**Broadsword (DX/Average):** Any balanced, 2- to 4-foot blade wielded in one hand – broadsword, cavalry saber, scimitar, etc. This skill also covers any stick or club of similar size and balance to these blades, as well as bastard swords, katanas, and longswords used one-handed. **Defaults:** Force Sword-4, Rapier-4, Saber-4, Shortsword-2, or Two-Handed Sword-4.

**Force Sword (DX/Average):** Any sword with a “blade” made of energy instead of matter. This generally refers to an ultra-tech weapon that projects energy from a powered hilt, but extends to similar effects produced using magic or psionics. **Defaults:** any sword skill at -3.

**Jitte/Sai (DX/Average):** Any tined, one-handed sword designed to catch rigid weapons. Jitte/Sai weapons are built for disarming, and give +2 in the Quick Contest to disarm an opponent (see Knocking a Weapon Away, p. 401). Furthermore, if you attempt to disarm on the turn immediately after you parry your opponent’s weapon, you need not roll to hit his weapon first. Just state that you are attempting to disarm and move directly to the Quick Contest! This still counts as an attack. **Defaults:** Force Sword-4, Main-Gauche-4, or Shortsword-3.

**Knife (DX/Easy):** Any rigid, hilted blade less than one foot long, from a pocketknife to a bowie knife. A knife
has a very small parrying surface, which gives you -1 to your Parry score. Defaults: Force Sword-3, Main-Gauche-3, or Shortsword-3.

Shortsword (DX/Average): Any balanced, one-handed weapon 1-2 feet in length – including the shortsword and any club of comparable size and balance (e.g., a police baton). Defaults: Broadsword-2, Force Sword-4, Jitte/Sai-3, Knife-4, Saber-4, Smallsword-4, or Tonfa-3.

Two-Handed Sword (DX/Average): Any balanced, two-handed blade over 4 feet in length: greatswords, zweihanders, etc. This skill also covers quarterstaffs wielded like swords, as well as bastard swords, katanas, and longswords used two-handed. Defaults: Broadsword-4 or Force Sword-4.

Whips

A whip is a flexible weapon made from a length of chain, leather, wire, etc. A whip can be up to seven yards long – but note that a whip two yards or more in length cannot strike at one yard or closer, and is slow to ready after an attack. A whip tends to wind around its target, making it an excellent disarming and entangling weapon. However, a whip’s lack of rigidity makes it a poor parrying weapon. For details, see Special Melee Weapon Rules (p. 404).

The skills in this category default to one another at -3.

Force Whip (DX/Average): Any whip made of pure energy instead of matter. These are usually ultra-tech devices that project energy from a powered hilt, but magical or psi-tech versions are possible. Most force whips can lash the target but do not ensnare him.


Monowire Whip (DX/Hard): A whip made of a weighted length of monomolecular wire attached to a handle.

Whip (DX/Average): Any ordinary whip.

Other Weapons

Some hand weapons defy easy classification. For instance:

Tonfa (DX/Average): A tonfa is a baton with a protruding handle on one side. It can function as a baton, but you can also grasp it by the handle and hold it against the forearm in close combat. This grip lets you jab for thrust+1 crushing damage and parry close-combat attacks at (skill/2) + 3, rounded down. Roll vs. skill to change grips. On a success, the grip change is a free action. On a failure, you must spend the entire turn changing grips. A critical failure means you throw your weapon away! Default: Shortsword-3.

Mental Strength

Will/Easy

Defaults: None.

Prerequisites: Trained By A Master or Weapon Master*. * At the GM’s option, a mage or psi may also learn this skill.

You can actively focus your mind to resist mental attacks. This skill replaces Will when you resist magic spells, psi powers, Hypnotism, Invisibility Art, KIai, and similar abilities. Mental Strength does not replace most normal Will rolls. Furthermore, it does not work if you are stunned, asleep, or unconscious – for that, buy the Mind Shield advantage (p. 70).

Merchant

IQ/Average

Defaults: IQ-5, Finance-6, or Market Analysis-4.

This is the skill of buying, selling, and trading retail and wholesale goods. It involves bargaining, salesmanship, and an understanding of trade practices. It covers all types of merchandise, but many merchants have an optional specialty (p. 169) in a single class of goods.

Make a skill roll to judge the value of any piece of common goods, find out where any commodity is bought and sold, find the local fair market value of any commodity, etc.

When two merchants haggle, the GM may settle it with a Quick Contest. The winner adds or subtracts 10% of fair value, depending on whether he was trying to sell or buy.

If you have this skill at any level, you get +1 on reaction rolls when buying or selling. If you have this skill at level 20 or better, you get +2.

Modifiers: -3 for Gullibility (p. 137); -3 for Low Empathy (p. 142); -1 to -4 for Shyness (p. 154), -3 for illegal goods, unless you have Streetwise at 12+ or specialize in such goods; -2 in an unfamiliar area, until you have had time to familiarize yourself with local market conditions; Cultural Familiarity modifiers (p. 23). These last two modifiers “stack,” and frequently occur together.

Metallurgy/TL†

IQ/Hard

Defaults: Chemistry-5, Jeweler-8, or Smith (any)-8.

This is the study of metals and their properties. A successful roll lets you identify metals or alloys, or solve a problem concerning metals, their use, mining, or refining.

Meteorology/TL†

IQ/Average

Defaults: IQ-5.

This is the study of the weather, and the ability to predict it. It includes familiarity with technological aids such as barometers and satellite maps, but you can still function without your instruments. (If you can’t, you’re a meter-reader; not a meteorologist!)

When you wish to predict the weather, the GM rolls against your skill in secret. On a success, he tells the truth; on a failure, he answers randomly, or lies. Each skill roll predicts the weather for one day. If one day’s roll fails, subsequent ones can’t succeed. For instance, a three-day forecast would require three skill rolls: the first for tomorrow, the second for the next day, and the third for the day after that.

A successful roll also allows you to deduce what sort of general climate to expect when you visit a new area. At TL4 or less, this skill is called Weather Sense; and you get +2 to skill in your home area. At TL5 and up, Meteorology is a scientific skill, and you must specialize by planet type; see Planet Types (p. 180) for details.

Modifiers: Time is a major factor! There is no penalty to predict tomorrow’s weather, but you have -1 for 2 days, -2 for 3 days, -4 for 4 days, -6 for 5 days, and an additional -2 per day for each further day. Instrumentation becomes useful with the development of the barometer at TL4, after which equipment modifiers (p. 345) apply. You must know this skill at better than default to claim bonuses for good equipment.
Mimicry†

IQ/Hard

Defaults: IQ-6 and others.

This is the ability to imitate voices. The Voice advantage (p. 97) gives +2 to skill. You must specialize:

Animal Sounds: Lets you emulate a lion's roar, a wolf's howl, a frog's croak, etc. You can only imitate animals that have distinctive sounds. Make a skill roll to attract animals of the type mimicked – or predators that normally hunt those animals – if any are nearby. To fool people, you must win a Quick Contest of Mimicry vs. the listeners' Naturalist-3 or Perception-6. Default: Naturalist-6.

Bird Calls: Allows you to reproduce the whistles, chirps, and other sounds made by birds. Otherwise, this works as Animal Sounds. Default: Naturalist-6.

Speech: Enables you to imitate vocal sounds. This does not allow you to converse in a foreign language, but if you have heard it, you can reproduce the sound of it. If you are trying to mimic a specific person, roll at -3. Treat this roll as a Quick Contest vs. the IQ of anyone who knows the person mimicked well. Default: Acting-6 or Linguistics-4.

Animal Sounds and Bird Calls default to one another at -6. There is no default between these specialties and Speech.

Note that if you have the Mimicry advantage (p. 68), there is no need to learn this skill!

Mind Block

Will/Average

Defaults: Will-5 or Meditation-5.

This ability allows you to establish a mental block against psionic or magical attempts to eavesdrop on your thoughts and emotions. The techniques involved are wholly mundane – for instance, doing complicated mathematical calculations, or repeating poetry over and over again. With sufficient training, anyone can learn this skill.

To maintain a block, you must make a Mind Block roll once per minute. You must roll every second in combat or other stressful situations.

If you succeed, anyone who reads your mind must win a Quick Contest of his mind-reading ability vs. your Mind Block skill in order to get useful information. Otherwise, he gets nothing but poetry, multiplication tables, etc. However, if you ever critically fail a Mind Block roll, you thought about precisely what the mind reader wanted to know – in detail – right there in the forefront of your mind!

This skill only works against mind reading, not mind control or other mental attacks. If you have a supernatural mind shield, Mind Block acts as a last-ditch defense: only mental probes that pierce your magical or psionic defenses and contact your mind will encounter the block.

Modifiers: +2 if you do nothing but concentrate on blocking; -3 if you are mentally or physically stunned; -2 or more to hide emotions rather than thoughts, depending on how strong the GM rules your emotions are – it's hard to block your emotions while sneaking up on your most hated enemy!

Monowire Whip

see Melee Weapon, p. 208

Mount

DX/Average

Default: DX-5.

This is the trained ability to serve as a mount for a rider. If your Mount skill exceeds your rider's Riding level, he may use the average of the two skills (round up) whenever he must make a Riding roll. If you have any points in this skill, your rider gets a minimum +1 to skill. To throw an unwelcome rider, win Quick Contest of Mount vs. his Riding skill.

Musical Composition

IQ/Hard

Defaults: Musical Instrument-2, or to Poetry-2 for song.

This is the ability to compose a piece of music. A successful skill roll means the piece is a pleasant listening experience.

To compose for an ensemble or band without a conductor, you must have a skill level of IQ with at least one instrument in the composition and a skill level of IQ-2 with the rest. Roll at -1 per “instrument group” after the first used in the piece; e.g., a jazz composition for a saxophone section, drums, and bass would require a roll at -2.

To compose for an orchestra or band with a conductor requires Group Performance (Conducting) skill (p. 198) at IQ level. Roll at -1 per general class of instruments after the first used in the piece. Classes include brass, percussion, strings, and woodwinds. Treat choir, harp, organ, or piano as its own class.

This skill includes the ability to read, write, and transcribe music in your culture's notation system (if any). Treat different systems – and different musical traditions – as familiarities (see Familiarity, p. 169).

Musical Influence

IQ/Very Hard

Defaults: None.

Prerequisites: Musical Ability I and either Musical Instrument or Singing at 12+.

This cinematic skill allows you to influence the emotions of others by playing a musical instrument or singing. In some settings, this is a magical or psionic talent, or a special form of hypnosis, and works with any instrument, as well as with voice. In other settings, this skill is associated with a specific type of magical or ultra-tech instrument.

To attempt Musical Influence, you must first get your audience to sit and listen to your performance. You must also make a successful Musical Instrument or Singing roll. You may then roll against your Musical Influence skill. On a success, you can adjust the reaction roll of your audience – to you or to anyone present – up or down by an amount equal to your margin of success, to a maximum of +3 (+4 for critical success).

If you have only a few seconds, or if the audience is not paying full attention to your performance, you may adjust reaction rolls by ±1 at most, regardless of your margin of success.

Listeners who do not wish to be influenced may resist with Will. Hard of Hearing (p. 138) gives +4 to resist, and those with Deafness (p. 129) are completely immune. However, some
science-fiction devices generate vibrations that affect the body, in which case a listener's sense of hearing is irrelevant.

It is up to the GM to determine whether this skill works on animals as well as sapient beings. In classic fantasy, it just might!

**Musical Instrument**†

*Defaults: Special.*

This is the ability to play a musical instrument. With a successful skill roll, you give a competent performance. You must specialize in a particular instrument. Defaults between specialties range from -3 for similar instruments to "no default" for utterly unrelated ones, such as Musical Instrument (Drums) and Musical Instrument (Harp).

This skill includes the ability to read music in your culture's notation system (if any). Treat different systems as familiarities (see *Familiarity*, p. 169).

**Naturalist**†

*Defaults: IQ-6 or Biology-3.*

This skill – crucial for fantasy druids and rangers – represents practical (as opposed to scientific) knowledge of nature in its many forms. It includes just enough Biology to tell dangerous plants and animals from benign ones; just enough Geology to locate a cave to shelter in; and just enough Meteorology to know when to take shelter. Roll vs. skill to do any of these things.

In settings where it is possible to visit other worlds, you must specialize by planet. The specialties for planets of the same type (see *Planet Types*, p. 180) default to one another at -4. Any larger difference results in no default.

**Navigation/TL**†

*Defaults: Special.*

This is the ability to find your position through careful observation of your surroundings and the use of instrumentation. A successful roll tells you where you are or lets you plot a course.

You must specialize:

- **Sea:** Navigation by the stars and ocean currents. *Modifiers:* +3 if you have Absolute Direction (p. 34), or a high-tech global positioning system or inertial compass; -5 (and no use of Astronomy default) if you lack high-tech aids, the weather is bad, and the stars are hidden. *Defaults:* Astronomy-5 or Seamanship-5.
- **Land:** Navigation using landmarks and the stars; also called “orienteering.” *Modifiers:* +3 if you have Absolute Direction or a high-tech substitute. *Defaults:* IQ-5, Cartography-4, or Mathematics (Surveying)-4.
- **Space:** Navigating through ordinary interplanetary and interstellar space, usually at less than the speed of light (but some science-fiction "warp drives" let you travel at faster-than-light speeds in normal space). *Modifiers:* +2 for 3D Spatial Sense (p. 34). *Defaults:* Astronomy-4 or Mathematics (Applied)-4.
- **Hyperspace:** Also called "astrogation." Similar to Navigation (Space), but used when traveling through "jump space" or "hyperspace." In settings with multiple faster-than-light drive technologies, there may be one Navigation specialty per drive type. *Modifiers* are as for Navigation (Space). *Defaults:* Astronomy-4 or Mathematics (Applied)-4.
- **Planet Types,** see *Planet Types.*, p. 180

Air, Land, and Sea default to one another at -2. Space and Hyperspace default to one another at -5. There are no defaults between these two groups.

*Modifiers:* -1 to -10 for being in an unfamiliar area (GM’s discretion, but an unfamiliar world, star system, etc. should give at least -5); equipment modifiers (p. 345).

**NBC Suit/TL**

*see Environment Suit, p. 192*

**Net**

*Default: Cloak-5.*

This is the ability to use a net as a thrown or melee weapon. For detailed net rules, see *Special Ranged Weapons* (p. 410).

**Observation**

*Defaults: Perception-5 or Shadowing-5.*

This is the talent of observing dangerous or “interesting” situations without letting others know that you are watching. Use this skill to monitor a location, a group of people, or your immediate surroundings for concealed or tactically significant details. This is not the same as gathering clues or making a hands-on search (use Forensics and Search, respectively) – you always use Observation from a distance.

A successful skill roll lets you gather information that is not specifically hidden. For instance, you could case a bank for obvious cameras before a robbery, learn the schedule of sentries, estimate the size of a crowd, or gauge the strength of troops moving in the open. The GM may require an Intelligence Analysis roll to interpret what you observe.

To spot deliberately hidden details – e.g., someone trying to sneak up on you, an armed man hiding in the crowd, or a concealed machine-gun nest – you must win a Quick Contest of Observation skill vs. the Stealth, Shadowing, or Camouflage skill (as appropriate) of the other party. The GM should roll the Contest in secret, and should not say, “You don’t see the machine gun nest concealed in the bushes.”

If your attempt fails, you get no details on an obvious item, or fail to spot a hidden one. On a critical failure, someone spots you and reacts poorly to the attention . . .

*Modifiers:* Acute Senses (p. 35), as appropriate; modifiers for cover, darkness, or size; -1 to -10 if the target is concealed by high-tech camouflage or “stealth” technology; +1 to +10 if you possess suitable surveillance devices (a thermograph to spot a concealed sniper; binoculars to observe troop movements, etc.) and succeed at the skill roll to operate them.
Occultism

IQ/Average

Default: IQ-5.

This is the study of the mysterious and the supernatural. An occultist is an expert on ancient rituals, hauntings, mysticism, primitive magical beliefs, psychic phenomena, etc. Note that an occultist does not have to believe in the material he studies!

In worlds where everyone knows that paranormal powers exist, Occultism covers lore about these powers and their users. A good roll might provide insights into phenomena that aren’t related to known powers. However, Occultism provides no details on how talented individuals invoke their powers. For instance, a fantasy occultist would know what magic can accomplish, and could provide advice on slaying demons, but without Thaumatology skill (p. 225), he could not explain the gestures, words, and symbols used by wizards.

In campaigns where many supernatural forces coexist, the GM may require occultists to specialize in such fields as Demonology (the study of demons, possession, and pacts), Pneumatology (the study of spirits), and Vampirology (the study of vampires).

Packing

IQ/Average

Default: IQ-5 or Animal Handling (Equines)-5.

This is the ability to get loads on and off of pack animals quickly and efficiently. It also lets you get the best performance from pack animals on the road, judge such beasts before purchase, and select the best route for a pack train. If the beasts are ornery or badly trained (GM’s judgment), you must make a successful Animal Handling roll before you can attempt a Packing roll. A caravan without at least one master packer (Packing at 15+) moves at 80% its normal speed.

Paleontology/TL†

IQ/Hard

Default: Biology-4 and others.

This is the science of fossil study. Make a skill roll to recognize fossils or to deduce an organism’s habitat, structure, etc. from fossil evidence. A successful roll with equipment modifiers (p. 345) for lab facilities – identifies the approximate age of a fossil.

You must specialize:

Micropaleontology: The study of fossils too small to be seen with the naked eye. This skill requires a lab.

Paleoanthropology: The study of human fossils and tools, and the relation of primitive tribes to their habitats. Also defaults to Anthropology-2.

Paleobotany: The study of vegetable fossils.

Paleozoology: The study of prehistoric animals from fossilized bones, food, feces, footprints, etc.

These specialties default to one another at -2.

Note that an occultist does not have to believe in the material he studies!

Panhandling

IQ/Easy

Default: IQ-4, Fast Talk-2, or Public Speaking-3.

This is the art of effective begging: who to approach, how to approach them, and how to avoid legal entanglements. Roll once per hour of begging.

On a success, you net $2.00 times your margin of success. On a critical success, you get some sort of unexpected bonus – perhaps someone buys you dinner or gives you a useful or saleable item (e.g., a raincoat or a new pair of shoes). On a failure, you receive nothing. On a critical failure, you are assaulted or have a run-in with the law.

Modifiers: Any bonus for Charisma (p. 41); +3 for Pritable (p. 22); -1 to -4 for Shyness (p. 154). You may, if you wish, apply the opposite of your usual appearance modifier – that is, a penalty for being attractive or a bonus for being unattractive – unless you are Horrific or Monstrous (p. 21). The GM may assign a bonus if there is a lot of foot traffic in the area, or a penalty if there is no one around.

Parachuting/TL

DX/Easy

Default: DX-4.

This is the ability to survive a parachute jump. Roll once per jump. Failure could mean anything from drifting off course to panic that makes you drop your gear (GM’s option). A critical failure means the chute did not open or was fatally fouled (see Falling, p. 431). For a jump under bad conditions, make a second roll on landing – for instance, to survive an "ankle-breaker" landing without injury, or to dodge trees on the way down. Make an IQ-based roll to pack a parachute.

Modifiers: -2 if your body weight plus encumbrance exceeds your Basic Lift×10.

Parry Missile Weapons

DX/Hard

Default: None.

This skill lets you parry thrown or missile weapons with a ready melee weapon. If you are wearing wristbands or gloves with DR 2+, or have at least this much natural DR, you can also parry with your hands. Your Parry score is (skill/2) + 3, rounded down – but based on Parry Missile Weapons skill, not your Melee Weapon or unarmed combat skill.

Modifiers (to Parry): +4 to parry large thrown weapons (e.g., axes and spears); +2 to parry small thrown weapons (e.g., knives and shuriken); no modifier to parry arrows; -2 to parry smaller low-tech missiles (e.g., crossbow bolts and blowpipe darts). You cannot parry bullets or similar high-tech projectiles! (Exception: Enhanced Time Sense allows you to parry bullets at -5.)

Performance

IQ/Average

Default: IQ-5, Acting-2, or Public Speaking-2.
This is the ability to act on the stage or screen. It is different from Acting in that you are trying to impress and entertain people – not deceive them. If you studied this skill formally, it includes the knowledge expected of a professional actor from your culture and tech level (stage directions, actor-agent-producer relations, etc.).

Modifiers: +2 for Voice (p. 97); -1 to -4 for Shyness (p. 154); -2 for Stuttering (p. 157).

**Persuade**  
*see Enthrallment*, p. 191

**Pharmacy/TL†**  
IQ/Average

Default: IQ-6 and others.

This is the skill of preparing medicines to treat illness. (To work with noxious drugs, use Poisons skill, p. 214.) You must specialize:

**Herbal:** The ability to make and administer remedies prepared from plants. Make a Naturalist roll to locate herbs. Before TL5, this is the only specialty available. It replaces Physician (below) and is frequently used in conjunction with Esoteric Medicine (p. 192). At TL5+, this specialty remains available, but Pharmacy Synthetic is much more common. Prerequisite: Naturalist. Default: Biology-5, Herb Lore-5, or Naturalist-5.

**Synthetic:** The skill of preparing drugs under "laboratory" conditions. To prescribe drugs, use Physician skill. This specialty is only available at TL5+. Default: Chemistry-5 or Physician-5.

**Philosophy†**  
IQ/Average

Default: IQ-6.

This is the study of a system of principles to live by. You must specialize in a particular school of philosophy; e.g., Confucianism, Marxism, or Stoicism. (If you study a religious philosophy, buy Theology skill, p. 226.) When confronted with someone who subscribes to this philosophy, a successful Philosophy roll might provide insights into his behavior.

You do not necessarily believe in the ideals of the philosophy you study. If you do, you may ask the GM to make a secret roll against your Philosophy skill when you are faced with a moral dilemma. On a success, the GM will "enlighten" you and provide a hint as to which course of action "feels" right given your beliefs.

**Photography/TL**  
IQ/Average

Default: IQ-5 or Electronics Operation (Media)-5.

This is the ability to use a camera competently, use a darkroom (TL5+) or digital imaging software (TL8+), etc., and to produce recognizable and attractive photos. You may roll at default to use a camera, but not to develop film or prints in a darkroom.

Modifiers: -3 for an unfamiliar camera; -3 for a motion-picture camera.

**Physician/TL**  
IQ/Average

Default: IQ-7, First Aid-11, or Veterinary-5.

This is the ability to aid the sick and the injured, prescribe drugs and care, etc. Make a skill roll to hasten natural recovery from injury (see Recovery, p. 423), and whenever the GM requires a roll to test general medical competence or knowledge. Apply physiology modifiers (p. 181) if your patient is of a different species from you.

At TL4 and below, this skill does not exist in most game worlds. Instead, use Esoteric Medicine (p. 192), Pharmacy (Herbal) (above), or both. At TL5+, medical knowledge is divided between Pharmacy (Synthetic) and Physician. A physician knows a great deal about drugs. He can identify most drugs fairly easily (at -5 without laboratory facilities, but +3 if he takes the risk of smelling/tasting the substance), but he cannot formulate them unless he also learns Pharmacy.

**Physics/TL**  
IQ/Average

Default: IQ-6.

Prerequisite: Mathematics (Applied) at TL+.

This is the science dealing with the properties and interactions of matter and energy. Beyond the basics (such as the behavior of moving bodies), a physicist's knowledge includes whatever is understood about electricity, gravity, heat, light, magnetism, radiation, and sound at his tech level.

At TL6+, most physicists have an optional specialty (p. 169): acoustics, astrophysics, geophysics, nuclear physics, optics, particle physics, quantum physics, relativity, solid-state physics, etc. Some settings offer exotic options, such as hyperspace physics (the science of hyperspace and jump points), parachronic physics (the study of other realities and timelines), paraparaphysics (the physics of psi phenomena), probability physics (the study of probability manipulation), and temporal physics (the science of time travel).

**Physiology/TL†**  
IQ/Average

Default: IQ-6, Diagnosis-5, Physician-5, or Surgery-5.

This is the study of the human body and its function. A physiologist knows how bones, muscles, and organs work, and where they are located. In settings with multiple sapient species, you must specialize by race. Defaults between species (if any) are up to the GM.

**Pickpocket**  
DX/Average

Default: DX-6, Filch-5, or Sleight of Hand-4.

This is the ability to steal a purse, knife, etc., from someone's person – or to "plant" something on him. If your victim is aware someone may try to pick his pocket, or if he is generally wary, you must win a Quick Contest of Pickpocket vs. the higher of his Perception or Streetwise skill. To outwit a third party who is watching you and the victim, you must win a Quick Contest of Pickpocket vs. the watcher's Observation skill.

Modifiers: +5 if the victim is distracted; +10 if he is asleep or drunk; up to -5 for goods in an inner pocket; and up to -10 for a ring or similar jewelry.

**SKILLS**  
213
**Piloting/TL†**  

**Default:** IQ-6.

This is the ability to operate a specific type of aircraft or spacecraft. The default is to IQ, because it takes intelligence to figure out the controls in an emergency, but when you learn this skill, always base it on DX.

Roll against Piloting for takeoffs and landings, and in any hazardous situation. Failure by 1 indicates a rough job; failure by more indicates damage to the vehicle. A critical failure is a crash! If you have skill 15+, a critical failure requires an immediate second roll. Only if the second roll is a failure does a mishap occur. Otherwise, it was a “near thing,” averted by experience. Air combat requires frequent Piloting rolls as well.

Make an IQ-based Piloting roll for basic map reading or practical meteorology, or to recall aviation laws and regulations.

Remotely piloted vehicles (RPVs) use this skill if the pilot uses some form of telepresence to mimic actually being in the cockpit. Otherwise, make a DX-based roll against the appropriate skill for the task the RPV is performing (e.g., Forward Observer for a surveillance drone).

You must specialize:

**Aerospace:** Any vehicle capable of atmospheric flight to and from orbit.  
**Default:** High-Performance Airplane-2 or other Piloting at -4.

**Autogyro:** Any rotor-equipped aircraft that uses its rotors for lift but not thrust.  
**Default:** Helicopter-3, any Airplane specialty at -4, or other Piloting at -5.

**Contragravity:** Any aircraft that relies on ultra-tech or magical levitation.  
**Default:** Vertol-3 or other Piloting at -5.

**Flight Pack:** Any “strap-on” aircraft.  
**Default:** Vertol-4 or other Piloting at -5.

**Glider:** Any kind of unpowered, winged aircraft.  
**Default:** Light Airplane or Ultralight at -2, or other Piloting at -4.

**Heavy Airplane:** Any winged aircraft weighing over 10 tons and flying at 600 mph or slower.  
**Default:** High-Performance Airplane or Light Airplane at -2, or other Piloting at -4.

**Helicopter:** Any aircraft that uses rotors for both lift and thrust.  
**Default:** Autogyro-2, Vertol-4, or other Piloting at -5.

**High-Performance Airplane:** Any winged aircraft capable of flying faster than 600 mph.  
**Default:** Aerospace, Heavy Airplane, or Light Airplane at -2, or other Piloting at -4.

**High-Performance Spacecraft:** Any space vehicle capable of accelerations of 0.1G or more.  
**Default:** Aerospace-4 or Low-Performance Spacecraft-2.

**Light Airplane:** Any winged aircraft weighing 10 tons or less and flying at 600 mph or slower.  
**Default:** Glider, Heavy Airplane, High-Performance Airplane, or Ultralight at -2, or other Piloting at -4.

**Lighter-Than-Air:** Any kind of airship or balloon.  
**Default:** other Piloting at -5.

**Lightsail:** Any spacecraft that uses a lightsail, regardless of thrust.  
**Default:** Low-Performance Spacecraft-4.

**Low-G Wings:** Muscle-powered strap-on wings used in a low-gravity environment with an atmosphere.  
**Default:** other Flight Pack at -4.

**Low-Performance Spacecraft:** Any space vehicle that accelerates at less than 0.1G.  
**Default:** Aerospace-4 or High-Performance Spacecraft-2.

**Ultralight:** Any winged aircraft weighing 0.5 tons or less and flying at 200 mph or slower.  
**Default:** Glider or Light Airplane at -2, other Airplane specialties at -4, or other Piloting at -5.

**Vertol:** Any aircraft that flies by brute-force application of thrust rather than by using rotors or wings.  
**Default:** Contragravity-3, Helicopter-4, or other Piloting at -5.

**Modifiers:** +1 for 3D Spatial Sense (p. 34); +1 for Perfect Balance (p. 74); -2 for an unfamiliar vehicle within your specialty (e.g., a twin-engine plane when you are used to single-engine craft); -2 or more for unusually primitive or extremely complex controls; -4 or more for a plane in bad repair; -2 or more for bad flying conditions.

**Poetry**  

**Default:** IQ-5 or Writing-5.

This is the ability to compose “good” poetry of any type native to your culture, in any language you know. A successful roll lets you write one good poem in an appropriate amount of time (GM’s decision). A failed roll might mean that you couldn’t get inspired – or that your audience just didn’t care for your work (for whatever reason).

**Modifiers:** The time modifiers under Time Spent (p. 346) will often apply; Cultural Familiarity modifiers (p. 23); Language modifiers (p. 23).

**Poisons/TL**  

**Default:** IQ-6, Chemistry-5, Pharmacy (any)-3, or Physician-3.
This skill represents practical knowledge of poisons. A successful skill roll lets you (among other things) recognize a poison-bearing plant in the wild; extract the poison in a useful form; recognize a poison by its taste in food or drink; identify a poison by observing its effects (+3 if you are poisoned); know a proper antidote; or recognize or prepare the antidote from its sources. Each of these feats requires a separate roll.

Modifiers: Acute Taste and Smell (p. 35) gives a bonus to notice or recognize a poison by taste or by scent. Likewise, Discriminatory Smell and Discriminatory Taste (p. 49) give +4 to these tasks when working by smell or by taste, respectively.

Poolearn
see Melee Weapon, p. 208

Politics
IQ/Average

Defaults: IQ-5 or Diplomacy-5.

This is the ability to get into office and get along with other politicians. It has nothing to do with administration! You can only learn Politics in office or by working for someone in office. A successful skill roll will give you +2 on reactions from fellow politicians. The GM may opt to handle an election as a Quick Contest of Politics.

Modifiers: +2 for Voice (p. 97); -3 for Low Empathy (p. 142); -1 to -4 for Shyness (p. 154). In some jurisdictions, money is another important modifier . . .

Power Blow
Will/Hard

Defaults: None.
Prerequisites: Trained By A Master or Weapon Master.

This is the ability to draw on your inner strength to deliver a devastating blow in melee combat. Roll once per attack. Power Blow costs 1 FP per attempt, successful or not.

If successful, double your ST for damage purposes for the next attack only. This attack takes all normal modifiers, and must occur immediately after the Power Blow roll. If you know Power Blow at better than skill 20, you can triple your ST by accepting an extra -10 to the skill roll.

You can also use this skill in noncombat situations. For instance, you could use Power Blow to double or triple your ST momentarily in order to move a heavy object. Such feats cost 1 FP and require a skill roll, as described above.

Modifiers: -10 if used instantly, dropping to -5 after 1 turn of concentration, -4 after 2 turns, -3 after 4 turns, -2 after 8 turns, -1 after 16 turns, and no penalty after 32 turns.

Pressure Points
IQ/Hard

Defaults: None*.
Prerequisites: Trained By A Master or Weapon Master:
* May default to Esoteric Medicine-4 in a cinematic campaign.

This is the art of striking pressure points in order to disable an opponent. To use this ability, you must make a successful attack with Karate (or other appropriate combat skill; see below). This attack is at -2 in addition to any hit location modifier (see Hit Location, p. 398). If at least one point of damage penetrates the target’s DR, roll a Quick Contest of Pressure Points vs. the victim’s HT.

If you win, you temporarily disable your target. A limb is paralyzed and effectively crippled for 5d seconds. A hit to a torso pressure point interferes with the victim’s breathing, resulting in suffocation (see Suffocation, p. 436); he may roll against HT every second to recover. A hit to the face stuns the victim; he gets an IQ roll every second to recover. A blow to the skull blinds the victim for 2d seconds; see Blindness (p. 124). You can also use Pressure Points with Judo. Roll the Quick Contest described above after successfully applying a lock. This is in addition to any other effects of the lock.

The GM may permit warriors to learn specialties of this skill for use with crushing weapons. Examples include Pressure Points (Bow) for use with blunt arrows, Pressure Points (Shortsword) for use with a baton, and Pressure Points (Staff) for use with a staff.

Modifiers: Physiology modifiers (p. 181).

Pressure Secrets
IQ/Very Hard

Defaults: None.
Prerequisites: Trained By A Master and Pressure Points at 16+.

This skill represents knowledge of the most vulnerable vital points of the human body. It allows you to maim and kill by crushing and tearing vital organs and nerve clusters with deadly precision.

To use this ability, you must make a successful unarmed attack. This attack is at -2 in addition to any hit location modifier (see Hit Location, p. 398). If you hit, make a Pressure Secrets roll.

On a success, any damage that penetrates DR is doubled – or tripled if you targeted the vital organs. In effect, your hands and feet have become impaling weapons!

You can also use this ability with locks and similar grappling attacks. This represents knowledge of exactly where to apply pressure to tear or sprain joints and ligaments. After applying the lock, make a Pressure Secrets roll. On a success, double the damage, shock, or harmful effects of the lock for that turn.

This skill is unrealistic and potentially unbalancing. The GM should carefully weigh its impact before allowing it, and may wish to make it very difficult for PCs to learn – or even restrict it to deadly NPC opponents.

Modifiers: Physiology modifiers (p. 181).

Professional Skill
DX or IQ/Average

Defaults: Special.

Many realistic job skills are more useful for making a living than for adventuring. Most such skills do not appear in this skill list – but you can still learn them if you want! Each is a separate Professional Skill. If your “adventuring” skills aren’t useful for earning money, a Professional Skill can help you earn a steady income. To qualify for most jobs, you will need the relevant Professional Skill at 12+ (unless you are supposed to be incompetent!).
Most professions encompass a body of knowledge. The associated Professional Skills are IQ/Average and default to IQ-5, because the smarter you are, the better you can recall and employ the techniques used at your job. Examples include air traffic controller, barber, brewer, cooper, distiller, dyer, florist, game designer, journalist, prostitute, tanner, vintner, and zookeeper.

A few professions – glassblower, tailor, weaver, etc. – focus more on precision than on recall. These Professional Skills are DX/Average and default to DX-5.

At the GM’s option, a given Professional Skill might also default to other skills. For instance, “Journalist” would logically default to Writing-3.

The skills associated with highly paid or respected professions often have prerequisites. For instance, “Air Traffic Controller” might require Electronics Operation (Sensors) skill. Like defaults, prerequisites are up to the GM.

You are free to create your own Professional Skills, subject to GM approval. They should be unique and well defined, not just a compilation of existing skills. For example:

**Bartender**

**IQ/Average**

**Defaults:** IQ-5 or Carousing-3.

This is the skill of maintaining a professional-quality bar and interacting with customers in a professional yet friendly way. A successful skill roll lets you mix drinks, recall local laws regarding alcohol, gauge the intoxication level of a customer, or calm an unruly drunk before the bouncer needs to get involved. At higher levels, this skill takes on an element of showmanship, allowing you to present drinks in unique and attractive ways, and to mix them with showy tricks and flourishes.

**Propaganda/TL**

**IQ/Average**

**Defaults:** IQ-5, Merchant-5, or Psychology-4.

This is the skill of indirect persuasion through the media. It is used for psychological warfare by intelligence and military organizations, and for advertising and marketing in the civilian world. Use familiarity (p. 169) to reflect the differences between these areas.

Propaganda works on groups, not individuals. The GM should set the effective Will of the target group based on its size, composition, and resistance to the desired outcome, and then use the Influence Rolls (p. 359) to determine the results. Success might inform the target audience or even alter its perceptions. Propaganda attempts nearly always take more time and exposure than ordinary Influence rolls, however; how much time is up to the GM.

**Prospecting/TL**

**IQ/Average**

**Defaults:** IQ-5 or Geology (any)-4.

This is the skill of finding valuable minerals. A successful Prospecting roll lets you locate minerals, judge good ore from a small sample (and gauge its commercial value), and find water by using an “eye for country,” as described for Survival skill (p. 223). This skill is “applied geology,” and requires on-site examination. Prospecting from a distance – using maps, instrument readings, and extrapolation – uses Geology skill instead.

**Modifiers:** Equipment modifiers (p. 345); -1 in a new area of a familiar type, or -2 or more in an unfamiliar type of area, until you have been there for at least a month.

**Psychology**

**IQ/Hard**

**Defaults:** IQ-6 or Sociology-4.

This is the skill of applied psychology, which may be learned by academic study or lengthy observation of human nature. Roll against skill to predict the general behavior of an individual or small group in a particular situation – especially a stressful situation.

In settings with multiple sapient species, you must specialize by race. Defaults between specialties are up to the GM.

If the GM desires extra detail, he may rule that Psychology is split into two specialties: Applied (described above) and Experimental (for scientists who run rats in mazes and so forth). Applied defaults to IQ-5, Acting-5, or Performance-2, or Politics-5.

**Push**

**DX/Hard**

**Defaults:** None.

**Prerequisite:** Trained By A Master.

This skill allows you to channel your chi in order to “gently” push away an adversary or cause him to lose his balance. Roll against Push skill to hit. This counts as a barehanded attack (see Shove, p. 372), and your target may attempt any legal active defense.

If you hit, use the higher of your ST or your Push skill as your effective ST. Roll swing damage for that ST, and double the result. For instance, if you had ST 10 and Push-15, you would roll swing damage for ST 15 (2d+1), and double it. This damage inflicts knockback (see Knockback, p. 378) but never actual physical injury.
Rapier
   see Melee Weapon, p. 208

Religious Ritual†
   IQ/Hard

   Defaults: Ritual Magic (same)-6 or Theology (same)-4.

   This is the ability to perform religious rites – masses, funerals, weddings, etc. – before a congregation. You must specialize by religion. This skill includes detailed knowledge of the ritual motions, prayers, and trappings of the faith, as well as the ability to capture and hold the attention of worshipers. For religions that practice sacrifice, Religious Ritual also covers familiarity with sacrificial tools and methods.

   To be a priest or holy man at TL1+, you must have both Religious Ritual and Theology skill (p. 226) for your religion. TL0 shamans need only learn Religious Ritual.

   In worlds where priests can perform miracles, each magical ritual or spell is a separate skill, but certain "mundane" religious rituals – such as sacrifice – can give bonuses to spell rolls. You must always make a successful Religious Ritual roll to claim such a bonus. In other settings, a priest's magic is only as good as his ritual. If this is the case, your roll to work magic is against the lower of Religious Ritual and your actual spell skill.

Research/TL
   IQ/Average

   Defaults: IQ-5 or Writing-3.
   Prerequisite: literacy in at least one language (see p. 24)*.
   * At TL8+, Computer Operation is also a prerequisite.

   This is the ability to do library and file research. Roll against skill to find a useful piece of data in an appropriate place of research . . . if the information is there to be found.

   At the GM's option, when researching material connected with a "book-learned" skill such as Forensics, Literature, or Physics, you may roll against that skill at -2 instead, if that would be better than your Research skill or default (but this is not a general default level).

   Modifiers: Language modifiers (p. 24), for research materials in a foreign tongue.

Riding†
   DX/Average

   Defaults: DX-5 or Animal Handling (same)-3.

   This is the ability to ride a particular kind of mount. Make a skill roll when you first try to mount a riding animal, and again each time something happens to frighten or challenge the creature (e.g., a jump).

   You must specialize by riding beast. Defaults between specialties vary from 0 to -10. For instance, if you have Riding (Horse), Riding (Mule) is essentially the same skill (no default penalty), Riding (Camel) would default at -3, Riding (Dolphin) at -6, and Riding (Dragon) at a whopping -10!

   Modifiers: +5 if the animal knows and likes you; +1 or more for a mount with the Mount skill (p. 210); -10 if the animal has not been trained for riding.
**Ritual Magic†**

**IQ/Very Hard**

*Default: Religious Ritual (same)-6.*

This skill gives an understanding of the intellectual and mystical processes involved in the rituals of a particular tradition of spirit invocation. Make a skill roll to determine the purpose of a ritual conducted in your presence, the type of entity being summoned, etc.

You *must* specialize by tradition; e.g., Voodoo or Witchcraft. Specialties default to one another at -5. The processes involved are comparable, but the specific rituals and spirits differ significantly.

In worlds with working ritual magic, Ritual Magic skill is the primary skill of sorcerers. All rituals of power default to it! See the appropriate worldbook for details.

This is the skill of invoking spirits to produce magical effects for nonreligious reasons. The equivalent skill for the more direct, flashy magic of fantasy is Thaumatology (p. 225); knowledge of religious rites associated with a tradition is Religious Ritual (p. 217).

**Running**

**HT/Average**

*Default: HT-5.*

This skill represents training in both sprints and long-distance running. Roll against the higher of Running or HT to avoid fatigue or injury due to running. When racing someone of equal Move on foot, roll a Quick Contest of Running skill to determine the winner.

Note that you must have legs and be capable of land movement to learn this skill.

**Saber**

see Melee Weapon, p. 208

**Savoir-Faire†**

**IQ/Easy**

*Defaults: IQ-4 and others.*

This is the skill of appropriate behavior in a subculture that has an established code of conduct – for instance, high society or the military. When dealing with that social group, a successful skill roll lets you interact without embarrassing yourself, detect pretenders to high standing, and so on. You may also substitute an Influence roll against Savoir-Faire for any reaction roll required in a social situation involving that subculture; see Influence Rolls (p. 359). Roll once per encounter.

You *must* specialize. Common specialties include:

**Dojo:** How to greet masters, wear weapons, and issue challenges at a karate *dojo*, kung fu *kwoon*, fencing *salle*, or similar academy of the martial arts. Recognized skill determines relative standing. In certain places and times, to flout tradition is to risk violent retribution! For competitive martial arts (only), this skill defaults to any relevant Games skill at -3.

**High Society:** The manners of those of "good" birth and breeding. Status determines relative standing. Roll against skill whenever you must impersonate someone more than three Status levels away from your own. If your Status is negative and you are trying to pass yourself off as someone of Status 1+, or vice versa, this roll is at -2.

**Mafia:** Proper conduct within a formal criminal organization. This includes such things as codes of silence and showing proper deference to "made men." These protocols often ape those of high society . . . but the penalties for misconduct are far more severe. Default: Streetwise-3.

**Military:** The customs, traditions, and regulations of military service. This also includes knowledge of the unwritten rules: what is acceptable even if not regulation, and what is forbidden although there is nothing in writing against it. Military Rank determines relative standing.

**Police:** As Savoir-Faire (Military), but for civilian police service. This gives knowledge of the social protocols for police officers; use Law (Police) for the legal protocols. Police Rank determines relative standing.

**Servant:** Knowledge of how to serve the upper class. Certain procedures are always done *just so* (the salad fork goes outside the dinner fork, the Duke is announced before the Earl, etc.), and certain attitudes in a servant are unacceptable.

Savoir-Faire (High Society) is the most common specialty, and you may list this as simply "Savoir-Faire" on your character sheet. Savoir Faire (High Society) and (Servant) default to one another at -2. There are no defaults between other types of Savoir-Faire.

**Modifiers:** Cultural Familiarity modifiers (p. 23). +2 if you are of higher standing than those you are trying to impress, or -2 if you are of lower standing ("standing" might mean Rank, Status, skill level, or something else). +2 if you seem to have important friends. -4 for Clueless (p. 126); -3 for Low Empathy (p. 142); -1 for Oblivious (p. 146); -1 to -4 for Shyness (p. 154).

**Scrounging**

**Per/Easy**

*Default: Perception-4.*
This is the ability to find, salvage, or improvise useful items that others can’t locate. Each attempt takes an hour: You do not necessarily steal your booty; you just locate it – somehow – and then acquire it by any means necessary. Note that if you find something that is “nailed down,” you must decide how to try to get it (which might require a roll on another skill).

Modifiers: As the GM sees fit, for the rarity of the item sought.

**Scuba/TL**

**IQ/Average**

Defaults: IQ-5 or Diving Suit-2.
Prerequisite: Swimming.

This is the ability to use self-contained underwater breathing apparatus (scuba). Roll when you first enter the water, and again every 30 minutes thereafter, to avoid inhaling water (treat as drowning; see Suffocation, p. 436). If you know this skill above default level, a successful roll also lets you locate it – somehow – and then acquire it by any means necessary. Note that if you find something that is “nailed down,” you must decide how to try to get it (which might require a roll on another skill).

Modifiers: -2 to -4 for unfamiliar scuba rigs; e.g., closed-circuit gear when you’re used to open-circuit.

**Seamanship/TL**

see Crewman, p. 185

**Search**

**Per/Average**

Defaults: Perception-5 or Criminology-5.

This is the ability to search people, baggage, and vehicles for items that aren’t in plain sight. The GM rolls once – in secret – per item of interest. For deliberately concealed items, this is a Quick Contest of your Search skill vs. the Holdout or Smuggling skill used to hide the item. If you fail, the GM simply says, “You found nothing.” (It defeats the purpose to say, “You don’t find the gun under his jacket.”)

If more than one person is searching, roll separately for each searcher. The GM should avoid unnecessary rolls. For instance, no human can get a sawed-off shotgun through a body search. Likewise, a knife or jewel simply cannot be found on a normally dressed person without an X-ray or skill search. In general, if the net bonus to the concealer’s Holdout roll is +3 or more, a skin search is required. If his Holdout is at -2 or worse for size, a skin search will automatically find the hidden item.

Modifiers: +1 for a “pat-down” of an unresisting person (takes one minute), +3 for a thorough “skin search” of a person’s hair and clothing (takes three minutes), or +5 for a complete search, including body cavities (takes five minutes). Bonuses for Acute Touch (p. 35) and Sensitive Touch (p. 83) apply to all hands-on searches. On a successful Electronics Operation (Security) roll, specialized sensors – metal detectors, X-ray machines, etc. – give from +1 to +5 to find items they can detect (a metal detector won’t help you find plastic explosives!).

**Sewing/TL**

**DX/Easy**

Default: DX-4.

This is the ability to work with fabric using the tools of your tech level. A successful skill roll lets you repair damaged clothing (or any other item made of cloth), modify garments (useful when you must wear another person’s clothing, perhaps to impersonate him), or create new clothing or costumes from suitable materials.

Make an IQ-based roll to design clothing, at +1 if you have Fashion Sense (p. 21).

Before TL7, someone knows this skill in almost every household. At TL7+, it is rare for anyone but a professional seamstress or tailor to know Sewing – most people work at default (at +4 for a simple task like reattaching a button) and discard items that they cannot mend.

Modifiers: Equipment modifiers (p. 345); modifiers for High Manual Dexterity (p. 59) or Ham-Fisted (p. 138).

**Sex Appeal**

**HT/Average**

Default: HT-3.

This is the ability to impress those who are attracted to members of your sex. It has as much to do with attitude as it does with looks. If you are not willing to “vamp” someone to get what you want, you won’t have this skill – or want it.

You may substitute an Influence roll against Sex Appeal for any reaction roll made by someone who is attracted to members of your sex; see Influence Rolls (p. 359).

Usually, you may make only one attempt per “target,” although the GM might allow another attempt after a few weeks.

Modifiers: +2 for Voice (p. 97); -3 for Low Empathy (p. 142); -1 for Oblivious (p. 146); -1 to -4 for Shyness (p. 154); -2 for Stuttering (p. 157). Apply any bonus for above-average appearance (p. 21) – or double the penalty for below-average appearance!

**Shadowing**

**IQ/Average**

Defaults: IQ-5, Observation-5, or Stealth-4 (on foot only).

This is the ability to follow another person through a crowd without being noticed. (In the wilderness, use Tracking and Stealth.) Roll a Quick Contest every 10 minutes: your Shadowing vs. the subject’s Vision roll. If you lose, you lost the subject; if you lose by more than 5, you were seen.

Once the subject is aware you are shadowing him, roll a Quick Contest every five minutes: your Shadowing skill vs. his Shadowing or Stealth skill. If he wins, he eludes you. If he loses by more than 5, he thinks he eluded you. If you critically fail, you lose him and follow the wrong person.

Following someone in a vehicle is harder than shadowing on foot. Use the same rules, but you roll at -2 (and may not use your Stealth default).

Modifiers: -3 if the subject knows you. Distinctive appearance gives a penalty – see Build (p. 18), Unnatural Features (p. 22), and specific disadvantages (e.g., Hunchback, p. 139) for details. If you belong to a visibly different race than most of the people around you, the penalty is up to the GM; it is never smaller in magnitude than the difference between your Size Modifier and that of those around you.
Shield†

**DX/Easy**

**Default:** DX-4.

This is the ability to use a shield, both to block and to attack. Your active defense with any kind of shield − your Block score − is \((\text{skill}/2) + 3\), rounded down. You must specialize:

**Shield:** Any shield held in place with straps. Such shields have the advantage that you can hold (but not wield) something in your shield hand, but the disadvantage of being slow to put on or take off. This is the most common specialty − list it as “Shield” on character sheets.

**Buckler:** Any kind of shield, usually a small one, held in the hand. A buckler occupies one hand completely, but you can ready it in only one turn and drop it as a free action.

**Force:** Any shield with a blocking “surface” formed from energy rather than matter.

Shield, Shield (Buckler), and Shield (Force) default to one another at -2.

Shiphandling/TL†

**IQ/Hard**

**Defaults:** IQ-6 and others.

**Prerequisites:** see below.

This is the ability to act as the master of a large vessel. It involves directing the crew in the tasks necessary to control the vehicle’s speed and direction. It also covers such duties as keeping the captain’s log and inspecting the crew. Someone with Shiphandling skill (at better than default!) should stand watch at all times when the vessel is underway. Roll vs. skill when encountering hazards or maneuvering for battle.

A failed roll when encountering hazards means the vessel is damaged. This might mean anything from scratched paint to crippling damage that requires extensive repairs.

A failed roll in battle means the vessel did not go exactly where intended. The details depend on the vessel, the tech level, and the GM’s judgment, but might include weapons being “masked” (unable to engage the enemy), a failed boarding attempt, or drifting out of formation with your fleet (which might deny you the benefits of area defenses, fire support, or tactical communications).

A critical failure under any circumstances means an appropriate disaster: running aground, colliding with another vessel, being dismasted, losing your screws or rudder, or simply giving an order that your crew disregards. Whether they then save your ship for you, or mutiny and flee, is up to the GM.

**Defaults:** Submariner-5 or Submarine (Large Sub)-5.

**Modifiers:** -2 to master an unfamiliar vessel (e.g., an aircraft carrier when you’re used to a battleship); -2 for an unfamiliar crew; -2 or more for a vehicle in bad repair.

Singing

**HT/Easy**

**Default:** HT-4.

This is the ability to sing in a pleasing fashion. A successful roll means the audience liked your song.

**Modifiers:** Language Modifiers (p. 24), if you are singing in a foreign language; -2 if the audience does not understand the language; +2 for Voice (p. 97); -2 for Stuttering (p. 157).

Skating

**HT/Hard**

**Default:** HT-6.

When you are moving on skates, this skill replaces Hiking skill (p. 200) for routine travel and Running skill (p. 218) for racing. The GM may also require DX-based skill rolls in combat or chases, or for hazardous maneuvers, conditions, or speeds. Under those circumstances, any failure indicates a fall, while critical failure results in 1d-2 damage to a randomly chosen limb.
**Skiing**  
**HT/ Hard**  
**Default: HT-6.**

This replaces Hiking skill (p. 200) when you are skiing cross-country and Running skill (p. 218) when you are racing. Roll once per day of routine travel. The GM may require much more frequent skill rolls – usually DX-based – in combat or chases, or for hazardous maneuvers, conditions, or speeds. In those situations, any failure indicates a fall, while critical failure means 1d damage to a randomly chosen limb.

**Sleight of Hand**  
**DX/ Hard**  
**Default: Filch-5.**

This is the ability to “palm” small objects, do coin and card tricks, etc. Make a skill roll to perform one piece of simple “stage magic.” A failed roll means you blew the trick.

When you use this skill to steal, you must win a Quick Contest of Sleight of Hand vs. the Vision roll or observation skill of potential witnesses to perform the theft unnoticed.

You can also use this skill to cheat at cards, dice, etc. A successful Sleight of Hand roll gives from +1 to +5 on your Gambling roll. Any failure causes you to be denounced as a cheat! In both cases, the exact results are up to the GM.

**Modifiers:** +3 if the light is dim; +3 if you have a confederate to distract attention; +5 if you have prepared in advance (cards up your sleeve, etc.); -3 if the person you want to fool knows Sleight of Hand himself; modifiers for High Manual Dexterity (p. 59) or Ham-Fisted (p. 138).

**Sling**  
**DX/ Hard**  
**Default: DX-6.**

This is the ability to use the sling or staff sling.

**Smallsword**  
*see Melee Weapon, p. 208*

**Smith/TL†**  
**IQ/ Average**

**Default: IQ-5 and others.**

This is the ability to work non-precious metals by hand. You must specialize:

- **Copper:** Copper itself and its alloys, including brass and bronze. Traditionally, a smith who worked with these metals was called a “brownsmith.” **Default: Jeweler-4.**
- **Iron:** The skill of being a blacksmith. Also covers steel, at tech levels where it exists.

**Lead and Tin:** Any of the softer, “white” metals, including alloys such as pewter. The traditional name for such a smith was “whitesmith.” **Default: Jeweler-4.**

These specialties default to one another at -4.

This skill is IQ-based, but ST is important, and some tools have a “Minimum ST,” just like weapons.

**Smuggling**  
**IQ/ Average**

**Default: IQ-5.**

This is the ability to conceal items in baggage and vehicles. You can also use it to hide an item in a room or a building. Roll against skill to hide an item from casual inspection. In an active search, the searchers must win a Quick Contest of Search vs. your Smuggling skill to find the item.

**Modifiers:** Equipment modifiers (p. 345) for specialized smuggling gear. The difference between the Size Modifier (p. 19) of the package, vehicle, or room in which you are hiding the item and that of the item itself; e.g., to hide a bottle of liquor (SM -5) in a family car (SM +3), you would roll at +8.

**Sociology**  
**IQ/ Hard**  
**Default: IQ-6, Anthropology-3, or Psychology-4.**

This is the study of societies and social relationships. A successful skill roll lets you judge how well a large group of people will work together; deduce the social pressures contributing to a crime wave, revolution, war, etc.; or predict the most probable outcome of dissimilar societies coming into contact.

**Soldier/TL**  
**IQ/ Average**  
**Default: IQ-5.**

This skill represents a combination of basic military training – the lessons taught at “boot camp” or its equivalent in your game world – and actual combat experience. Only those who have served in an army, militia, etc. are likely to know it.

The GM may require a Soldier roll whenever circumstances would test your battlefield discipline (knowing when to shoot, use concealment, take cover, etc.) or skill at practical field survival (e.g., keeping your feet dry and eating when you get the chance). Roll daily during prolonged military action. Failure means an inconvenience – perhaps a minor piece of equipment fails. Critical failure indicates a disaster: “friendly fire” incident, trench foot, etc.

Soldier includes basic lessons in many fields covered by other skills. For instance, a TL8 soldier learns to strip his rifle without learning Armoury (Small Arms), to use a radio without learning Electronics Operation (Comm), to dig a foxhole without learning Engineer (Combat), and so forth. In a situation where someone with one of those skills would roll at +4 or better for a routine task (see Task Difficulty, p. 345), the GM may let you roll against Soldier skill instead. You do not receive the bonus that someone with the full-fledged skill would get, but you do suffer any situational penalties.

Soldier can only substitute for skill rolls to do things that would be a believable part of basic training. This means the routine use of standard equipment by ordinary troops – not research, improvisation, or design, and never the operation of new or secret technologies! Soldier cannot replace weapon skills, either; you must buy all such skills separately.

**Example:** If someone with Electronics Operation (Comm) would be at +4 to call HQ on a standard-issue radio, you could do so with a successful Soldier roll. However, you could not use Soldier to fix a broken radio, use an enemy radio, or transmit coded signals.
**Spencer/TL**
see Crewman, p. 185

**Spear**
see Melee Weapon, p. 208

**Spear Thrower**

Defaults: DX-5 or Thrown Weapon (Spear)-4.

This is the ability to use the spear thrower; a long, flat stick with a notch or a loop at one end. It increases the force with which you can hurl a javelin or similar weapon. It takes one turn to position the spear in the thrower after both are in hand and ready.

Modifiers: -5 in tight quarters (less than two yards of overhead clearance).

**Speed-Reading**

Defaults: None.

This is the ability to read much faster than normal. Whenever time is of the essence (for instance, when reading the instructions on a parachute as you fall), multiply your reading speed by a factor of \(1 + \frac{\text{skill}}{10}\); e.g., Speed-Reading-12 would give a factor of 2.2. Make a skill roll to determine whether you retain what you have read.

On a failure, your recall is shaky. Every time you try to remember or use what you read, you must make an IQ roll at a penalty equal to your margin of failure. Roll at -5 if you have Eidetic Memory, or +10 for Photographic Memory. If this roll fails, you cannot recall the information; on a critical failure, you recall badly flawed information but believe it to be true! To eliminate this IQ roll, you must go back and reread the material slowly.

Modifiers: Language modifiers (p. 24).

**Sports**

Defaults: DX-5 and others.

This is the ability to play a particular sport well – perhaps well enough to earn a living. Each sport is a separate Sports skill. Most Sports skills are DX/Average and default to DX-5, but those that put a premium on strength (e.g., rugby) might default to ST-5. Some Sports skills might default to one another or to other skills as well.

Make an IQ-based roll to recall the basic rules of your sport. Detailed knowledge of the full rules governing leagues and tournaments – as would be expected of a coach or referee – is covered by the relevant Games skill (p. 197).

The GM may rule that certain Sports are useful in combat situations. For instance, Sports (Baseball) might let you use a bat to parry hurled rocks and grenades at \((\text{skill}/2) + 3\), Sports (Bullfighting) might give a Parry equal to \(\frac{\text{skill}}{2} + 3\) against a slam by a beast that uses a “running head butt,” and you might be able to roll against Sports (Rugby) to hit with a slam.

**Staff**

see Melee Weapon, p. 208

**Stage Combat**

Defaults: Combat Art or Sport-2, an actual combat skill-3, or Performance-3.

This skill allows you to perform a choreographed fight safely, yet in an entertaining manner. A critical failure indicates an injury: 1d-2 damage to a random location.

Modifiers: -4 for an unfamiliar weapon.

**Stealth**

Defaults: DX-5 or IQ-5.

This is the ability to hide and to move silently. A successful roll lets you conceal yourself anywhere except in a totally bare room, or move so quietly that nobody will hear you, or follow someone without being noticed. (To follow someone through a crowd, use Shadowing, p. 219.)

If someone is specifically on the alert for intruders, the GM will roll a Quick Contest between your Stealth and the sentinel’s Perception.

You can also use this skill to stalk game. A successful roll (and about 30 minutes) gets you within 30 yards of most animals. Another roll, at -5, gets you within 15 yards.

Modifiers: A penalty equal to your encumbrance level. -5 to hide in an area without “natural” hiding places, or +3 or more if there are many hiding places. -5 to move silently if you are moving faster than Move 1. -5 to fool those with Discriminatory Smell (e.g., dogs).

A successful Streetwise roll might let you learn where any sort of illegal “action” is; which local cops or bureaucrats can be bought, and for how much; and how to contact the local underworld.

**Strategy†**

Defaults: IQ-6, Intelligence Analysis-6, or Tactics-6.

This is the ability to plan military actions and predict the actions of the enemy. In most settings, only the military teaches this skill.

A successful Strategy roll lets you deduce, in advance, enemy military plans unless another person with this skill leads them. In that case, the GM rolls a Quick Contest of Strategy. The amount of information gained depends on how well you roll (but not on the quality of the foe’s plans). If you fail an uncontested roll or lose a Quick Contest, the GM gives you false information.

You must specialize in a type of strategy – Land, Naval, Space, etc. These specialties default to one...
another at -4. The specific units being commanded are less important; even the units of another nation or tech level would give -1 or -2 at most (GM's judgment), as long as you had accurate information about their capabilities.

**Streetwise**

*Default: IQ-5.*

This is the skill of getting along in rough company. A successful Streetwise roll might let you learn (among other things) where any sort of illegal "action" is; which local cops or bureaucrats can be bought, and for how much; and how to contact the local underworld. Note that you might also be able to get this information by asking a Contact (p. 44). This skill is a measure of your ability to make new connections as needed.

You may substitute an Influence roll against Streetwise for any reaction roll made in an underworld or "bad neighborhood" situation; see *Influence Rolls* (p. 359).

**Modifiers:** +3 if you have a tough reputation (either "good" or "bad") in the area; -3 if you are obviously a stranger in the area; -3 for Low Empathy (p. 142); -1 for Oblivious (p. 146); -1 to -4 for Shyness (p. 154).

**Submariner/TL†**  

*Default: IQ-6.*

This is the ability to operate a specific type of underwater vehicle. As with Piloting, the default is to IQ, but when you learn the skill, always base it on DX.

Roll against Submarine to dive or to surface, to maneuver in underwater combat, or to negotiate hazardous waters. Failure can mean anything from a slight drift off course to a collision; critical failure may strand the vessel underwater.

Make an IQ-based Submarine roll for basic chart reading or practical oceanography, or to recall nautical laws and regulations.

You must specialize:

- **Free-Flooding Sub:** Any small, open submersible. The crew is exposed to the water, and must wear underwater breathing gear. Prerequisites: Diving Suit or Scuba. *Defaults:* Large Sub-5 or Mini-Sub-4.
- **Large Sub:** Any crewed, long-duration submersible, including attack subs and missile subs. *Defaults:* Free-Flooding Sub-5 or Mini-Sub-4.
- **Mini-Sub:** Any small, closed, short-duration submersible, typical of those used for scientific research. *Defaults:* Free-Flooding Sub-4 or Large Sub-4.

**Modifiers:** -2 for an unfamiliar submarine within your specialty (e.g., a diesel attack sub when you are used to a nuclear missile sub); -4 or more for a vessel in bad repair; -1 to -10 for navigational hazards.

**Survival†**  

*Per/Average (same planet)-3.*

This is the ability to "live off the land," find safe food and water; avoid hazards, build shelter, etc. You may look after up to 10 other people. To live safely in a wilderness situation, you must make a successful Survival roll once per day. Failure inflicts 2d-4 injury on you and anyone in your care; roll separately for each victim.

This skill also gives an "eye for country." A successful roll shows you the best direction of travel to find flowing water; a mountain pass, or whatever other terrain feature you desire – assuming that it exists.

Finally, you can use this skill to trap wild animals. (A city-bred thief could use Traps skill, but he's used to different game . . . so the roll would be at -5.) Make one roll per trap. It takes about 30 minutes to improvise a trap from ordinary materials, or 10 minutes to set and hide a commercial steel trap. Pit traps for large game take several hours to dig.

Survival often requires skill rolls based on scores other than Perception.
tion. The GM might ask for a ST-based roll to dig a pit trap or erect a log shelter; a DX-based roll to start a fire using primitive techniques (flint sparking, bow and palette, etc.), or even a HT-based roll to avoid nutritional deficiencies from an improvised diet.

You must specialize by terrain type. Land-dwellers may choose from Arctic, Desert, Island/Beach, Jungle, Mountain, Plains, Swampland, and Woodlands. Aquatic beings may take any of Bank, Deep Ocean Vent, Fresh-Water Lake, Open Ocean, Reef, River/Stream, Salt-Water Sea, and Tropical Lagoon. Amphibious individuals can pick from either list!

Land specialties default to one another at -3, while aquatic specialties default among themselves at -4. Island/Beach and Tropical Lagoon default to each other at -4, as do Swampland and River/Stream, but there are no other defaults between land and aquatic specialties.

In settings where it is possible to visit other worlds, you must also specialize by planet. Each Survival specialty defaults to the same terrain type for a different planet at -4. The defaults between terrain types given above are at an extra -4 between different planets. All this assumes the two planets are of the same planet type (see Planet Types, p. 180). There is no default at all between Survival skills for two planets of different planet types.

At the GM's option, extreme man-made terrain may call for unique specialties; e.g., Survival (Radioactive Wasteland). Most such specialties have no default of any kind.

See also Urban Survival, p. 228.

Modifiers: Up to -5 for extreme weather conditions. Equipment modifiers (p. 345).

Sway Emotions
see Enthrallment, p. 191

Swimming

Default: HT-4.

This is the skill of swimming (whether on purpose or to keep afloat in emergencies) and lifesaving. Roll against the higher of Swimming or HT to avoid fatigue while swimming or injury due to aquatic misfortunes.

When racing someone of equal water Move, roll a Quick Contest of Swimming to determine the winner. See Swimming (p. 354).

Note that Swimming does not cover high diving – that's Sports (Diving).

Symbol Drawing†

Default: Special.

This is the art of scribing magical symbols. Depending on your magical tradition, you might carve these symbols with a ritual dagger; draw them on the ground or an altar using blood or ceremonial powders, write them in ink, trace them in the air with a wand or your fingers, or something else. You must specialize in a particular magical tradition.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voodoo ritual.

In traditions where magical power flows from the caster, nature, spirits, etc. as opposed to the symbols themselves, the symbols provide a focus that aids magic use. Roll against Symbol Drawing before each ritual. On a success, add half your margin of success (round down) to your skill with the next ritual you conduct over the symbols. This kind of Symbol Drawing defaults to Ritual Magic (same)-4. For instance, Symbol Drawing (Voodoo) defaults to Ritual Magic (Voodoo)-4, and lets you draw the symbols used in Voo 
In traditions where magical power flows from the caster, nature, spirits, etc., as opposed to the symbols themselves, the symbols provide a focus that aids magic use.

Teamster† IQ/Average

Defaults: IQ-5, Animal Handling (same)-4, or Riding (same)-2.

This is the skill of driving a team of animals pulling a wagon, chariot, etc. It includes the ability to harness and care for the beasts, and judge them for quality before purchase. If the animals are ornery or badly trained (GM's judgment), you must make a successful Animal Handling roll before you can attempt a Teamster roll.

For normal travel, make a Teamster roll once per day. When moving at a gallop (80% or more of the animals' full Move) or when executing complex maneuvers with a chariot in combat, roll every 10 seconds.

A failure usually means nothing worse than lost time or a wider turn than intended. A critical failure – or any failure at a gallop – spills the wagon or chariot. Treat this as a five-yard fall for each passenger and animal involved (see Falling, p. 431). As well, roll 2d for each beast; on a 12, a leg is broken! You will have to make Animal Handling rolls to calm the beasts. Time required to reload the cargo depends on the load, terrain, and weather.

You must specialize by animal type; the most common specialty is Teamster (Equines), which covers horses and mules. Teamster specialties default to one another at -3.

Modifiers: -2 for more than four animals; -2 for a team of unfamiliar animals; up to -5 for bad terrain.

Thaumatology IQ/Very Hard

Default: IQ-7*.

* There is no default in a nonmagical setting, or for those who have never witnessed "real" magic.

This is the academic study of magical theory and the "physics" of mana. Anyone may learn this skill, but it is easier for a mage; add Magery to IQ when learning this skill, just as for spells.

The main use for this skill is magical research. When creating a new spell, use the rules for inventing (see Chapter 17), but replace Engineer skill with Thaumatology. A successful skill roll can also identify an unknown spell when you see it cast, deduce the ramifications of a critical success or failure with magic, determine the spells needed to enchant a magic item to perform as desired, etc. The better your roll, the more insight the GM will provide.

This is the study of fantasy magic – fireball spells, rings of power, etc. The equivalent skill for traditional, spirit-mediated sorcery is Ritual Magic (p. 218), while holy magic might require Religious Ritual (p. 217) or Theology (p. 226). However, a Thaumatology roll at -5 will allow a thaumatologist to relate these different varieties of magic to "standard" wizardry. Exceptionally weird powers or otherworldly artifacts might give a larger penalty!
Theology††

**IQ/Hard**

*Defaults:* IQ-6 or Religious Ritual (same)-4.

This is the study of a particular religion: its gods, cosmology, doctrines, scriptures, etc. You *must* specialize by religion. There are usually no defaults between specialties, but the GM might permit a default at -4 or so for belief systems that have similar origins, or where one is derived from the other.

Alternatively, you may study the similarities and differences between religions; this is Theology (Comparative). The Theology of any religion routinely studied by scholars in your game world defaults to this specialty at -5.

To be a priest or holy man at TL1+, you must have both Theology and Religious Ritual skill (p. 217) for your religion. TL0 shamans need only learn Religious Ritual.

You do not necessarily believe in the religion you study – faith comes from within, not from book learning! If you do, you may ask the GM to make a secret roll against your Theology skill when confronted with moral uncertainty. On a success, the GM will advise you on which course of action “feels” right, given your beliefs and understanding of scripture.

### Throwing

**DX/Average**

*Defaults:* DX-3 or Dropping-4.

This is the ability to throw any small, relatively smooth object that fits in the palm of your hand. Examples include baseballs, hand grenades, and rocks. (Boomerangs, javelins, knives, etc. require their own specialized skills; see *Thrown Weapon*, below.) Roll against skill to hit. Furthermore, if you know Throwing at DX level, add +1 to ST when figuring throwing distance, and +1 *per die* of damage with thrown weapons. These bonuses increase to +2 if you know Throwing Art at DX+1 or better. If you are a Weapon Master, this bonus is *instead* of the usual damage bonus for your weapon.

You can use the items you throw as improvised weapons. Treat forks, kitchen knives, and other long, sharp objects as daggers. Any small, blunt object does thrust+1 crushing damage. Baseball bats do swing+1 crushing. Pencils do thrust-3 impaling. Playing cards do thrust-3 cutting.

Throwing Art lets you throw anything covered by the Throwing and Thrown Weapon skills. If you have Throwing Art, you do not need those skills.

### Thrown Weapon††

**DX/Easy**

*Defaults:* DX-4 and others.

This is the ability to hurl any one type of thrown weapon. You *must* specialize:

- **Axe/Mace:** Any axe, hatchet, or mace balanced for throwing (but not an unbalanced battleaxe or maul!).
- **Dart:** Any sort of small, finned dart. Games (Darts) defaults to this skill at no penalty. *Default:* Throwing-2.
- **Harpoon:** Any sort of *tethered* spear. *Default:* Thrown Weapon (Spear)-2.
- **Knife:** Any sort of knife.
- **Shuriken:** Any sort of hiltless blade, notably *shuriken* (“ninja stars”). *Default:* Throwing-2.
- **Spear:** Any sort of spear, javelin, etc. *Defaults:* Spear Thrower-4 or Thrown Weapon (Harpoon)-2.
- **Stick:** Any balanced and shaped throwing stick, such as a boomerang. This type of throwing stick does not return to the user.

### Throwing Art

**DX/Hard**

*Defaults:* None.

*Prerequisites:* Trained By A Master or Weapon Master.

This is the cinematic ability to throw anything you are strong enough to lift: knives, medicine balls, televisions... *anything!* Roll against skill to hit. Furthermore, if you know Throwing Art at DX level, add +1 to ST when figuring throwing distance, and +1 *per die* of damage with thrown weapons. These bonuses increase to +2 if you know Throwing Art at DX+1 or better. If you are a Weapon Master, this bonus is *instead* of the usual damage bonus for your weapon.

You can use the items you throw as improvised weapons. Treat forks, kitchen knives, and other long, sharp objects as daggers. Any small, blunt object does thrust+1 crushing damage. Baseball bats do swing+1 crushing. Pencils do thrust-3 impaling. Playing cards do thrust-3 cutting.

Throwing Art lets you throw anything covered by the Throwing and Thrown Weapon skills. If you have Throwing Art, you do not need those skills.

### Tonfa

*see Melee Weapon*, p. 208

### Tracking

**Per/Average**

*Defaults:* Perception-5 or Naturalist-5.

This is the ability to follow a man or an animal by its tracks. Make a Tracking roll to pick up the trail, then roll periodically to avoid losing it. The frequency and difficulty of these rolls depend on the terrain:

- *Jungle, Plains, or Woodlands*: Roll every 30 minutes.
- *Arctic, Desert, Island/Beach, or Mountain*: Roll at -2 every 15 minutes.
- *Swampland*: Roll at -4 every 5 minutes.
- *Urban*: Roll at -6 every minute!

You may also use this skill to *cover* your tracks. This doubles your travel time! A successful roll means you have hidden your tracks well enough that only someone else with this skill can see them. If another tracker follows you, the Tracking rolls above become Quick Contests of Tracking skill. If he loses any of the Contests, he loses your trail.

To stalk game once you have tracked it, use the Stealth skill (p. 222).

*Modifiers:* -5 if the trail is more than a day old, or -10 if more than a week old. +3 if you are following a man, or +6 if following a group of men. Superior senses help a *lot*: bonuses for Acute Vision (p. 35) and Discriminatory Smell (p. 49) usually apply, and many superhuman senses (Infravision, Subsonic Hearing, etc.) give situational bonuses.

### Traps/TL

**IQ/Average**

*Defaults:* IQ-5 or Lockpicking-3*.

* Also defaults to DX-5 if you are disarming or resetting a trap, but not if you are detecting or building one.

This is the skill of building and nullifying traps. A successful Traps roll will (among other things) disarm a trap once you have found it, reset it after you pass, or build a new trap (given suitable materials). Time required is as for Lockpicking (p. 206).
To detect a trap, make a Perception-based skill roll.

Note that for the purposes of Traps skill, detection devices are “traps.” Thus, this skill covers everything from covered pits to elaborate electronic security systems!

**Modifiers:** Infinitely variable. The more sophisticated the trap, the harder it will be to disarm, reset, build, or find – and a given trap might be (for instance) easy to find but hard to disarm. The GM should be creative! Equipment modifiers (p. 345) apply to most rolls to set or disarm traps.

**Bonuses for Acute Vision** (p. 35) apply to rolls to detect traps (only).

### Two-Handed Axe/Mace

see Melee Weapon, p. 208

---

**Example of Character Creation (concluded)**

Dai has spent 203 of his 250 points, leaving him with 47 points for skills. Reading through the skill list, we see dozens of skills that suit a master thief – but since we’re on a budget, we settle on the following.

First, a thief must be stealthy. For this, Dai needs the Stealth skill (p. 222). We want this to be reliable, so we choose skill level 16. At that level, only a roll of 17 or 18 will fail . . . and that’s a failure for anyone. Stealth is a DX/Average skill. Since Dai’s DX is 15, level 16 is DX+1 for him. From the Skill Cost Table (p. 170), we learn that a level of Attribute+1 in an Average skill costs 4 points.

Any thief worth his salt can pick pockets and open locks. This calls for Pickpocket (p. 213) and Lockpicking (p. 206). We want to buy Dai a 15 in both – not as high as his Stealth, but still reliable. Pickpocket is DX/Hard. Skill 15 is DX level, and from the table, we see this costs 4 points for a Hard skill. Lockpicking, on the other hand, is IQ/Average. With Dai’s IQ 12, skill 15 is IQ+3 level. This costs 12 points – it’s very expensive to raise a skill so far above its controlling attribute!

We also want Dai to be an adept second-story man and escape artist, so we spend 1 point apiece on Climbing (p. 183) and Escape (p. 192). Climbing is DX/Average; 1 point buys DX-1 level, giving skill 14. Escape is DX/Hard; 1 point is only good for DX-2 level, or skill 13. Of course, we selected these skills knowing that Dai’s Flexibility advantage would give +3 to both! His Perfect Balance adds another +1 to Climbing, too. His final levels are Climbing at 18 and Escape at 16.

To case an area before he strikes, Dai needs Observation skill (p. 211). This is Per/Average. But Dai’s Perception is a whopping 15, so he doesn’t need to spend many points: 2 points buys Observation at Per level (15), which is more than good enough.

Since stealth can fail, we want to give Dai some combat skills for backup. We decide that he prefers knives. Knife skill (p. 208) is fine for melee combat, but we also want Dai to be good at the quick draw and with throwing knives. Fast-Draw (p. 194) and Thrown Weapon (p. 226) fit the bill. Both require a specialty – in this case, “Knife.” All of these skills are DX/Easy. With Dai’s low ST, he’ll need superb aim to make a knife effective, so we settle on 17 in Knife and Thrown Weapon (Knife). This is DX+2 level, which costs 4 points per skill. Fast-Draw (Knife) is a neat trick, but skill 15 is plenty. This costs 1 point.

To reflect Dai’s medieval background, we decide that he is a fair hand with the shortsword. But not too good – swords are expensive, and Dai grew up poor. We give him the Shortsword skill (p. 209) at 15. Shortsword is DX/Average, so this costs 2 points.

As an ISWAT officer, Dai should know how to shoot. A slim target pistol sounds like his kind of gun. Reviewing the Guns skill (p. 198), we see that pistols call for the “Pistol” specialty. Guns are new to Dai, so we spend only 1 point. Since Guns (Pistol) is DX/Easy, this buys DX level: a very adequate 15.

To conceal all these weapons, Dai needs Holdout skill (p. 200). This is IQ/Average. Dai doesn’t routinely carry concealed weapons, so we just give him IQ level – 12 – for 2 points.

We decide to give Dai some “background skills” next. He grew up on the street, so Urban Survival (p. 228) fits: it’s the ability to scrounge food and shelter in the city. A Per/Average skill, 1 point buys Per-1 level, or 14. Filch (p. 195) covers shoplifting. It’s DX/Average; 1 point buys DX-1, also 14. Survival has a social side, too. We give Dai Fast-Talk (p. 195) to talk his way out of jams and Streetwise (p. 223) to deal with professional criminals. Both are IQ/Average. We buy IQ level (12) in each, at 2 points a skill.

Dai has now spent 44 of his remaining 47 points. We decide to put his last three points into skills that complement his advantages.

Rereading the descriptions of his advantages, we see that Perfect Balance gives +1 to Acrobatics (p. 174). That’s definitely Dai’s style! Acrobatics is DX/Hard, so 2 points buys DX-1 level, or 14. With the +1 for Perfect Balance, he gets a 15.

We also discover that Absolute Direction gives +3 to Body Sense (p. 181): the skill of reorienting yourself after teleportation. This sounds ideal for Dai! We put 1 point into Body Sense, which is DX/Hard. This buys DX-2 level, or 13. The +3 for Absolute Direction makes this 16.

At this stage, Dai has spent all 250 points. If we wanted to add more abilities, we could add more disadvantages to pay for them – but we want Dai to be carefree, not saddled with problems.

Now it’s time to write it all down. Dai’s character sheet appears on p. 311.
Two-Handed Flail
see Melee Weapon, p. 208

Two-Handed Sword
see Melee Weapon, p. 208

Typing

\[ \text{DX/Easy} \]

_defaults: DX-4 and others.

This is the skill of using a typewriter. Typing speed is skill \times 3 \text{ words per minute (wpm)} on a manual, skill \times 5 \text{ wpm} on an electric typewriter or computer keyboard.

This skill defaults at -3 to any skill that involves a lot of typing, notably Administration, Computer Operation, Research, and Writing, and Professional Skills such as Journalist. If you have such a skill, Typing skill is redundant (unless you wish to work as a professional typist).

Urban Survival

\[ \text{Per/Average} \]

_defaults: Perception-5.

This talent covers the physical part of staying alive in a city environment, whether it's overpopulated or empty. (The social problems of city survival are covered by Streetwise skill.) A successful skill roll allows you to find clean rainwater; locate manholes from above or below; quickly locate building entrances, exits, stairwells, etc.; recognize and avoid physically dangerous areas, such as crumbling buildings; make and read city maps; find your way out of strange city areas; find a warm place to sleep outside in cold weather; and locate common types of buildings or businesses without asking anyone, just by your "feel" for the way cities are laid out.

Vacc Suit/TL

see Environment Suit, p. 192

Ventriloquism

\[ \text{IQ/Hard} \]

_defaults: None.

This is the ability to disguise and "throw" your voice a short distance. A successful roll lets you throw your voice well enough to fool your audience.

Modifiers: +5 if you have a dummy or confederate to distract your audience (it's easier to "see" a face talk than it is to believe the voice comes from an immobile object); -3 if the audience has reason to be suspicious.

Veterinary/TL

\[ \text{IQ/Hard} \]

_defaults: Animal Handling (any)-6, Physician-5, or Surgery-5.

This is the ability to care for a sick or wounded animal. You may take an optional specialty (p. 169) in a particular type of animal.

Modifiers: +5 if the animal knows and trusts you; -2 or worse if the animal is of an unfamiliar type.

Weather Sense

see Meteorology, p. 209

Weird Science

\[ \text{IQ/Very Hard} \]

_defaults: None.

This skill allows you to formulate astonishing new crackpot scientific theories that are far ahead of their time . . . or at least utterly different from the usual assumptions of your tech level. You may attempt a Weird Science roll whenever you work on a new invention (see Chapter 17) or investigate an existing item of weird technology (e.g., a UFO).

On a success, you get +5 on an invention attempt (but only +1 if using the Gadgeteer advantage, since Gadgeteer already gives you favorable die rolls for thinking "outside the box"). If investigating weird technology, success gives +2 to any skill roll you make for this purpose – and the GM might even allow a default skill roll to operate the device!

On a critical success, you get these bonuses and some incredible insight into a totally different problem! Critical failures are always spectacular; although not necessarily fatal or even dangerous.

Whip

see Melee Weapon, p. 208

Wrestling

\[ \text{DX/Average} \]

_defaults: None.

This skill represents training at grappling and pinning. Roll against the higher of DX or Wrestling to hit with a grapple, or to make or resist a takedown. Furthermore, if you know Wrestling at DX+1 level, add +1 to ST for the purpose of making or resisting any choke, grapple, neck snap, takedown, or pin, and whenever you attempt to break free. Add +2 to ST for Wrestling at DX+2 or better.

When you defend with bare hands, Wrestling allows you to parry once per turn. You must use both hands. Your Parry score is (skill/2) + 3, rounded down. This parry is at -3 vs. weapons. For complete rules for parrying barehanded, see Parrying Unarmed (p. 376).

Writing

\[ \text{IQ/Average} \]

_defaults: IQ-5

This is the ability to write in a clear or entertaining manner. A successful roll means the work is readable and accurate.

This is mostly useful to earn a living or write for GURPS, but can sometimes help on adventures . . . or after them. The report of a spy, soldier, or private investigator is far more useful if it is well-written!

Modifiers: The time modifiers under Time Spent (p. 346) will often apply; -5 if you are writing about an unfamiliar subject; Language modifiers (p. 24).

Zen Archery

\[ \text{IQ/Very Hard} \]

_defaults: None.

_prerequisites: Trained By A Master or Weapon Master, Bow at 18+, and Meditation.

This skill allows you to strike difficult targets with ease when using a bow. On a success, add up the penalties for size and speed/range, and then divide them by three (round down).

Modifiers: -10 if used instantly, dropping to -5 after 1 turn of concentration, -4 after 2 turns, -3 after 4 turns, -2 after 8 turns, -1 after 16 turns, and no penalty after 32 turns.
You (or your GM!) may want a way to improve your ability with a specific application of a skill without increasing the overall skill level. This is realistic – people do train at particular tasks to the exclusion of others – but allowing this in the game makes play (and character sheets) more complex. As a result, the following section is purely optional.

A “technique” is any feat that you can practice and perfect separately from the skill that allows you to perform that task. It is a specific action covered by the parent skill, studied on its own. It differs from an optional specialty (p. 169), which covers a body of theory, not an action. Techniques work a lot like skills, but with a few important differences.

**Creating Techniques**

There are six steps to creating a technique. We’ll walk through these steps using two examples. Even those who plan to use only the sample techniques at the end of this section should read these rules, as they explain the basic concepts involved.

**Concept and Name**

Decide what you want the technique to do, in general terms, and give it a name that clearly describes the feat it represents.

**Example 1:** Both still and motion-picture cameras require Photography skill (p. 213). A photographer could study just motion-picture equipment in order to get rid of the -3 to use it; therefore, “Motion-Picture Camera” would be a reasonable Photography technique.

**Example 2:** Karate skill (p. 203) covers both kicks and punches. A karateka could spend extra time on kicks, with the goal of eliminating the -2 to kicking attacks. Thus, “Kicking” would be a logical technique for Karate.

A technique should never be the “core” action undertaken with the skill. For instance, Punching would not be a valid technique for Boxing skill, which is all about punching! To get better at the primary task covered by a skill, you must improve the skill itself.

**Prerequisites**

The skill with which a technique is associated is automatically its prerequisite – that is, you must have at least one point in a skill before you can improve its techniques. If more than one skill lets you perform the task covered by the technique, any of these skills can count as the prerequisite. The GM may require other skills and advantages as prerequisites for particularly complex techniques.

**Example 1:** The prerequisite of Motion-Picture Camera is Photography skill.

**Example 2:** Either Brawling or Karate skill can be the prerequisite of Kicking, since both allow you to kick.

**Defaults and Specialties**

A technique always defaults to one of its prerequisites. Usually, the default penalty equals the modifier given for the feat in the skill description or elsewhere. There can be more than one default. If a technique offers a choice of defaults, those who learn it must specialize in the version of the technique associated with the chosen default.

**Example 1:** Photography skill states that motion-picture cameras are used at -3, so Motion-Picture Camera defaults to Photography-3.

**Example 2:** Both Brawling and Karate let you kick at -2 to skill, so Kicking defaults to Brawling-2 or Karate-2. Those who use the Brawling default must specialize in Kicking (Brawling), while those who use the Karate default must specialize in Kicking (Karate).

**Difficulty Level**

Techniques come in only two difficulties: Average and Hard. Feats that have severe negative consequences on a failure, or that allow only one attempt, are Hard; all others are Average. This affects point cost – see Technique Cost Table (p. 230).

**Example 1:** Motion-picture photography is rarely dangerous, and you can usually do a second take if you fail; therefore, Motion-Picture Camera is an Average technique.

**Example 2:** On a failed kick, you can fall down – a potentially fatal turn of events in combat – so Kicking is a Hard technique.

**Maximum Level**

Tightly focused practice can only take you so far. Eventually, you’ll have to learn new fundamentals in order to improve. To reflect this, techniques often specify an upper limit relative to parent skill. On attaining this level, the only way to improve further is to raise the underlying skill. For a technique that covers an important use of a skill, maximum level is usually equal to prerequisite skill level. More peripheral techniques might be able to exceed prerequisite skill level, or have no maximum level.

**Example 1:** An adventurer could make a career of motion-picture photography without affecting game balance. Thus, it seems believable and fair to leave Motion-Picture Camera open-ended and specify no maximum level.

**Example 2:** Kicking is a potent attack, and one of the main reasons to learn Brawling or Karate skill; therefore, Kicking cannot be improved past prerequisite skill level.

**Description**

The prerequisite skill description provides the necessary rules for most techniques, but some techniques supply optional additional detail, or outline entirely new uses of the skill.

**Example 1:** There isn’t a lot to be said about Motion-Picture Camera – it lets you use motion-picture cameras, per Photography skill.

**Example 2:** Kicking does +1 damage relative to a punch, and you must roll vs. DX to avoid a fall if you miss. These rules bear mentioning in any formal description of Kicking.
BUYING AND IMPROVING TECHNIQUES

Buying a technique is a lot like buying a skill – point cost depends on difficulty and desired relative skill level – but there are two differences. You buy up a technique relative to its default, not relative to a controlling attribute, and you determine its point cost using the Technique Cost Table (below) instead of the Skill Cost Table (p. 170).

To improve a technique, pay the difference in point cost between the desired level and your current level – exactly as for a skill. And just as skills increase for free when you raise attributes, techniques improve for free when you raise the skill on which they are based. For instance, if you have Karate-15 and Kicking-15, and raise Karate to 16, Kicking also goes to 16 at no extra charge!

You need not buy a technique to use it. If you have even one point in a skill, you may use all that skill’s techniques at default. To avoid a cluttered character sheet, though, only note techniques that you know at better than default level.

**Technique Cost Table**

<table>
<thead>
<tr>
<th>Your Final Skill Level*</th>
<th>Difficulty of Technique Average</th>
<th>Difficulty of Technique Hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default</td>
<td>0 points</td>
<td>0 points</td>
</tr>
<tr>
<td>Default+1</td>
<td>1 point</td>
<td>2 points</td>
</tr>
<tr>
<td>Default+2</td>
<td>2 points</td>
<td>3 points</td>
</tr>
<tr>
<td>Default+3</td>
<td>3 points</td>
<td>4 points</td>
</tr>
<tr>
<td>Default+4</td>
<td>4 points</td>
<td>5 points</td>
</tr>
<tr>
<td>+1</td>
<td>+1 point</td>
<td>+1 point</td>
</tr>
</tbody>
</table>

* Most techniques have maximum levels. For instance, a technique that “cannot exceed prerequisite skill level” and that defaults to skill-5 tops out at default+5.

**Using Techniques**

A technique works just like a skill in play: make a success roll (see Chapter 10) against your level in the technique. Unless noted otherwise, all general modifiers to a skill – for culture (p. 23), language (p. 23), equipment (p. 345), tech level (p. 168), and so forth – apply to its techniques, as do any special critical success or failure results.

**SAMPLE COMBAT TECHNIQUES**

Special moves in combat are by far the most common techniques, and can give warriors a “bag of tricks” similar to a wizard’s spells. If a combat technique has multiple defaults, you must specialize by prerequisite skill. For instance, learning a technique for Axe/Mace skill gives no special ability with the Broadsword version of that technique!

Techniques marked with a * are not particularly realistic. The GM may wish to restrict these “cinematic” techniques – even at default – to PCs with Trained By A Master (p. 93) or Weapon Master (p. 99).

**Arm Lock**

*Average*

Default: Judo or Wrestling.
Prerequisites: Judo or Wrestling; cannot exceed prerequisite skill+4.

This technique allows you to improve your effective Judo or Wrestling skill for the purpose of applying an arm lock. For rules governing arm locks, see Arm Lock (p. 403).

**Back Kick**

*Hard*

Default: Karate-4.
Prerequisites: Karate; cannot exceed Karate skill.

This technique lets you attack someone behind you without changing facing. You must know that he is there! Roll against Back Kick to hit, but otherwise resolve this as a normal kick. After attempting a Back Kick, all your active defenses are at -2 until next turn.

**Choke Hold**

*Hard*

Defaults: Judo-2 or Wrestling-3.
Prerequisites: Judo or Wrestling; cannot exceed prerequisite skill.

This technique lets you to “buy off” the basic -2 to Judo or -3 to Wrestling when using the rules given under Choke Hold on p. 404.

**Disarming**

*Hard*

Default: prerequisite skill.
Prerequisite: Any unarmed combat or Melee Weapon skill; cannot exceed prerequisite skill+5.

If you know this technique above default, you may use it instead of the underlying skill whenever you attack to disarm (see Striking at Weapons, p. 400). For instance, if you have Broadsword-14 and Disarming (Broadsword)-17, you disarm as if you had Broadsword-17.

**Dual-Weapon Attack**

*Hard*

Default: prerequisite skill-4.
Prerequisite: any one-handed Melee Weapon skill; cannot exceed prerequisite skill*.

* You may learn this technique for Guns (Pistol), even in a realistic campaign.

Normally, you are at -4 to attack with two weapons at once unless you make an All-Out Attack. This technique lets you “buy off” that penalty. (Note that you must still learn Off-Hand Weapon Training, p. 232, to reduce the -4 for using the “off” hand!) For detailed rules, see Dual-Weapon Attacks (p. 417).

**Elbow Strike**

*Average*

Defaults: Brawling-2 or Karate-2.
Prerequisites: Brawling or Karate; cannot exceed prerequisite skill.
This technique lets you “buy off” the -2 penalty to strike with the elbow. See Elbow Strike (p. 404) for more information.

**Feint**

**Hard**

**Default:** prerequisite skill.

**Prerequisite:** Any unarmed combat or Melee Weapon skill; cannot exceed prerequisite skill +4.

If you know this technique above default, you may use it instead of the underlying skill whenever you feint (see Feint, p. 365). For instance, if you have Broadsword-14 and Feint (Broadsword)-16, you feint as if you had Broadsword-16.

**Finger Lock**

**Hard**

**Default:** Arm Lock-3

**Prerequisite:** Arm Lock; cannot exceed Arm Lock.

This technique lets you grab fingers and twist them painfully. Use the rules for Arm Lock (p. 403), except that all damage is to the hand – which is easier to cripple than the arm.

**Ground Fighting**

**Hard**

**Default:** prerequisite skill-4.

**Prerequisite:** Any unarmed combat or Melee Weapon skill; cannot exceed prerequisite skill.

This technique lets you “buy off” the -4 for attacking from your back. Roll against this technique instead of the prerequisite skill whenever you use that skill to attack from the ground. For instance, if you had Wrestling-14 and Ground Fighting (Wrestling)-13, you could grapple from the ground at skill 13.

In addition, make a roll against Ground Fighting whenever you must defend yourself from your back. On a success, you defend at -1 instead of at -3.

**Horse Archery**

**Hard**

**Default:** Bow-4.

**Prerequisites:** Bow and Riding; cannot exceed Bow skill.
Knee Strike

Average

Defaults: Brawling-1 or Karate-1.
Prerequisite: Brawling or Karate; cannot exceed prerequisite skill.

This technique lets you “buy off” the -1 penalty to strike with the knee – see Knee Strike (p. 404).

Neck Snap

Hard

Default: ST-4; cannot exceed ST+3.

This brute-force attack consists of grabbing and suddenly twisting the victim's head, with the intent of snapping the neck – see Neck Snap o Wrench Limb (p. 404). Unlike most techniques, Neck Snap defaults to ST, not a skill. Wrestling gives its usual skill-based ST bonus.

Retain Weapon

Hard

Default: prerequisite skill.
Prerequisite: Any Melee Weapon skill; cannot exceed prerequisite skill+5.

If you know this technique above default, you may use it instead of the underlying skill whenever someone attempts to disarm you (see Striking at Weapons, p. 400). For instance, if you have Staff-13 and Retain Weapon (Staff)-16, you resist disarm attempts as if you had Staff-16.

You can also learn this technique for missile weapons, such as guns and bows. In that case, it defaults to DX and cannot exceed DX+5.

Whirlwind Attack*

Hard

Default: prerequisite skill-5.
Prerequisites: Broadsword, Staff, or Two-Handed Sword; cannot exceed prerequisite skill.

Whirlwind Attack is a special All-Out Attack that lets you attack every foe adjacent to you with lightning speed! If you use this technique, it is all you can do that turn, no matter how fast or skilled you are. Furthermore, since this is an All-Out Attack, you will have no active defenses afterward – see All-Out Attack (p. 365).

When you launch a Whirlwind Attack, you spin in place, attacking all adjacent foes within one yard. You must attack them in clockwise or counterclockwise order – your choice. All your attacks must be swung attacks, and you cannot combine a Whirlwind Attack with other techniques (such as Disarming) or with cinematic skills (such as Power Blow).

Determine a random hit location for each target, and then roll against Whirlwind Attack to hit, with the usual hit location penalties. You opponent may defend normally. Resolve each attack completely before moving on to the next one. If any of the attacks is a critical miss (or if any of your opponents critically succeeds on his defense), that attack and all remaining attacks are critical misses – roll on the Critical Miss Table (p. 556) once per attack!

You may end a Whirlwind Attack facing in any direction you wish.

Double Defaults and Techniques

A skill cannot default to another skill known only by default (see Double Defaults, p. 173). However, techniques are not skills. If two techniques are based on the same underlying skill, one can default to the other, even if you only know the intermediate technique at default.

Example: Finger Lock defaults to Arm Lock-3, and Arm Lock defaults to Judo or Wrestling. Effectively, Finger Lock also defaults to Judo-3 or Wrestling-3.

Sweep

Hard

Default: prerequisite skill-3.
Prerequisites: Polearm, Spear, or Staff; cannot exceed prerequisite skill.

This technique lets you sweep your adversary's legs out from under him using a pole weapon. Roll against Sweep to hit. The target may defend normally. If he fails, roll a Quick Contest: your Sweep or ST vs. your victim's ST or DX. Use the higher value in both cases. If the victim loses, he falls down unless he can make an Acrobatics-5 roll to somersault in the air and land safely.

Unarmed fighters call this technique “Sweeping Kick.” It works exactly the same way, but uses a leg instead of a pole, and defaults to Judo-3, Karate-3, or Sumo Wrestling-3.

Off-Hand Weapon Training

Hard

Default: prerequisite skill-4.
Prerequisite: Any Melee Weapon skill; cannot exceed prerequisite skill.

This technique lets you “buy off” the -4 for using your "off" hand with one specific Melee Weapon skill. Use your level with this technique instead of the prerequisite skill whenever you use that skill to attack or parry with your off hand. For instance, if you had Rapier-14 and Off-Hand Weapon Training (Rapier)-14, you could attack and parry at full skill with your off hand.

SAMPLE NONCOMBAT TECHNIQUES

Nearly any task that calls for a skill roll at a penalty could become a technique. The main purpose of such techniques is to buy off skill penalties, but the GM might wish to provide additional details.
**Impersonate**  
*Average*  
*Default:* Mimicry (Speech)-3.  
*Prerequisite:* Mimicry (Speech); cannot exceed prerequisite skill.

Through practice, you can improve your ability to mimic one specific person, gradually buying off the -3 to impersonate him. Each person mimicked is a separate technique.

**Lifesaving**  
*Hard*  
*Default:* Swimming-5.  
*Prerequisite:* Swimming; cannot exceed prerequisite skill.

You can study lifesaving separately from swimming in order to eliminate the basic -5 for that task. See Lifesaving (p. 355) for detailed rules.

**Motion-Picture Camera**  
*Average*  
*Default:* Photography-3.  
*Prerequisite:* Photography.

This technique, common among professional cameramen, allows you to buy off the -3 to use a motion-picture camera with Photography skill.

**No-Landing Extraction**  
*Hard*  
*Default:* Piloting-4.  
*Prerequisite:* Piloting; cannot exceed prerequisite skill.

This technique lets you pick up cargo from the ground without landing. You can only fetch cargos outfitted with special no-landing extraction apparatus. Someone on the ground must make a successful Freight Handling roll to prepare the cargo (takes 2d hours). A failed Freight Handling or No-Landing Extraction roll means a missed pick-up or damaged cargo. Critical failure indicates the cargo is lost (critically injured, if a living passenger).

**Rope Up**  
*Average*  
*Default:* Climbing-2.  
*Prerequisite:* Climbing; cannot exceed prerequisite skill.

A climber normally has -2 to climb a dangling rope (see Climbing, p. 349). With practice, you can buy off this penalty.

The "opposite" technique, Rope Down, defaults to Climbing-1 and can be improved to Climbing+3. Sliding down a rope is significantly easier than any kind of climbing!

**Scaling**  
*Hard*  
*Default:* Climbing-3.  
*Prerequisite:* Climbing; cannot exceed prerequisite skill.

This technique lets you eliminate some or all of the -3 to skill for climbing a relatively smooth, vertical surface such as a building or rock face (see Climbing, p. 349).

**Set Trap**  
*Hard*  
*Default:* Explosives (Demolition)-2.  
*Prerequisite:* Explosives (Demolition); cannot exceed prerequisite skill.

With study, you can gain familiarity with "trap" triggers, allowing you to set traps without the usual -2 to skill. Assassins, commandos, spies, etc. often improve this technique.

**Slip Handcuffs**  
*Hard*  
*Default:* Escape-5.  
*Prerequisite:* Escape; cannot exceed prerequisite skill.

This technique represents study of a specific set of tricks for slipping out of handcuffs. With the GM's permission, you can learn similar techniques for other restraints commonly used in your game world.

**Work by Touch**  
*Hard*  
*Default:* Lockpicking-5.  
*Prerequisite:* Lockpicking; cannot exceed prerequisite skill.

Lockpicking is normally at -5 if you must work by touch, but if you routinely practice this way, it will eventually become second nature.

The GM might permit you to learn a Work by Touch technique for other "thief" skills – e.g., Explosives and Traps – allowing you to operate in total darkness, which is a common way to use such skills . . .
These rules only matter to wizards, and only in worlds where magic exists. If you are not creating a wizard for a magical setting, you can safely skip this chapter.

Magic is a powerful force manipulated using skills called spells. By casting spells, a wizard can direct magical energy – known as mana – to produce almost any effect. This is a fickle art in some settings, a precise science in others.

The best wizards have an inborn ability to learn and use magic, called Magery (p. 66). Anyone with any degree of Magery is called a mage. In many game worlds, only mages can use magic. In all worlds, they are better with magic than non-mages.

Glossary of Magical Terms

Abort: To stop the casting of a spell before its completion.
Backfire: A critical failure when casting a spell.
Base skill: Your unmodified skill with a spell; compare with effective skill.
Basic spell: A spell with no other spells as prerequisites.
Cancel: To end your own spell before it would normally be over.
Caster: The person casting a spell.
Class: A group of spells that use the same special rules. Three examples appear in this glossary: Melee spells, Missile spells, and Resisted spells.
College: A group of spells that deal with the same subject – fire, healing, etc.
Effective skill: Your base skill, plus any modifiers (usually penalties) for range, circumstances, etc. A caster rolls against effective skill.
Enchantment spell: A spell for creating permanent magic items. See Magic Items, p. 480.
Energy: The “cost” to cast a spell. You may pay this in either FP or HP. Some game worlds offer alternative energy sources.
Grimoire: The list of spells you know (and more generally, any book of spells).
Mage: Anyone with the Magery advantage.
Magery: The advantage of being “in tune” with magic; see p. 66.
Maintain: To continue a spell after it would normally end. This costs more energy, unless you have high skill.
Mana: The ambient magical energy manipulated by spells. Different areas (or worlds) have different levels of mana; see Mana (p. 235).
Melee spell: A spell that “charges” your hand or a magic staff with harmful energies that affect the first target you strike.
Missile spell: A spell that summons a magical projectile that you must “throw” at the subject.
Prerequisites: A requirement for learning a spell. Means exactly what it means for skills; see Prerequisites (p. 169).
Resisted spell: Any spell that must overcome the “power” of its subject before it works.
Spell: A skill that produces a specific magical effect when used successfully.
Subject: The person, place, or thing on which a spell is cast.
Wizard: Any user of magic, whether he is a mage or not.
LEARNING MAGIC

Anyone can learn most spells – although in some worlds, you must be a mage to use the spells you know. Some spells specify a particular level of Magery as a prerequisite: if you lack the required Magery level, you cannot learn the spell.

Each magic spell is a separate skill, learned just like any other skill. Most spells are IQ/Hard skills, but a few potent spells are IQ/Very Hard. Spells have no default – you can only cast spells you know.

Add your Magery to IQ when you learn spells. For instance, if you have IQ 12 and Magery 3, you learn spells as if you had IQ 15. In addition, reduce the time required to learn spells (but not the point cost) by 10% per Magery level, to a minimum of 60% the usual time at Magery 4; e.g., Magery 3 would let you learn spells in 70% the usual time.

The maximum level of Magery available in your world is up to the GM. Most GMs will want to limit PCs to Magery 3 or 4.

If you know more than a few spells, you may wish to make a “grimoire.” This is a list of the spells you know and your skill with each, along with the energy cost, time to cast, duration, etc. for each spell. This saves a lot of reference time in play!

PREREQUISITES

Any spell but the most basic has one or more prerequisites: requirements you must meet in order to learn the spell. If the prerequisite is another spell, you must have at least one point in the prerequisite spell before you can study the advanced spell. Some spells require a minimum Magery level; for instance, “Magery 2” means you must have Magery 2 (or higher) to learn the spell. A few spells require a minimum basic attribute score, an advantage, or even a mundane skill.

Mana

Mana is the ambient energy that empowers magic. Magic will work only if the mana level of the game world or specific area allows it, as follows:

Very High Mana: Anyone who knows spells can cast them. A mage who spends FP to cast a spell on his turn gets those FP back at the start of his next turn. However, all failures are treated as critical failures – and actual critical failures produce spectacular disasters! Very high mana is extremely rare in most settings.

High Mana: Anyone who knows spells can cast them. This mana level is rare in most worlds, but some game worlds have high mana throughout.

Normal Mana: Only mages can cast spells. These spells work normally, according to all rules given in this chapter. This is the default mana level in most fantasy settings: mages use magic, others don’t.

Low Mana: Only mages can cast spells, and all spells perform at -5 to skill, for all purposes. (Magic items are similarly affected; see Power of a Magic Item, p. 481.) However, critical failures have mild effects or no effect at all.

No Mana: Nobody can cast spells. Magic items do not function (but regain their powers when taken to an area with mana). This mana level occurs in isolated spots in magical worlds, but entire game worlds can lack mana, making magic use impossible.

CASTING SPells

You must know a spell in order to cast it, unless you possess a magic item that lets you cast it (see Magic Items, p. 480). Tell the GM what spell you are casting, then take Concentrate maneuvers for the requisite number of turns (see Time Required, p. 236). At the end of the last second of concentration, make a success roll for the spell.

Casting a spell works like any other use of a skill. Roll 3d and compare the total to your effective skill: your base skill with the spell adjusted by any applicable modifiers. Modifiers depend on the class of spell (see Spell Classes, p. 239). If your roll is less than or equal to your effective skill, the spell works. If it is greater than your effective skill, the spell fails.

On a success, mark off the spell’s energy cost against your FP or HP (see Energy Cost, p. 236). Its effects take place immediately. On a critical success, the spell works especially well. Details are up to the GM, who should be both generous and creative. Whatever else occurs, there is never an energy cost if you get a critical success when you cast a spell.

On a failure, the spell does not work. If success would have cost energy, you lose one energy point; otherwise, you lose nothing. (Exception: You must pay the full energy cost even on a failure for an Information spell; see Information Spells, p. 241.) On a critical failure, you must spend the full energy cost and the spell fails . . . badly! The GM may use the Critical Spell Failure Table or improvise some other “backfire” he finds amusing.
DISTRACTION AND INJURY

If you use an active defense against an attack, or are knocked back, knocked down, injured, grappled, or otherwise distracted while concentrating, make a Will roll at -3 to continue casting your spell. On a failure, your spell is spoiled and you must start over.

If you are stunned while concentrating, your spell is automatically spoiled.

If you are injured but not stunned while concentrating, and succeed on the roll to avoid distraction, you may cast your spell. However, the shock penalty for your injury reduces your effective skill. See p. 419 for details on shock.

CASTER AND SUBJECT

The “caster” of a spell is the person who is attempting to cast it.

The “subject” of a spell is the person, place, or thing upon which the spell is cast. If you are casting a spell on yourself, you are both caster and subject. The subject can also be another being, an inanimate object, or even a patch of ground. If the subject is a place, the caster can “touch” it by extending a hand over it or touching the ground, as appropriate for the spell.

TIME REQUIRED

Most spells take one second to cast. Take the Concentrate maneuver for one turn and attempt your skill roll at the end of your turn. If you succeed, the spell takes effect instantly. Whether you succeed or fail, your turn ends as soon as you roll the dice.

Example: Wat wants to cast Create Fire, a one-second spell. On his turn, Wat says, “I’m concentrating on Create Fire.” This uses his entire turn. He then rolls the dice for his spell. If he succeeds, he creates fire – but either way, Wat’s turn ends.

Some spells take more than one second to cast. This requires multiple, consecutive Concentrate maneuvers in combat. Make the skill roll at the end of the last turn of concentration. You may “abort” an unfinished spell before it is cast, at no penalty, but you must start over if you wish to try again.

If your base skill with a spell – modified only by the -5 for low mana, if applicable – is 15 or higher, reduce the cost to cast the spell by 1. If you have skill 20 or higher, reduce the cost by 2. Cost continues to decrease by 1 per full five skill levels beyond skill 20. Apply the same reduction to the cost to maintain a spell. Calculate the entire cost for a spell (for instance, by multiplying cost for the size of the subject or the area affected) before applying energy cost reductions for

Critical Spell Failure Table

Roll 3d on the table below. If the result is inappropriate – or if it is the result that the caster intended – roll again. The GM is free to improvise instead of using the table. Improvisations should be appropriate to the spell and the situation, and should never kill the caster outright.

3 – Spell fails entirely. Caster takes 1d of injury.
4 – Spell is cast on caster (if harmful) or on a random nearby foe (if beneficial).
5-6 – Spell is cast on one of the caster’s companions (if harmful) or on a random nearby foe (if beneficial).
7 – Spell affects someone or something other than its intended target – friend, foe, or random object. Roll randomly or make an interesting choice.
8 – Spell fails entirely. Caster takes 1 point of injury.
9 – Spell fails entirely. Caster is stunned (IQ roll to recover).
10-11 – Spell produces nothing but a loud noise, bright flash of light, awful odor, etc.
12 – Spell produces a weak and useless shadow of the intended effect.
13 – Spell produces the reverse of the intended effect.
14 – Spell seems to work, but it is only a useless illusion. The GM should do his best to convince the wizard and his companions that the spell did work!
15-16 – Spell has the reverse of the intended effect, on the wrong target. Roll randomly.
17 – Spell fails entirely. Caster temporarily forgets the spell. Make an IQ roll after a week, and again each following week, until he remembers.
18 – Spell fails entirely. A demon or other malign entity appropriate to the setting appears and attacks the caster. (The GM may waive this result if, in his opinion, caster and spell were both lily-white, pure good in intent.)

Example: If a spell takes three seconds to cast, you must spend three turns doing nothing but concentrating. You roll the dice at the end of your third turn.

ENERGY COST

Each spell has an energy cost. When you cast the spell, you must pay this cost in either FP or HP. The better you know the spell, the less energy you need to cast it. If you know it well enough, you can cast it at no cost. Exception: Never reduce the cost of a Blocking spell; see Blocking Spells (p. 241).
high skill. Energy is still going into the spell, but your skill lets you draw it from the surrounding mana rather than supplying it yourself!

You normally pay the energy cost of a spell in FP. You can recover lost FP by resting. A mage with the Recover Energy spell (p. 248) recovers FP faster than normal.

**Burning HP**

You may also expend life energy to pay the cost of a spell. Mark off some or all of the cost against HP instead of FP – the spell is actually harming you! You are at -1 on your spell roll per HP used. This is instead of the usual shock penalty for injury, and High Pain Threshold has no effect.

Using HP to power spells is dangerous, but it may be necessary if you are badly fatigue and must cast another spell. You may “burn” HP until you fall unconscious. Should a failed HT roll indicate that you have died, you do not actually spend the HP. Instead, you fall unconscious.

Treat HP lost this way just like any other injury.

**Magic Rituals**

To cast a spell, you must usually perform a ritual that involves gestures and speech. If you can’t perform the ritual, you can’t cast the spell! For instance, if the ritual for a spell requires you to speak, you cannot cast the spell if you are gagged or under a spell of silence.

The higher your skill with a spell, the easier it is to cast: it takes less time, requires less energy, and has less stringent ritual requirements. See the list below for details. In all cases, “skill” refers to base skill, not effective skill. The only modifier that matters here is the -5 for low mana, if applicable.

**Skill 9 or less – Ritual:** You must have both hands and both feet free for elaborate ritual movements, and you must speak certain words of power in a firm voice. **Time:** Doubled. **Cost:** As listed.

**Skill 10-14 – Ritual:** You must speak a few quiet words and make a gesture. **Time:** As listed. **Cost:** As listed.

**Skill 15-19 – Ritual:** You must speak a word or two or make a small gesture (a couple of fingers are enough), but not necessarily both. You are allowed to move one yard per second while taking the Concentrate maneuver. **Time:** As listed. **Cost:** Reduced by 1.

**Skill 20-24 – Ritual:** None. You simply stare into space as you concentrate. **Time:** Halved (round fractions up to the next second). Minimum casting time is still one second. **Cost:** Reduced by 2.

**Skill 25-29 – Ritual:** None. **Time:** Divided by 4 (round up). **Cost:** Reduced by 3.

**Skill 30 or more –** As above, but for every five levels of skill beyond skill 25 (that is, at levels 30, 35, 40, etc.), halve casting time again and reduce energy cost by one more point.

Certain spells always require a specific ritual. Such requirements override the rules above. For instance, high skill has no effect on the cost to cast Blocking spells (p. 241) or the time to cast Missile spells (p. 240).

**Magnitude and Effect**

Talented mages may exceed the usual limits for spells that allow a finite number of “levels of effect” (dice of damage, bonuses to skill, etc.). The upper limit is the higher of the standard number of levels or the caster’s Magery level.

**Example:** Major Healing (p. 248) allows you to spend 1, 2, 3, or 4 energy points to heal 2, 4, 6, or 8 HP. It has four levels of effect. Magery 10 would let you revise this limit to 10 levels of effect – you could spend 1-10 energy points to heal 2-20 HP!

**Canceling Spells**

Sometimes, you will want to end a spell before its full duration is up. If you specify a shorter duration when you cast the spell, the spell lasts exactly the time desired. If you suddenly decide to “cancel” a spell before its time is up, though, you must pay one energy point (from FP or HP) to do so, regardless of the spell or your skill level.

The GM is free not to use this rule if he thinks it would be unbalanced. Of course, if he puts a limit on the highest level of Magery available, this is not a problem!

**Limits on Effect**

The effects of many spells vary with the energy spent. For instance, a healing spell might heal 1 HP per energy point, or a combat spell might inflict 1d damage per point.

If the spell description sets no upper limit, then you may spend as much energy as you can afford! The more you spend, the greater the effect.

If the spell specifies a finite range of effects and associated energy costs, though, you cannot exceed the upper limit without a high level of Magery (see below).

If either type of variable spell is cast on the same subject more than once, only the spell with the most powerful effects counts – multiple instances of a given spell do not “stack” or add in any way. Spells that heal, damage, or otherwise permanently affect the subject are an exception; you may cast such spells repeatedly, healing or damaging the subject by the full amount each time.

**Duration of Spells and Maintaining Spells**

Some spells produce an instantaneous effect when cast and then end immediately. Other spells last for a fixed “duration” (given for the particular spell, but most often one minute) and then wear off – unless you maintain them.
If you can maintain a spell, the energy cost to do so is given in its description, following the casting cost. When the spell reaches the end of its duration, you may continue the spell by paying its maintenance cost. If you do, the spell continues for another interval equal to its duration. This takes no time and requires no skill roll. Distance is not a factor.

Example: The Light spell (p. 249) notes “Duration: 1 minute” and “Cost: 1 to cast; 1 to maintain.” It ends after a minute unless, at the end of that minute, you spend one more energy point to maintain it. If you do, it lasts another minute.

You may repeat this process for as long as you wish, provided you can supply the required energy. As long as you are conscious, you know when one of your spells needs to be renewed. However, you cannot maintain a spell while you sleep, and you cannot “hand off” a spell to someone else so he can maintain it for you.

High Skill and Cost to Maintain

Energy cost reduction for high skill also applies to the cost to maintain a spell. This can reduce maintenance cost to zero. For instance, if you know a spell at skill 15-19, you may reduce its maintenance cost by 1; if this cost is 1 to begin with, you can maintain the spell indefinitely at no energy cost!

Concentration and Maintenance

You can maintain a spell without concentration unless the spell requires constant manipulation and change; e.g., to maneuver a levitating object. Spells like this require you to take the Concentrate maneuver only. If you are distracted, injured, or stunned, you must make a Will roll at -3. If you fail, the spell does not end, but it remains in precisely the state it was in when you were distracted, and does not respond to change until you can concentrate on it again. On a critical failure, the spell ends.

Casting another spell does not break concentration, but you suffer a skill penalty for doing two things at once (see below).

Ceremonial Magic

If you know a spell at skill 15+ and have a group of willing assistants, you may opt to cast the spell by leading your assistants in an elaborate ritual that maximizes the spell’s power. Such “ceremonial magic” is time-consuming, but lets you cast more powerful spells than you could cast on your own.

When you work ceremonial magic, multiply casting time by 10. Energy cost does not change, but your assistants can supplement your energy input as follows:

Each mage who knows the spell at level 15+: as much energy as he wishes to contribute.
Each non-mage who knows the spell at level 15+: up to 3 points.
Each mage who knows the spell at level 14 or lower: up to 3 points.
Each unskilled spectator who supports the casting (by chanting, holding candles, etc.): 1 point, to a maximum of 100 points from all spectators.
Each spectator who opposes the casting: -5 points, to a maximum penalty of -100 points from all spectators!

Sum the energy from all sources to find the total energy available. If this exceeds the cost to cast the spell, you receive a skill bonus.

<table>
<thead>
<tr>
<th>Extra Energy</th>
<th>Skill Bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>+1</td>
</tr>
<tr>
<td>40%</td>
<td>+2</td>
</tr>
<tr>
<td>60%</td>
<td>+3</td>
</tr>
<tr>
<td>100%</td>
<td>+4</td>
</tr>
</tbody>
</table>

Add another +1 per additional 100% of the required energy.

At the end of the ritual, make a skill roll to cast the spell. Apply all standard modifiers for magic use and any bonus for extra energy. Regardless of the outcome of the die roll, all contributed energy is spent when you roll the dice.

Notes on Ceremonial Magic

- High skill does not reduce casting time or energy cost.
- A group aids concentration. If you are distracted during the ritual, roll at Will as opposed to Will-3 to avoid distraction.
- Ceremonial magic is hard to coordinate. A roll of 16 is always a failure, and a roll of 17-18 is always a critical failure – even if effective skill is 16+.
- Once the spell is cast, the participants can continue to provide energy to maintain the spell. The composition of the group may change, as long as the ritual continues uninterrupted. Thus, ceremonial magic lets you maintain a spell indefinitely.

Casting Spells While Maintaining Other Spells

You can only cast one new spell at a time. However, you can cast new spells before older ones end. Apply the following modifiers whenever you cast spells while you have other spells active:

-3 per spell you are concentrating on at the moment. See the individual spell descriptions to learn which spells require concentration.
-1 per other spell you have “on” at the moment. A spell that lasts permanently (as indicated in the spell description) does not carry a penalty.
There are many different types of magic. Spells fall into "colleges" according to subject matter and "classes" according to the way they work.

**Colleges of Magic**

Spells related by subject matter – e.g., fire, healing, or mind control – belong to the same college. The basic spells of a college are prerequisites for the more advanced ones. Some spells fall into more than one college. For instance, Earth to Air (p. 243) is both an Earth and an Air spell. This is only important when counting prerequisites.

Most wizards specialize in only a few colleges. This is the most efficient way to learn advanced magic. However, you may learn spells from as many colleges as you wish.

**Spell Classes**

Each spell falls into one or more classes that define how it works in play. These classes are not mutually exclusive, except as noted below.

**Regular Spells**

Most spells fall into this class. A Regular spell affects only one subject. Its energy cost assumes a human-sized subject – that is, one with Size Modifier 0. For a subject with a positive SM, multiply cost by $1 + SM$: ¥2 energy for SM +1, ¥3 for SM +2, ¥4 for SM +3, and so on. There is no cost reduction for a subject with a negative SM. A few Regular spells give special cost schemes that override these rules.

Regular spells work best if you can touch or see the subject. You do not have to see through your own eyes; any spell that lets you see by magical means will do.

If you cannot touch the subject, apply a skill penalty equal to your distance in yards from the subject; e.g., -5 at five yards. Figure distance at the moment you roll the dice for the spell.

If you cannot touch or see the subject, there is a further -5 penalty. There are two ways to direct such a spell:

- **Name a target location.** For instance, if you specify “One yard beyond the other side of this door,” you’ll get whoever is standing on the other side of the door. If there is nobody there, you wasted the spell.
- **Name a subject:** e.g., “The closest person in the next room,” or, “George, who I know is around here somewhere.” The GM determines the actual range to the subject. This is risky! If the subject is farther away than you think – or simply absent – you are inviting failure or even critical failure!

No physical barrier affects a Regular spell. Unless the spell backfires, a Regular spell never hits the wrong target.

**Area Spells**

These spells affect an area rather than an individual. They are cast on a surface – floor, ground, etc. – and their effects extend four yards (12 feet) up from that surface. A few Area spells work differently; see the individual spell descriptions for details.

The size of the area governs the energy cost, but not the difficulty of the roll. The cost listed for an Area spell is its “base cost.” The actual cost to cast the spell is equal to base cost multiplied by the radius of the area of effect in yards (minimum one yard): $x1$ for a one-yard radius, $x2$ for a two-yard radius, $x3$ for a three-yard radius, and so on.

Some Area spells have a fractional base cost, such as 1/2 or 1/10. You must spend a minimum of one energy point on these spells. A few Area spells specify a minimum cost; you must always pay the minimum cost, even if this is larger than the base cost multiplied by the desired radius.

If an Area spell affects living beings, it affects everyone in the area of effect. You may choose to affect only a part of the area, rather than the whole circle, but the cost is still the same.

If you cannot touch some part of the affected area, apply a skill penalty equal to your distance in yards from the nearest edge of the area.

Otherwise, Area spells work like Regular spells.

**Area Spells on a Battle Map**

Represent Area spells on a battle map as follows. The area of effect of a spell cast over a one-yard radius is a single hex. The area of effect of a spell cast over a two-yard radius is a central hex and all adjacent hexes. The area of effect of a spell cast over a three-yard radius is a central two-yard area of effect plus the ring of hexes adjacent to that. And so on, building up larger areas by adding successive rings of adjacent hexes.
Melee Spells

Melee spells “charge” your hand or magic staff (see box) with harmful energies that affect the first target you strike. These spells require two skill rolls: a roll against spell skill to cast the spell, and a normal melee attack roll to hit your target with your hand or staff.

To cast a Melee spell, concentrate for the required time, roll against spell skill at the end of the final turn of concentration, and pay the energy cost. There is no distance modifier – you are casting the spell on yourself! On a success, you energize your hand or staff with the spell’s magic. On your next turn, you must do one of two things with your spell: hold it or attack with it.

If you hold your spell, your hand or staff remains “charged.” This has no energy cost and requires no skill roll. You cannot cast another spell while holding a Melee spell. You can take any other combat maneuver (but an attack with the energized hand or staff discharges the spell). A parry with that hand or staff does not discharge the spell; an attack is part of the ritual, and nothing else works.

A held Melee spell on a staff persists only for as long as you wield the staff. If you lose hold of your staff, even for an instant, the spell drains away harmlessly. If someone grabs your staff, and you are both holding onto it on your turn, your attempt to wrench it free counts as an attack, and your opponent instantly suffers the spell’s effects!

To attack, roll against DX or an unarmed combat skill to hit with a hand, or the appropriate Melee Weapon skill to hit with a staff. This is a standard melee attack. Your target may attempt any active defense. If he succeeds, your spell is not triggered; you may try again next turn. If he fails, your melee attack does its usual damage and your spell affects him immediately.

Armor protects normally against some Melee spells, not at all against others. If the spell is one that ignores armor, neither an unarmed parry (even with an armored limb) nor a block will protect the target from the spell. Even if such a defense wards off the melee attack, the spell arcs through the target’s armor or shield and affects him.

Note that some Melee spells are resisted (see p. 241). These spells require a second roll against spell skill, when the spell actually takes effect, to overcome the target’s resistance.

Missile Spells

This class of spells encompasses long-distance “projectile” or “bolt” attacks, such as Fireball (p. 247) and Lightning (p. 244). Missile spells require two skill rolls: a roll against spell skill to cast the spell, and a roll against Innate Attack skill (p. 201) to hit the target.

To cast a Missile spell, you must concentrate for one second. At the end of your turn, roll against your skill with the spell. There is no modifier for distance – you are creating a magical missile in your hand. On a success, you may invest one or more points of energy in the spell, to a maximum number of energy points equal to your Magery level. The missile then appears in your hand, “charged” to the desired level.

Once you stop enlarging a Missile spell, you may “hold” it in hand, ready to attack. You do not have to launch the missile until you want to. While holding a Missile spell, you may move up to your full Move, take a Wait or Aim maneuver, or even attack using the hand that isn’t “holding” the missile. You may defend normally. However, you cannot cast another spell.

There is one drawback: if you are injured while you have a missile “in

Magic Staffs

A “magic staff” is any wand or staff imbued with the power to extend your reach for the purpose of casting spells (see Staff, p. 481). It gives three main benefits:

- Touching a subject with your staff lets you cast spells on that subject at no distance penalty. This is useful in situations where you must cast a spell on a subject you cannot touch with your hand (e.g., when casting a healing spell on someone trapped under rubble).
- Pointing with a staff reduces the range to a distant subject by the length of the staff. This is valuable for Regular spells, as a one-yard wand shaves -1 off distance penalties, while a two-yard quarterstaff eliminates -2! You can point as part of the ritual to cast a spell. Tell the GM you are pointing at the subject when you start concentrating. (This might warn an unwilling subject!)
- A staff can carry Melee spells. This gives them more reach, and lets you strike and parry without putting your hand in harm’s way.

A magic staff can be any length up to two yards. A wand is Reach C, too light to do damage, and uses Knife or Main-Gauche skill. A long wand or short staff is Reach 1, functions as a bato in combat, and uses Shortsword or Smallsword skill. A full-length staff is Reach 2, counts as a quarterstaff in combat, and uses Staff or Two-Handed Sword skill. In most game worlds, a suitable ordinary item can be enchanted as a magic staff for $30, but it must be made from once-living materials (wood, bone, ivory, coral, etc.).
hand,” you must make a Will roll. If you fail, the missile immediately affects you!

When you are ready to attack, roll against your Innate Attack skill to hit. This is a standard ranged attack, subject to the usual modifiers for target size, speed, and range. Once launched, the missile flies in a straight line to the target. Physical barriers affect it just as they would affect any missile weapon.

Your target may block or dodge, but not parry. If he fails, he is hit and the spell affects him. The strength of the effect depends on the energy invested. Most Missile spells inflict 1d4 points of damage per point of energy. Damage Resistance – whether natural or from armor – protects normally against damaging Missile spells.

**Blocking Spells**

A Blocking spell is cast instantly as a defense against either a physical attack or another spell. It is the magical equivalent of a block, parry, or dodge (and often counts as one of these defenses; see the spell description for details). You may cast only one Blocking spell per turn, no matter how skilled you are. You cannot attempt a Blocking spell against a critical hit.

If you try a Blocking spell, it automatically interrupts your own concentration. You lose any spell you were preparing exactly as if you had failed the Will roll to resist a distraction. If you are holding (not casting) a Melee spell, it is unaffected. If you are holding a Missile spell, you cannot enlarge it further but may retain it for later use.

Blocking spells do not get an energy cost reduction for high skill.

**Information Spells**

Information spells are cast to gain knowledge. Some require you to touch the subject, while others function at a distance; see Long-Distance Modifiers (box) for range penalties. Spells intended to find things are at -1 per “known” item you choose to ignore in your search. Most Information spells have additional special modifiers, so be sure to read the spell description carefully.

When you cast an Information spell, the GM rolls *for you in secret*. If the spell succeeds, the GM gives you the desired information – the better the roll, the better the information. If the spell fails, the GM says, “You sense nothing.” On a critical failure, the GM lies to you! Regardless of the outcome, you must always pay the full energy cost for the spell.

Information spells generally allow only one attempt per day by each caster (or ceremonial group). “Seek” spells are an exception to this.

Except where specifically noted, Information spells have no duration. They grant a momentary glimpse of insight and end immediately; therefore, you cannot maintain them.

**Resisted Spells**

A spell of any type can also be “Resisted.” A spell like this works automatically only on a critical success. On a regular success, your spell must defeat the subject’s resistance to work.

The subject always has a chance to resist, even if he is unconscious. A conscious subject is aware that something is happening, and may choose not to resist. Individuals who are unconscious, unfamiliar with magic, or wary of hostile magic always try to resist.

To resolve a Resisted spell, you must first succeed at your skill roll. If the spell has a single subject (that is, it isn't an Area spell), you have a penalty equal to the subject's Magic Resistance (p. 67), if any – even if he is willing! On a failure, the spell fails and the subject notices nothing. On a success, note your margin of success; e.g., if you rolled a 6 against an effective skill of 13, you succeeded by 7. If the subject is living or sapient, the Rule of 16 applies (see *The Rule of 16*, p. 349). There is no such limit if the subject is a spell.

---

**Long-Distance Modifiers**

Use these modifiers for Information spells that work over long distances, such as “Seek” spells. Certain advantages also use these range penalties. If the distance falls between two values, use the *higher*.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 200 yards</td>
<td>0</td>
</tr>
<tr>
<td>1/2 mile</td>
<td>-1</td>
</tr>
<tr>
<td>1 mile</td>
<td>-2</td>
</tr>
<tr>
<td>3 miles</td>
<td>-3</td>
</tr>
<tr>
<td>10 miles</td>
<td>-4</td>
</tr>
<tr>
<td>30 miles</td>
<td>-5</td>
</tr>
<tr>
<td>100 miles</td>
<td>-6</td>
</tr>
<tr>
<td>300 miles</td>
<td>-7</td>
</tr>
<tr>
<td>1,000 miles</td>
<td>-8</td>
</tr>
</tbody>
</table>

Add another -2 per additional factor of 10.
The subject then attempts a resistance roll. A character resists using the attribute or other trait indicated in the spell description – usually HT or Will. The subject's Magic Resistance, if any, adds to his resistance. A spell resists using the caster's effective skill when he cast the spell.

Compare the subject's resistance roll to your skill roll in a Quick Contest. If you win, your spell affects the subject. If you lose or tie, the spell has no effect – but you must still pay the full energy cost! A conscious subject feels a slight mental or physical wrench (depending on which attribute he resisted with), but no other effect. You know whether or not the subject resisted your spell.

Resisted Area Spells: When casting an Area spell that is Resisted, make the usual success roll for the spell and record your margin of success if you succeed. Everyone in the area gets a resistance roll, and those with Magic Resistance get double the usual benefit. Your spell affects those who make their roll by less than you did.

Special Spells
These spells follow special rules given in the spell description.

On the following pages are 93 spells, picked for their utility in a beginning fantasy or horror campaign. But this is only a glimpse of what magic can do – see GURPS Magic for hundreds more spells!

Each spell includes:

Name of Spell and the Class(es) it belongs to. A “(VH)” indicates an IQ/Very Hard spell; otherwise, it’s IQ/Hard.

Description: The spell’s effects, special rules, etc. If the spell requires particular items, assume it uses them up unless the description states otherwise.

Duration: The time the spell’s effects last. If you maintain the spell, it lasts for another period equal to this. Spells with an instantaneous effect do not list duration and cannot be maintained.

Cost: The energy (FP or HP) spent when you cast the spell. If given as Base Cost, this is the cost per yard of radius of an Area spell. Maintainable spells also give a cost to maintain.

Time to Cast: If no time is given, the spell requires one second of concentration and takes place at the end of your turn.

Prerequisites: Other spells you must know (have placed at least one point in the spell) before you may study this spell, as well as any Magery, IQ, or other requirements.

Air Spells
These spells deal with the traditional magical “element” of air. Except as noted, assume that “air” is normal breathing air at one atmosphere of pressure.
Purify Air

This spell removes all impurities from the air in its area of effect. It is often used to neutralize the effects of poisonous gas or vapors. Note that a room full of smoke may safely be purified one section at a time – but truly deadly vapors must all be removed at once, or some may escape.

This spell also turns old “stale” air into fresh breathable air. The air in a one-yard radius, if not renewed from the outside, will last 45 minutes for one person at rest, less for multiple persons or someone violently exercising (GM's discretion).

Duration: Works instantly. Purification is permanent.

Base Cost: 1. Cannot be maintained; must be recast.

Create Air

This spell manufactures air where none exists. When cast where there is already air, it produces an outward breeze lasting about five seconds. When cast in a vacuum, it instantly creates breathable air. When cast within earth, stone, or other material, it fills any empty spaces with air; but does not burst the stone. When cast underwater, it makes bubbles! It cannot be cast inside a living being.

Duration: Breeze, bubbles, etc. last 5 seconds. Air created is permanent.

Base Cost: 1. Cannot be maintained; must be recast.

Prerequisite: Purify Air.

Shape Air

This spell lets the caster create movements of air over a small area. The caster must choose a starting point (calculate distance penalties to that point). The wind starts there and blows in a stream one yard wide, for a distance in yards equal to 5 times the energy put into the spell, and then dissipates. This may cause knockback (see Knockback, p. 378) on someone it hits; each second, roll 1d per full 2 points of energy in the spell. Treat this as damage for knockback purposes only (this spell does not cause injury).

Duration: 1 minute.

No-Smell

Removes the subject’s odor and makes it (or him) totally undetectable by smell. Any possessions are also affected. This spell changes no other properties of the subject.

Duration: 1 hour.

Cost: 2; same to maintain.

Prerequisite: Purify Air.

Predict Weather

Lets the caster forecast the weather accurately for a given location over a given time. This forecast does not take magical meddling into account, or predict the actions of other wizards!

Cost: Twice the length of the forecast, in days. Double the cost for a location outside the general area (say, over the horizon). Quadruple the cost for a place on another continent. This spell cannot predict weather on other planets or planes.

Time to cast: 5 seconds per day forecast.

Prerequisites: At least four Air spells.

Breathe Water

Lets the subject breathe water as though it were air. Subject does not lose the ability to breathe ordinary air! This spell is also considered a Water spell.

Cost: 4 to cast; 2 to maintain.

Prerequisites: Create Air and Destroy Water (p. 253).

Walk on Air

Temporarily grants the subject the Walk on Air advantage (p. 97). If the subject falls for any reason (e.g., injury), the spell is broken! If the spell is recast immediately, he falls for only one second (about 5 yards) and then “lands” on the air (taking 1d damage) – unless he hits ground before then. If he's 10 feet over a lava pit, too bad!

Duration: 1 minute.

Cost: 2 to cast; 2 to maintain.

Prerequisite: Shape Air.

Earth to Air

This spell turns earth or stone into air, which can be valuable to someone who is trapped underground! The more energy the caster spends, the more earth he can transform, but he is limited to regular shapes with the largest dimension no more than four times the smallest one. This spell is also considered an Earth spell.

Duration: Permanent.

Cost: 1 to transform one cubic foot of earth/stone to air, giving enough air for one person to breathe for 1 minute. To transform larger quantities of earth/stone at once, the cost is 5 per cubic yard.

Time to cast: 2 seconds.

Prerequisites: Create Air and Shape Earth (p. 245).
**Stench**

**Area**

Produces a cloud of vile, yellowish gas that reeks of brimstone. Until it dissipates, anyone who breathes it must make a HT roll or take 1d damage. Roll once per minute. Those in the area also begin to suffocate (see **Suffocation**, p. 436). The cloud is heavy, and "rolls" downhill if the ground is not level. The rate of dissipation depends on the area and presence of wind; indoors, it usually lasts until the spell expires, but outdoors on a windy day, it might only last 10 seconds or so.

*Duration:* 5 minutes, except in windy areas.

**Base Cost:** 1. Cannot be maintained; must be recast.

**Prerequisite:** Purify Air.

**Lightning**

**Missile**

Lets the caster shoot a bolt of lightning from his fingertip. This has 1/2D 50, Max 100, Acc 3. Treat any metal armor as DR 1 against this spell! If the target is wounded, he must make a HT roll, at -1 per 2 HP suffered, or be stunned. He may attempt a HT roll each turn thereafter to recover. Against electronic equipment, treat this attack as if it had the Surge damage modifier (see **Surge**, p. 105).

Lightning behaves unpredictably around conductors. A lightning bolt cannot be fired through a metal grid, between bars, from within a car, etc.—it jumps to the metal and is lost. However, the GM may (for instance) allow a wizard to shoot a lightning bolt into a metal floor. This would not electrocute those on it, but could shock them all, interrupting concentration and doing slight damage (no more than 1 point, and possibly none at all). The GM may encourage creative use of lightning until it becomes a nuisance . . .

**Cost:** Any amount up to your Magery level per second, for three seconds. The bolt does 1d-1 burning damage per energy point.

**Time to cast:** 1 to 3 seconds (the caster's fingers sparkle as the spell builds up).

**Prerequisites:** Magery 1 and at least six other Air spells.

**Body Control Spells**

These spells directly affect the body. Except as noted, they only affect living beings.

**Itch**

**Regular; Resisted by HT**

Causes the subject to itch fiercely in a spot of the caster's choice. The subject is at -2 DX until he takes one full turn to scratch (more, if armor, etc. is in the way!). Only one Itch spell can affect a given subject at a time.

*Duration:* Until the subject takes a turn to scratch.

**Cost:** 2. Cannot be maintained; must be recast.

**Prerequisite:** Itch.

**Spasm**

**Regular; Resisted by HT**

Can be directed against any of the subject's voluntary muscles. Directed against a hand, it causes the subject to drop whatever he is holding (usually a weapon). If the subject is in the middle of a lengthy spell requiring gestures, he must make a DX roll or start over. Ingenious casters will find other uses . . .

*Duration:* A moment.

**Cost:** 2. Cannot be maintained; must be recast.

**Prerequisite:** Itch.

**Pain**

**Regular; Resisted by HT**

The subject feels a stab of agonizing pain. He must make a Will roll to avoid crying out. If he is in a precarious position (climbing, for instance), he must make a DX roll to avoid catastrophe! His DX and all DX-based skills are at -3 for the next turn only. If the subject is in the middle of a spell requiring gestures, he must roll vs. Will or start over. High Pain Threshold gives +3 to the Will and DX rolls above; Low Pain Threshold gives -4.

*Duration:* 1 second.

**Cost:** 2. Cannot be maintained; must be recast.

**Prerequisite:** Spasm.

**Clumsiness**

**Regular; Resisted by HT**

The subject suffers -1 to his DX and DX-based skills for every point of energy put into the spell.

*Duration:* 1 minute.

**Cost:** 1 to 5 to cast; half that amount to maintain (round up).

**Prerequisite:** Spasm.

**Hinder**

**Regular; Resisted by HT**

The subject is at -1 to his Move and Dodge scores for every point of energy put into the spell. This spell is also considered a Movement spell.

*Duration:* 1 minute.

**Cost:** 1 to 4 to cast; same to maintain.

**Prerequisite:** Clumsiness or Haste (p. 251).

**Rooted Feet**

**Regular; Resisted by ST**

The subject's feet are glued in place! He may try another resistance roll at -5 every turn, against the original spell skill roll, to break free. While the spell continues, the subject's skill with any weapon except a ranged weapon is at -2 and his Dodge score is cut in half (round down).

*Duration:* 1 minute, or until subject breaks free.

**Cost:** 3. Cannot be maintained; must be recast.

**Prerequisite:** Hinder.

**Paralyze Limb**

**Melee; Resisted by HT**

The caster must strike the subject on a limb to trigger this spell (hits elsewhere have no effect). Armor does not protect. Resolve resistance on contact. If the caster wins, the subject's limb is paralyzed; it is considered crippled for one minute.

*Duration:* 1 minute.

**Cost:** 3. Cannot be maintained; must be recast.

**Prerequisites:** Magery 1 and five Body Control spells, including Pain.

**Wither Limb**

**Melee; Resisted by HT**

The caster must strike the subject on a limb to trigger this spell. Armor
Paralyze Limb

Sense Emotion

Sense Foes

DEATHtouch

COMMUNICATION

AND EMPATHY

SPELLS

These spells deal with discerning (or concealing) thought and intent. For spells that manipulate emotions and loyalties, see Mind Control Spells (p. 250).

Sense Foes

Information; Area

Tells the caster if the subject has hostile intent, and what the degree of hostility is. Can be cast on one person or a whole area. If cast over an area, this spell only detects that someone is hostile, without telling who.

Base Cost: 1 (minimum 2).

Sense Emotion

Regular

Lets the caster know what emotions the subject is feeling at the moment. It works on any living being, but is not much use except on sapient creatures! This also tells how loyal the subject is to the caster (see Loyalty of Hirlings, p. 518).

Cost: 2.
Prerequisite: Sense Foes.

Truthsayer

Information; Resisted by Will

This tells whether the subject is lying or not. May be cast in two ways:

1. To tell whether the subject has told any lies in the last five minutes.
2. To tell whether the last thing the subject said was a lie.

May also give an indication of how great the lie is. If the caster is not touching the subject, calculate range as for a Regular spell.

Cost: 2.
Prerequisite: Sense Emotion.

Mind-Reading

Regular; Resisted by Will

Lets the caster read the subject's mind. Works on any living being, but is most useful on sapient creatures. Detects only surface thoughts (what the subject is thinking at that moment). The subject is not aware his mind is being read, except in the case of a critical failure.

Modifiers: -2 if the caster does not know the subject's native language; -2 if the subject is of a different race – or -4 or more if the subject is totally alien!

Duration: 1 minute.
Cost: 4 to cast; 2 to maintain.
Time to cast: 10 seconds.
Prerequisite: Truthsayer.

Hide Thoughts

Regular

This spell resists all mind-reading and thought-control attempts on the subject. The "attacking" ability must win a Quick Contest against this spell in order to affect the subject. If the attacking ability pierces Hide Thoughts, the subject still gets his normal resistance roll (roll separately). This spell does not affect previously established mental control.

Duration: 10 minutes.
Cost: 3 to cast; 1 to maintain.
Prerequisite: Truthsayer.

Earth Spells

These spells deal with the traditional magical “element” of earth. Except as noted, none of these spells affect stone or metal.

Seek Earth

Information

This spell tells the caster the direction and approximate distance of the nearest significant amount of any one type of earth, metal, or stone. Use the long-distance modifiers (p. 241). Any known sources of that material may be excluded if the caster specifically mentions them before beginning.

Cost: 3.
Time to cast: 10 seconds.

Shape Earth

Regular

Lets the caster move earth and shape it into any form. If the form is stable (e.g., a hill), it remains permanently after shaping. An unstable form (e.g., a column or wall) lasts only while the spell continues – no special concentration is required – and then collapses.

Earth moved with this spell travels at only Move 2. It can harm no one except by flowing over an immobile person and burying him. If earth is moved onto a person to bury him – or from beneath him, to create a hole – he may move normally on his next turn, to escape. He is trapped only if he fails to do so.

Anyone buried by this spell may try to claw his way out of the loose earth. One roll, at ST-4, is allowed per turn. GMs may make this roll harder if the victim is buried under more than two cubic yards of earth! The victim can hold his breath (see Holding Your Breath, p. 351), but he eventually risks suffocation (see Suffocation, p. 436).

Duration: 1 minute.
Cost: 1 per cubic yard of earth shaped (minimum 2); half that to maintain (round up).
Prerequisite: Seek Earth.

Earth to Stone

Regular

Turns an item of earth or clay into hard stone (but not gemstone).

Duration: Permanent.
Cost: 3 per cubic yard (minimum 3).
Prerequisites: Magery 1 and Shape Earth.
Earth to Air

Regular

As listed under Air Spells (p. 243).

Create Earth

Regular

Lets the caster create good, solid earth where none existed before. This earth must be created in contact with the ground – not hanging in the air or floating in the sea!

Duration: Permanent.
Cost: 2 per cubic yard to create earth from nothingness (minimum 2); 1 per cubic yard to solidify mud into good earth (minimum 1).
Prerequisite: Earth to Stone.

Flesh to Stone

Regular; Resisted by HT

“Petrifies” a living subject (and all his gear!), turning him to stone. Must affect the entire subject.

Duration: Permanent, unless reversed by Stone to Flesh.
Cost: 10.
Time to cast: 2 seconds.
Prerequisite: Earth to Stone.

Stone to Earth

Regular

Turns any kind of stone (including gemstone) into simple earth. Must be cast on a whole stone or block, rather than a part of it.

Duration: Permanent.
Cost: 6 per cubic yard (minimum 6).
Prerequisite: Earth to Stone or any four Earth spells.

Stone to Flesh

Regular

Reverses the effects of Flesh to Stone and brings the victim back to life (stunned). Cannot be used to animate a statue that was never alive.

Duration: Permanent.
Cost: 10.
Time to cast: 5 seconds.
Prerequisite: Magery 2, Flesh to Stone, and Stone to Earth.

Entombment

Regular; Resisted by HT

The earth instantly swallows the subject. He remains in suspended animation, in a tiny spherical chamber 50 feet underground, until rescued by tunneling or the reverse of this spell. A mage who casts Entombment on himself may elect to stay awake, but this is unwise unless he also knows Earth to Air!

Duration: Permanent, unless reversed by this spell.
Cost: 10 (but only 6 to reverse an entombment).
Time to cast: 3 seconds.
Prerequisites: Magery 2 and five Earth spells.

Enchantment Spells

Enchantment spells allow mages to create permanent magic items, and constitute both a college of magic and a class of spells. Since they are only ever used to create artifacts, they appear with the other rules for artifacts in Chapter 17 (see Enchantment Spells, p. 480).

Fire Spells

These spells deal with the traditional magical “element” of fire. Should the volume of a particular fire matter in play, assume that the flames created or controlled by Fire spells shoot six feet high. See Flame (p. 433) for rules for setting things on fire.

Ignite Fire

Regular

This spell produces a single spot of heat, and is used to set fire to a readily flammable object. It works best on paper and cloth, and cannot affect any item that would not burn in an ordinary fire. In particular, it cannot set fire to a living being! Once ignited, the fire burns normally.

Duration: One second.
Cost: Depends on the amount of heat desired:

1 – for an effect as though a match had been held to the subject: lights a candle, pipe, or tinder in one second.

2 – for an effect as though a torch had been held to the subject: ignites paper or loose cloth in one second, ordinary clothes being worn in four seconds.

3 – for an effect as though a blowtorch had been held to the subject: ignites dry firewood or clothes being worn in one second, leather in two seconds, heavy wood in six seconds.

4 – for an effect as though burning magnesium or phosphorus had been held to the subject: ignites coal in one second, heavy wood in two seconds.

Cost to maintain is the same as the original cost to cast.

Create Fire

Area

Fills the area of effect with fire that requires no fuel (if cast in midair; it produces a sphere of flame, which falls to the ground). This is real fire, and will eventually ignite any flammable objects it touches. Cannot be cast within rock, foes, etc.

Duration: 1 minute.
Base Cost: 2; half that to maintain.
Ordinary fires set by this spell do not require maintenance.
Prerequisite: Ignite Fire.

Shape Fire

Area

Lets the caster control the shape of any flame. Each shape change requires a second of concentration. Once shaped, the flame keeps that shape until the spell expires, without concentration. Moving a flame requires constant concentration (the flame moves at Move 5, on the caster’s turn). A natural fire cannot move to a place that it can’t burn, but flame made with the Create Fire spell needs no fuel and can move almost anywhere.

Flame shaped with this spell normally retains its volume. If the fire is “spread out” across twice its original area, it only does half damage; if spread across three times its original area, it does 1/3 damage, and so on.

Duration: 1 minute.
Base Cost: 2; half that to maintain.
Prerequisite: Ignite Fire.

Deflect Energy

Blocking

Deflects one energy attack about to hit the subject – including a beam weapon attack or a Fireball or Lightning spell. Counts as a parry for combat purposes. If the caster is not
the subject, apply distance modifiers as for a Regular spell. Deflected attacks may still hit a target beyond the subject.

Cost: 1.
Prerequisites: Magery 1 and Shape Fire.

**Extinguish Fire**

Area

Puts out all ordinary and magical fires in its area of effect. Has no effect on molten steel, lava, plasma, etc.

Duration: Once out, a fire stays out.
Base Cost: 3.
Prerequisite: Ignite Fire.

**Heat**

Regular

This spell raises the temperature of an object. It does not necessarily produce fire, though most things burn if heated enough. Heat radiates away normally. (Use this as a guideline for playable effects – don’t try to turn the spell into a physics exercise!)

Any wizard planning to make extensive use of this spell should arm himself with a list of the melting points of various materials. The spell can have drawbacks. If you were in jail, you might melt your way through the bars . . . but the radiated heat would probably boil you first.

Duration: 1 minute. Each minute raises the target’s temperature by 20°. Maximum temperature possible with this spell is 2,800°.

Cost: 1 for an object up to the size of a fist, 2 for an object up to one cubic yard, and 2 per cubic yard for a larger object. Temperature change can be doubled to 40° per minute for double cost, tripled to 60° per minute for triple cost, and so on. Slower heating costs no less. Same cost to maintain.

Time to cast: 1 minute.
Prerequisites: Create Fire and Shape Fire.

**Cold**

Regular

This spell is the reverse of Heat (above). It can reduce the temperature of any object to absolute zero, if maintained for long enough.

Duration, Cost, and Time to cast: As for Heat, except each minute lowers the target’s temperature by 20°.
Prerequisite: Heat.

**Resist Cold**

Regular

The subject (person, creature, or object) and anything he carries become immune to the effects of cold and frostbite (but not falling ice, magical ice spears, etc.).

Duration: 1 minute.
Cost: 2 to cast; 1 to maintain. Cost doubles if subject must resist cold of -40° or more; cost triples if subject must resist the cold of absolute zero.
Prerequisite: Heat.

**Resist Fire**

Regular

The subject (person, creature, or object) and anything he carries become immune to the effects of heat and fire (but not electricity).

Duration: 1 minute.
Cost: 2 to cast; 1 to maintain. Cost doubles if subject must resist a blast furnace or volcano; cost triples if subject must resist the heat of a star, nuclear bomb, etc. Only the first level of protection is necessary against combat-type Fire spells.
Prerequisites: Extinguish Fire and Cold.

**Fireball**

Missile

Lets the caster throw a ball of fire from his hand. This has 1/2D 25, Max 50, Acc 1. When it strikes something, it vanishes in a puff of flame. This spell is likely to ignite flammable targets.

Cost: Any amount up to your Magery level per second, for three seconds. The fireball does 1d burning damage per energy point.

Time to cast: 1 to 3 seconds.
Prerequisites: Magery 1, Create Fire, and Shape Fire.

**Explosive Fireball**

Missile

Creates a fireball that affects both its target and things nearby. This has 1/2D 25, Max 50, Acc 1. Can be thrown at a wall, floor, etc. (at +4 to hit) to catch foes in the blast. The target and anyone closer to the target than one yard take full damage. Those further away divide damage by 3 times their distance in yards (round down).

Cost: Any amount up to twice your Magery level per second, for three seconds. The fireball does 1d burning damage per full 2 points of energy.

Time to cast: 1 to 3 seconds.
Prerequisite: Fireball.

**Gate Spells**

These spells manipulate time, space, and dimensions.

**Planar Summons**

Special

Summons a creature, such as a demon or a Thing Man Was Not Meant To Know, from another plane of existence. The GM determines the predisposition and abilities of this being. Each plane requires a different Planar Summons spell. Some exceptionally potent entities might require their own unique spells!

When the creature appears, the caster must immediately try to control it. Treat this as a Quick Contest between the caster’s Planar Summons skill and the entity’s Will. The caster is at +4 if he knows the creature’s “true name.”

If the caster wins, he can give the creature a single command, which it must carry out. On completing this task – or after one hour in any event – the entity usually vanishes. However, some powerful entities can stay for as long as they wish . . .

If the creature resists, the creature reacts badly. An “evil” being commits violence or vandalism, while a “good” one is more likely to depart in a huff and put in a bad word with the caster’s gods. Wild or chaotic creatures are liable to engage in theft and mischief. Extremely alien entities might react in disturbing and unpredictable ways.

Duration: Until the task is done or one hour, whichever is less. Usually.
Cost: 1 point per 10 character points used to build the summoned entity. Minimum energy cost is 20 (although this will not always summon a 200-point being). The GM secretly determines the capabilities of all summoned creatures.

Time to cast: 5 minutes.
Prerequisites: Magery 1 and at least one spell from each of 10 different colleges.
**Plane Shift (VH)**

Special

This spell bodily transports the caster—along with anything he is carrying (up to Heavy encumbrance)—to a particular plane of existence. Each plane requires its own Plane Shift spell. This is a one-way trip. To get back, the caster must know Plane Shift for his home plane or get a wizard in the other plane to cast Banish (p. 252) on him.

This spell gives the caster no special immunity to his surroundings. To safely visit a plane where the natural conditions are vacuum, flame, etc., you must learn the necessary protective spells.

*Duration:* Permanent.
*Cost:* 20.
*Time to cast:* 5 seconds.
*Prerequisite:* Planar Summons for the same plane.

**HEALING SPELLS**

Anyone who tries to heal *himself* has a skill penalty equal to the amount of injury he has. For example, a wizard who is missing 4 HP rolls at -4 to heal himself.

A *critical* failure with a Healing spell always has some appropriate bad effect on the patient, aggravating the injury, creating a new wound, or the like.

**Lend Energy**

Regular

Restores the subject’s lost Fatigue Points, at an energy cost to the caster. Cannot increase the subject’s FP score above its normal maximum.

*Cost:* Any amount; the energy spent by the caster goes to the subject as restored fatigue. Does not eliminate disease or poison, but cures the damage they cause.

**Lend Vitality**

Regular

Temporarily restores the subject’s lost Hit Points, at an energy cost to the caster. Cannot increase the subject’s HP score above its normal maximum.

Since restored HP vanish after one hour and the spell cannot be maintained, this spell is only a stopgap measure.

*Duration:* 1 hour.
*Cost:* Any amount; the energy spent by the caster goes to the subject as restored HP (e.g., if the caster spends 5 energy, the subject regains 5 lost HP). Casting cost is not reduced by high skill. Cannot be maintained; must be recast.

*Prerequisite:* Lend Energy.

**Recover Energy**

Special

This spell allows the caster to rest and recover Fatigue Points more quickly than normal by drawing energy from the mana around him. A normal person recovers 1 FP every 10 minutes. A mage who knows this spell at skill 15 or higher recovers 1 FP every 5 minutes. A mage who knows this spell at skill 20 or higher recovers 1 FP every 2 minutes. No further improvement is possible. Note that this spell works on the caster himself; it cannot restore FP to others.

The mage must rest quietly, but no ritual or die roll is required. While resting, he can maintain ordinary spells, but not those that require concentration.

This spell does not function in low- or no-mana areas.

*Cost:* None.
*Prerequisites:* Magery 1 and Lend Energy.

**Awaken**

Area

This spell renders the subject(s) awake and alert. It instantly counters the effects of stunning. If the subject is very fatigued (less than 1/3 basic FP), this spell renders him alert for an hour but costs him 1 FP at the end of that time. It has no effect on those with 0 or fewer FP. Sleeping or unconscious subjects get a HT roll to awaken, at a bonus equal to the caster’s margin of success. A subject rolls at -3 if unconscious due to injury, at -6 if drugged.

*Base Cost:* 1.
*Prerequisite:* Lend Vitality.

**Minor Healing**

Regular

Restores up to 3 HP to the subject. Does not eliminate disease or poison, but cures the damage they cause.

This spell is risky when used more than once per day by the same caster on the same subject. If you try, roll at -3 for the first repetition, -6 for the second, and so on.

If you have the Physician skill at level 15 or higher, a critical failure with this spell counts only as an ordinary failure—unless you are trying the spell more than once per day on the same subject.

*Cost:* 1 to 3. The same amount is restored to the subject.
*Prerequisite:* Lend Vitality.

**Major Healing (VH)**

Regular

Restores up to 8 HP to the subject. Does not eliminate disease or poison, but cures the damage they cause.

Otherwise, this spell functions just like Minor Healing: it is at -3 per casting on the same subject in one day, and Physician skill at level 15 or higher mitigates the effects of a critical failure.

The penalties for repeated casting accrue separately for Minor Healing and Major Healing. For instance, a caster could cast both spells on the same subject in the same day at no penalty.

*Cost:* 1 to 4. Twice the amount spent is restored to the subject.
*Prerequisite:* Lend Vitality.

**Great Healing (VH)**

Regular

Restores all of the subject’s missing HP. Does not eliminate disease or poison, nor does it restore crippled or missing body parts, but it can heal HP lost to any of these things.

A given subject can only benefit from this spell *once per day*, whether cast by the same caster or by a different caster each time.

If you have the Physician skill at level 15 or higher, a critical failure with this spell counts only as an ordinary failure.
Seeker

Aura

SPELLS

Knowledge Spells

These spells provide information. Duration is “instantaneous” unless noted otherwise – that is, the caster gets a flash of knowledge, not a continuing picture.

Detect Magic

Regular

Let the caster determine whether any one object is magical. If the spell is successful, a second casting tells whether the magic is temporary or permanent. A critical success on either roll fully identifies the spell, as for Analyze Magic.

Cost: 2.
Time to cast: 5 seconds.
Prerequisite: Magery 1.

Aura

Information

Shows the caster a glowing halo, or “aura,” around the subject. This aura gives the caster a general insight into the subject's personality – the better the skill roll, the better the insight. The aura also shows whether the subject is a mage (and about how powerful); whether the subject is possessed or controlled in any way; and whether the subject is in the grip of any violent emotion. A critical success detects “secret” traits, such as lycanthropy, vampirism, and unnatural longevity.

All living beings have auras; inanimate things do not. A zombie is detectable by his faint, death-haunted aura, while a vampire retains the aura he had in life. Illusions and created aura, while a vampire retains the aura detectable by his faint, death-haunted mate things do not. A zombie is vampirism, and unnatural longevity.

Modifiers: Long-distance modifiers (p. 241). Something associated with the item sought (e.g., part of a lost person's clothing) should be available at the time of casting; if not, roll at -5. The roll is at +1 if the caster has held or is otherwise familiar with the item sought.

Cost: 3. One try per week.
Prerequisites: Magery 1, IQ 12+; and at least two “Seek” spells (e.g., Seek Earth and Seek Water).

Trace

Regular

May be cast on any object or living being. As long as the spell is maintained, the caster will know where the subject is if he concentrates for a second. Either the subject must be with the caster when the spell is first cast, or the caster must first cast Seeker successfully. Long-distance modifiers (p. 241) apply if subject is not in caster's presence.

Duration: 1 hour.
Cost: 3 to cast; 1 to maintain. One try per day.
Time to cast: 1 minute.
Prerequisite: Seeker.

Identify Spell

Information

Let the caster know what spell or spells have just been cast (within the last five seconds), or are being cast at the moment, on or by the subject. It does not identify the spells on a permanently enchanted item. One casting identifies all spells cast on or by the subject. However, if any of these spells are totally unknown to the caster – not just spells he doesn’t know, but spells he has never heard of – the GM should provide only a general, vague description; e.g., “Some kind of physical protection.” Wizards have heard of every spell in this list unless the GM rules that some are secret, but wizards have never heard of new spells created by the GM or players.

Cost: 2.
Prerequisite: Detect Magic.

Analyze Magic

Information; Resisted by spells that conceal magic

Tells the caster exactly what spells are on the subject. If the subject has more than one spell on it, Analyze Magic identifies the one that took the least energy and tells the caster “there are more spells.” It can then be cast again to determine the next spell, and so on. Like Identify Spell, above, it gives limited results when faced with a spell the caster has never heard of.

Cost: 8.
Time to cast: 1 hour.
Prerequisite: Identify Spell.

Light and Darkness Spells

These spells affect not just visible light, but also infrared and ultraviolet light. Spells that provide illumination allow those with Infravision and Ultravision to see, while spells that block ordinary vision also block those senses.

Light

Regular

Produces a small light, like a candle flame. It stays still unless the caster concentrates on moving it; then it can travel at Move 5.

Duration: 1 minute.
Cost: 1 to cast; 1 to maintain.

Continual Light

Regular

When cast on a small object (up to fist-sized or 1 lb.) or a small part of a larger object, this spell makes that object glow with white light.

Duration: Variable. Roll 2d for number of days. Does not count as a spell “on.”
Cost: 2 for a dim glow, 4 for the brightness of a fire, 6 for a glare so bright as to be painful at close range.
Prerequisite: Light.
Darkness

Area

Cloaks the area of effect in pitch darkness. A person inside the area can see out normally, but can see nothing else within the area. Those outside the area can see only darkness within. Thus, attacks out of darkness suffer no penalty, but attacks into darkness are at a penalty; see Visibility (p. 394) for combat rules.

The Dark Vision advantage lets you see through a Darkness spell, but Night Vision and Infravision do not.

Duration: 1 minute.
Base Cost: 2 to cast; 1 to maintain.
Prerequisite: Continual Light.

Blur

Regular

This spell makes the subject harder to see and therefore harder to hit with attacks. Each point of energy gives -1 to the effective skill of any attack on the subject, to a maximum of -5.

Duration: 1 minute.
Cost: 1 to 5 to cast; the same to maintain.
Time to cast: 2 seconds.
Prerequisite: Darkness.

Counterspell

Regular; Resisted by subject spell

This spell nullifies any one ongoing spell. It cannot "counter" spells that make a permanent change in the world (e.g., Extinguish Fire, Flesh to Stone, or Zombie) and it cannot affect permanently enchanted items, but it can counter spells cast using magic items. The "subject" of Counterspell may be either the subject of the spell to be countered or the person who cast that spell.

Counterspell is a single spell – but to counter a given spell, you must also know that spell. Roll against the lower of your Counterspell skill or your skill with the spell being countered. You must win a Quick Contest with the target spell to cancel it. You can cast multiple Counterspells to negate an Area spell piece by piece.

Cost: Half that of the spell countered, not counting bonuses the other caster got for high skill.
Time to cast: 5 seconds.
Prerequisite: Magery 1.

Dispel Magic

Area; Resisted by subject spells

This spell negates other spells within the area. It has no effect on enchanted items – just on spells. Each spell resists separately.

Duration: Dispelled magic is permanently gone.
Base Cost: 3.
Time to cast: 1 second for each energy point spent.
Prerequisites: Counterspell and at least 12 other spells (any type).

Mind Control Spells

These spells have no effect on subjects that lack intelligence (IQ 0) or free will (in general, this means the Automaton meta-trait; see p. 263). Thus, they do not work on most golems, robots, zombies, etc.

Foolishness

Regular; Resisted by Will

The subject suffers -1 to his IQ and IQ-based skills (including spells) for every point of energy put into the spell. The GM may also require an IQ roll to remember complex things while under the influence of this spell.

Duration: 1 minute.
Cost: 1 to 5 to cast; half that amount to maintain (round up).
Prerequisite: IQ 12+.

Forgetfulness

Regular; Resisted by Will or skill

Causes the subject to forget one fact, skill, or spell temporarily. The skill or spell cannot be used while Forgetfulness is in effect. If (for instance) a forgotten spell is a prerequisite for other spells, the other spells can still be used, at -2 to skill.

Duration: 1 hour.
Cost: 3 to cast; 3 to maintain.
Time to cast: 10 seconds.
Prerequisites: Magery 1 and Foolishness.

Daze

Regular; Resisted by HT

Subject looks and acts normal, but does not notice what is going on around him, and will not remember it.
later. A dazed guard will stand quietly while a thief walks past! Any injury, or successful resistance to a spell, causes the subject to snap out of the daze and return to full, alert status.

*Duration:* 1 minute.
*Cost:* 3 to cast; 2 to maintain.
*Time to cast:* 2 seconds.
*Prerequisite:* Foolishness.

**Mass Daze**

*Area; Resisted by HT*

As Daze, but can be cast over an area.

*Duration:* 1 minute.
*Base Cost:* 2 to cast; 1 to maintain.
*Minimum radius:* 2 yards.
*Time to cast:* 1 second for each point spent.
*Prerequisites:* Daze and IQ 13+.

**Sleep**

*Regular; Resisted by HT*

Subject falls asleep. If standing, he falls – but this does not wake him. He can be awakened by a blow, loud noise, etc., but will be mentally stunned (see Effects of Stun, p. 420). The Awaken spell (p. 248) arouses him instantly. If not awakened, he will sleep for around eight hours and awaken normally.

*Cost:* 4.
*Time to cast:* 3 seconds.
*Prerequisite:* Daze.

**Mass Sleep**

*Area; Resisted by HT*

As Sleep, but can be cast over an area.

*Base Cost:* 3. Minimum radius 2 yards.
*Time to cast:* 1 second for each point spent.
*Prerequisites:* Sleep and IQ 13+.

**Command**

*Blocking; Resisted by Will*

Lets the caster give the subject one immediate command – a word and a gesture, or at most two words – which the subject must obey. If the subject is unable to fulfill the command immediately or on his next turn, the spell has no effect. Some examples:

“Drop it!” – the subject drops whatever he was holding.

“Look!” – the subject looks in the direction the caster indicates.

“Wait!” – the subject takes the Wait maneuver on his next turn.

*Cost:* 2.
*Prerequisites:* Magery 2 and Forgetfulness.

**Movement Spells**

These spells physically manipulate the subject or affect his movement abilities.

**Haste**

*Regular*

Increases the subject’s Move and Dodge scores by up to 3.

*Duration:* 1 minute.
*Cost:* 2 to cast, and 1 to maintain, per point added to the subject’s Move and Dodge.
*Time to cast:* 2 seconds.

**Hinder**

*Regular; Resisted by HT*

As listed under *Body Control Spells* (p. 244).

**Great Haste (VH)**

*Regular*

Speeds the subject up a lot. In effect, the subject has one level of Altered Time Rate (p. 38) for the duration of the spell.

*Duration:* 10 seconds.
*Cost:* 5. Cannot be maintained; must be recast. At the spell’s end, the subject also loses 5 FP (unless the caster was the subject).
*Time to cast:* 3 seconds.
*Prerequisites:* Magery 1, IQ 12+, and Haste.

**Apportation**

*Regular; Resisted by Will*

Lets the caster move physical objects without touching them. This spell levitates its subject at Move 1 – not fast enough to do damage with it. Living subjects get to resist with Will.

*Duration:* 1 minute.
*Cost:* 1 for an object up to 1 lb. in weight; 2 for an object up to 10 lbs.; 3 for an object up to 50 lbs.; 4 for an object up to 200 lbs.; and 4 for each additional 100 lbs. Cost to maintain is the same.
*Prerequisite:* Magery 1.

**Lockmaster**

*Regular; Resisted by Magelock*

Opens locks magically. A Magelock spell gets a roll to resist Lockmaster. Any modifiers for the difficulty of the lock that would apply Lockpicking skill also affect this spell.

*Duration:* Once opened, a lock stays open until closed.
*Cost:* 3. Cannot be maintained.
*Time to cast:* 10 seconds.
*Prerequisites:* Magery 2 and Apportation.

**Deflect Missile**

*Blocking*

Deflects one missile about to hit the subject – including any Missile spell. Counts as a parry for combat purposes. If the caster is not the subject, apply distance modifiers as for a Regular spell. Deflected attacks may still hit a target beyond the subject.

*Cost:* 1.
*Prerequisite:* Apportation.

**Necromantic Spells**

These spells deal with death, the dead, and spirits. They affect corpses and spirits of all races, unless otherwise noted in a racial description.

**Death Vision**

*Regular*

The subject sees a vivid presentiment of his own death. This might be a vision of the future or a false vision from another possible future – but it is always chilling. The subject is mentally stunned until he can make his IQ roll to shake off the effects of the spell. This spell can also be useful to the subject, by pointing out a possibly deadly hazard.

*Duration:* 1 second.
*Cost:* 2.
*Time to cast:* 3 seconds.
*Prerequisite:* Magery 1.
Sense Spirit

Information; Area

Tells the caster if there are any ghosts, spirits, undead, or similar supernatural entities within the area of effect. On a good roll, it gives a general impression of what kind of being is present. Caster may, at the time of casting, limit the spell to a specific type of entity, or exclude a given type.

Base Cost: 1/2.
Prerequisite: Death Vision.

Summon Spirit

Information; Resisted by spirit's Will

Lets the caster talk to the spirit of a dead person. The subject resists at -5 if he was a friend of the caster. If the spell succeeds, the subject will answer one question, to the best of his knowledge, as if the time he died, and one more per minute he remains.

If the spell fails, that caster (or ceremonial group) may not summon that spirit again for one year. A critical failure means the caster summoned a malignant spirit, who lies deliberately.

Modifiers: -5 if you don't know the subject's full name, -1 if it has been more than a month since the subject's death, -2 if more than a month, -3 if more than a year, -4 if more than 10 years, -5 if more than 50 years, and -6 if more than 500 years.

Duration: 1 minute.
Cost: 20 to cast; 10 to maintain.

Zombie

Regular

The subject of this spell must be a relatively complete dead body. The condition of the corpse determines the result: a fresh body produces a zombie, a skeleton produces an animated skeleton, and an old, dry body produces a walking mummy. The animated corpse becomes an undead servant of the caster. It attributes are based on those of the original body, as are its physical advantages and DX-based skills. It does not have the "soul," mental traits, IQ-based skills, or memories of the living person. The GM determines its exact abilities, as appropriate to the campaign.

Duration: The zombie remains animated until destroyed.
Cost: 8, multiplied by 1 + SM for creatures larger than human-sized.
Time to cast: 1 minute.
Prerequisites: Summon Spirit and Lend Vitality.

Turn Zombie

Area

Inflicts 1d of injury on anything in the area that was animated using the Zombie spell; DR does not protect. In addition, roll 1d for each zombie. On a 1, it turns and flees from the caster.

Duration: Successfully turned undead will avoid the caster for one day.
Base Cost: 2. Cannot be maintained; must be recast.
Time to cast: 4 seconds.
Prerequisite: Zombie. (This spell is common among those who have Power Investiture.)

Banish

Special; Resisted by Will

This spell sends an extradimensional visitor (e.g., a demon) back to its plane of origin. It can only be cast if the caster is in his home dimension. In an alien plane, you could not "banish" yourself back home, but a native of that plane could banish you. This spell does not work on a creature that is already in its home dimension.

Resolve the Banish attempt as a Quick Contest: the caster's Banish skill vs. the subject's Will. If the caster wins, the subject immediately returns to its home plane. It cannot return for one month. Anything that it brought with it when it appeared (e.g., weapons) vanishes with it. Other things it may be carrying (e.g., screaming victims) stay behind.

Note that certain powerful creatures are resistant or even immune to this spell.

Modifiers: +4 if the caster knows the entity's "true name"; -5 if the caster does not know the subject's plane of origin . . . and an extra -1 if he believes he knows where the creature came from, but is wrong!

Cost: 1 point per 10 character points the subject is worth. Minimum energy cost is 10. The caster does not know in advance how much energy the spell will require, and may fall unconscious or even wound himself in casting the Banish.

Time to cast: 5 seconds.
Prerequisites: Magery 1 and at least one spell from each of 10 different colleges.

PROTECTION AND WARNING SPELLS

Shield

Regular

Conjures an invisible shield of magical force that moves to protect the subject from frontal attacks. The Defense Bonus granted by this spell is cumulative with that from an actual shield, but this spell does not allow a subject without a shield to block.

Duration: 1 minute.
Cost: Twice the Defense Bonus given to the subject, to a maximum of the subject's life points.
Armor

Regular

Adds to the Damage Resistance of a living subject. DR from this spell is treated for all purposes like DR from armor, and is cumulative with that from actual armor.

Duration: 1 minute.
Cost: Twice the Damage Resistance given to the subject, to a maximum of 5 (cost 10); half that to maintain.
Prerequisites: Magery 2 and Shield.

DB of 4 (cost 8); half that to maintain.

Prerequisite: Magery 2.

WATER SPELLS

These spells deal with the traditional magical “element” of water. Except as noted, none of these spells affect the water in a human body or any other living creature.

Seek Water

Information

This spell lets the caster determine the direction, distance, and general nature of the nearest significant source of water. Use the long-distance modifiers (p. 241). Any known sources of water may be excluded if the caster specifically mentions them before beginning. Requires a forked stick; roll at -3 if this is not available.

Cost: 2.

Create Water

Regular

Lets the caster create pure water out of nothing. This water may appear in any of several forms. It may appear within a container, or as a globe in midair (it falls immediately). Or it may appear as a dense mist of droplets; in this form, one gallon of water extinguishes all fires in a one-yard radius. Water cannot be created inside a foe to drown him!

Duration: The created water is permanent.
Cost: 2 per gallon created.
Prerequisite: Purify Water.

Purify Water

Special

Lets the caster remove all impurities from water by pouring it through any hoop or ring (or, in a pinch, his own fingers) into a container. Only one skill roll is required, as long as the flow continues.

Duration: Purified water stays pure unless re-contaminated.
Cost: 1 per gallon purified.
Time to cast: Usually 5 to 10 seconds per gallon, unless a large container and ring are used.
Prerequisite: Seek Water.

Base Cost: 2; half that to maintain.

Duration: 1 minute.

Prerequisite: Create Water.

Breathe Water

Regular

As listed under Air Spells (p. 243).

Shape Water

Regular

Lets the caster sculpt water (including ice or steam) into any form, and even move it about. Once given a shape, the water holds it without further concentration until the spell ends. Water moved with this spell travels at Move 3.

A useful shape is a wall of water to stop fiery attacks. Twenty gallons creates a wall 2 yards high ¥ 1 yard wide. This stops Fireball spells and ordinary fire.

Duration: 1 minute.
Cost: 1 per 20 gallons shaped; same cost to maintain.
Time to cast: 2 seconds.
Prerequisite: Create Water.

Fog

Area

Creates an area of dense fog. Even one yard of fog blocks vision. Flaming weapons and missiles lose their extra power in fog. A Fireball loses 1 point of damage per yard of fog it must traverse (e.g., a 3d Fireball that crosses 5 yards of fog inflicts 3d-5 damage), while victims of an Explosive Fireball may count each yard of fog as two yards of distance from the blast. However, no amount of fog can extinguish a fire.

Duration: 1 minute.
Base Cost: 2; half that to maintain.
Prerequisite: Shape Water.

Icy Weapon

Regular

Causes any weapon to become freezing cold. This does not harm the user or the weapon, but an attack with the weapon does +2 damage to most foes if it penetrates DR. Multiply this bonus for any Vulnerability (p. 161) to ice or cold. Add this bonus to the final injury inflicted by the attack – for instance, an “impaling” icy attack is still only good for +2 damage, not +4.

Duration: 1 minute.
Cost: 3 to cast; 1 to maintain.
Time to cast: 3 seconds.
Prerequisite: Create Water.

DB of 4 (cost 8); half that to maintain.

Seek Water

Special

Magelock

Regular; Resist Lockmaster spell

Locks a door magically. The door will not open unless the spell is removed (Counterspell and Lockmaster are both able to counter it) or the door itself is destroyed.

Duration: 6 hours.
Cost: 3 to cast; 2 to maintain.
Time to cast: 4 seconds.
Prerequisite: Magery 1.

Create Water

Regular

Lets the caster create pure water out of nothing. This water may appear in any of several forms. It may appear within a container, or as a globe in midair (it falls immediately). Or it may appear as a dense mist of droplets; in this form, one gallon of water extinguishes all fires in a one-yard radius. Water cannot be created inside a foe to drown him!

Duration: The created water is permanent.
Cost: 2 per gallon created.
Prerequisite: Purify Water.

Destroy Water

Area

Causes water (in any form) to vanish, leaving a vacuum – or perhaps specks of dry impurities. If more water is all around, it rushes in to fill the hole. Good for drying things out, saving a drowning victim, etc. Cannot be used as a “dehydration” attack on a foe.

Duration: Permanent.
Base Cost: 3. In deep water, the area is only 2 yards in height (or depth).
Prerequisite: Create Water.
The rules in this chapter concern psionic characters in worlds where psi powers are possible. If you are not creating a psi, you can safely ignore this material.

“Psionics” (or “psi powers”) are paranormal mental abilities such as telepathy and ESP. They might be mutations or gifts possessed by a rare few individuals; powers common to an entire civilization, race, or other large group; or the result of deliberate experimentation.

The GM decides whether psi exists in his game world – and if so, who can have psionic powers. If psi powers are rare, he is free to require an Unusual Background (p. 96).

### POWERS, ABILITIES, AND TALENTS

The six basic psionic powers are Antipsi, ESP, Psychic Healing, Psychokinesis (PK), Telepathy, and Teleportation. Other psi powers exist in some settings. Three things define each power:

- A set of advantages that represent different ways the power can manifest.
- A special limitation, called a **power modifier**, which, when applied to any of these advantages, turns it into a **psi ability** within the power.
- A **Talent** that makes it easier to use all the psi abilities within the power.

You possess a given power if you have at least one of its psi abilities. You may spend earned points to add new psi abilities within any power you already possess, but you may not buy psi abilities associated with **new powers** without the GM’s permission.

If you possess a particular psi power, you may start out with its psionic Talent. You may also spend earned points to add or improve this Talent later on.

You may also start with a Talent and **no** psi abilities. In that case, you are a “latent” – you have potential but no actual power. You may spend earned points to buy psi abilities within the power with which you have Talent.

Finally, you may take psi abilities as potential advantages (see **Potential Advantages**, p. 33), in which case they will function as if they had the limitations Unconscious Only (p. 115) and Uncontrollable (p. 116) until fully paid for.

### Power Modifier

All psi abilities have a special limitation called a “power modifier.” Each psi power has its own modifier; generally worth -10%. An advantage with a power modifier becomes part of the associated power; and is subject to the restrictions under **Using Psi Abilities** (p. 255). This is a limitation because it converts an ability that would otherwise be impeded only by specific countermeasures into...

---

**Glossary of Psi Terminology**

- **antipsi**: The power to interfere with other psi powers. Also used to describe a psi who possesses this power.
- **ESP**: Extrasensory perception – the power to see, hear, or know things that the ordinary five senses cannot detect.
- **esper**: A psi who possesses ESP.
- **latent**: Someone who possesses a psi Talent but no actual psi abilities. Psis whose abilities have the Unconscious Only limitation might appear to be latent.
- **PK**: Psychokinesis – the power to affect matter with the mind.
- **psi**: The generic term for superhuman mental powers. Also used to describe a person who possesses such powers.
- **psionic**: Of or pertaining to psi powers.
- **psychic healing**: The ability to heal injury and illness with the mind.
- **screamer**: An uncontrolled antipsi. Also called a “jammer.”
- **Talent**: An advantage that makes it easier to use all psi abilities of one type.
- **telepath**: A psi who can read or influence the minds of others.
- **telepathy**: The power of mental communication and control.
- **teleportation**: The power to transport objects across space, time, or dimensions instantaneously.
one that is susceptible to interference from anything that affects the entire power or all psi powers.

**Psionic Talents**

Each power has a psionic Talent; e.g., Telepathy Talent. Talent represents natural or learned ability to control that psi power. You may have Talent without psi abilities (that is, you are a "latent") or psi abilities without Talent (you have raw power, but little flair for directing it).

A Talent gives a bonus to any roll to activate or otherwise use that particular psionic power; e.g., Telepathy Talent 2 would give +2 to use any of your telepathic abilities. This most often modifies IQ, Will, and Perception rolls.

Most Talents cost 5 points/level. You may not buy more than four levels of a given Talent without the GM's permission.

**Psionic Powers**

Six sample psi powers appear below. The abilities listed for each are only guidelines. The GM is free to modify these lists, or to permit players to do so themselves.

**Antipsi**

This is the power of interfering with other psi use. Some psychic researchers think unconscious, uncontrollable Antipsi might be common . . .

You may use earned points to "buy off" any limitation the GM feels practice could negate; e.g., Uncontrollable or Unreliable. You cannot buy off a power modifier, though, or any limitation the GM deems fundamental to the way psi functions in his game world.

**Gaining New Psi Abilities**

You can use earned points to add enhancements to your psi abilities, or to buy higher levels of abilities that come in multiple levels. You can also buy additional Talent with any power you possess. Finally, if you already have a psionic power or Talent, you may buy new abilities within that power.

However, like most advantages, psi abilities are inborn. Under normal circumstances, you cannot add abilities in powers you do not possess. The GM might allow you to gain new powers through dangerous superscience experiments, divine intervention, etc.

**Using Psi Abilities**

A psi ability is an advantage with a modifier. It functions just like the ordinary form of the advantage, with a few exceptions.

Someone with the advantage Resistant to Psionics (see Resistant, p. 80) has a bonus to all rolls to resist psi abilities, whether he is the target or merely caught in the area of effect. This advantage has no effect on abilities that do not allow a resistance roll.

The advantages Neutralize (p. 71) and Psi Static (p. 78) can interfere with psi abilities. These traits may be part of the Antipsi power (below) or have other origins.

Other advantages, technology, etc. specifically noted as affecting psionics in general or one power in particular can also impede psi. For instance, technological mind shields that only affect telepathy are common in science-fiction settings.

**Psionic Talents**

Each power has a psionic Talent; e.g., Telepathy Talent. Talent represents natural or learned ability to control that psi power. You may have Talent without psi abilities (that is, you are a "latent") or psi abilities without Talent (you have raw power, but little flair for directing it).

A Talent gives a bonus to any roll to activate or otherwise use that particular psionic power; e.g., Telepathy Talent 2 would give +2 to use any of your telepathic abilities. This most often modifies IQ, Will, and Perception rolls.

Most Talents cost 5 points/level. You may not buy more than four levels of a given Talent without the GM's permission.

**Psionic Powers**

Six sample psi powers appear below. The abilities listed for each are only guidelines. The GM is free to modify these lists, or to permit players to do so themselves.

**Antipsi**

This is the power of interfering with other psi use. Some psychic researchers think unconscious, uncontrollable Antipsi might be common . . .

You may use earned points to "buy off" any limitation the GM feels practice could negate; e.g., Uncontrollable or Unreliable. You cannot buy off a power modifier, though, or any limitation the GM deems fundamental to the way psi functions in his game world.

**Gaining New Psi Abilities**

You can use earned points to add enhancements to your psi abilities, or to buy higher levels of abilities that come in multiple levels. You can also buy additional Talent with any power you possess. Finally, if you already have a psionic power or Talent, you may buy new abilities within that power.

However, like most advantages, psi abilities are inborn. Under normal circumstances, you cannot add abilities in powers you do not possess. The GM might allow you to gain new powers through dangerous superscience experiments, divine intervention, etc.

**Using Psi Abilities**

A psi ability is an advantage with a modifier. It functions just like the ordinary form of the advantage, with a few exceptions.

Someone with the advantage Resistant to Psionics (see Resistant, p. 80) has a bonus to all rolls to resist psi abilities, whether he is the target or merely caught in the area of effect. This advantage has no effect on abilities that do not allow a resistance roll.

The advantages Neutralize (p. 71) and Psi Static (p. 78) can interfere with psi abilities. These traits may be part of the Antipsi power (below) or have other origins.

Other advantages, technology, etc. specifically noted as affecting psionics in general or one power in particular can also impede psi. For instance, technological mind shields that only affect telepathy are common in science-fiction settings.

**Psionic Powers**

Six sample psi powers appear below. The abilities listed for each are only guidelines. The GM is free to modify these lists, or to permit players to do so themselves.

**Antipsi**

This is the power of interfering with other psi use. Some psychic researchers think unconscious, uncontrollable Antipsi might be common . . .

You may use earned points to "buy off" any limitation the GM feels practice could negate; e.g., Uncontrollable or Unreliable. You cannot buy off a power modifier, though, or any limitation the GM deems fundamental to the way psi functions in his game world.

**Gaining New Psi Abilities**

You can use earned points to add enhancements to your psi abilities, or to buy higher levels of abilities that come in multiple levels. You can also buy additional Talent with any power you possess. Finally, if you already have a psionic power or Talent, you may buy new abilities within that power.

However, like most advantages, psi abilities are inborn. Under normal circumstances, you cannot add abilities in powers you do not possess. The GM might allow you to gain new powers through dangerous superscience experiments, divine intervention, etc.

**Using Psi Abilities**

A psi ability is an advantage with a modifier. It functions just like the ordinary form of the advantage, with a few exceptions.

Someone with the advantage Resistant to Psionics (see Resistant, p. 80) has a bonus to all rolls to resist psi abilities, whether he is the target or merely caught in the area of effect. This advantage has no effect on abilities that do not allow a resistance roll.

The advantages Neutralize (p. 71) and Psi Static (p. 78) can interfere with psi abilities. These traits may be part of the Antipsi power (below) or have other origins.

Other advantages, technology, etc. specifically noted as affecting psionics in general or one power in particular can also impede psi. For instance, technological mind shields that only affect telepathy are common in science-fiction settings.

**Psionic Powers**

Six sample psi powers appear below. The abilities listed for each are only guidelines. The GM is free to modify these lists, or to permit players to do so themselves.

**Antipsi**

This is the power of interfering with other psi use. Some psychic researchers think unconscious, uncontrollable Antipsi might be common . . .

You may use earned points to "buy off" any limitation the GM feels practice could negate; e.g., Uncontrollable or Unreliable. You cannot buy off a power modifier, though, or any limitation the GM deems fundamental to the way psi functions in his game world.

**Gaining New Psi Abilities**

You can use earned points to add enhancements to your psi abilities, or to buy higher levels of abilities that come in multiple levels. You can also buy additional Talent with any power you possess. Finally, if you already have a psionic power or Talent, you may buy new abilities within that power.

However, like most advantages, psi abilities are inborn. Under normal circumstances, you cannot add abilities in powers you do not possess. The GM might allow you to gain new powers through dangerous superscience experiments, divine intervention, etc.

**Using Psi Abilities**

A psi ability is an advantage with a modifier. It functions just like the ordinary form of the advantage, with a few exceptions.

Someone with the advantage Resistant to Psionics (see Resistant, p. 80) has a bonus to all rolls to resist psi abilities, whether he is the target or merely caught in the area of effect. This advantage has no effect on abilities that do not allow a resistance roll.

The advantages Neutralize (p. 71) and Psi Static (p. 78) can interfere with psi abilities. These traits may be part of the Antipsi power (below) or have other origins.

Other advantages, technology, etc. specifically noted as affecting psionics in general or one power in particular can also impede psi. For instance, technological mind shields that only affect telepathy are common in science-fiction settings.
ESP Talent

5 points/level

You have a natural talent for ESP. You get +1 per level to use any ESP ability. You can use earned points to acquire new ESP abilities, even if you did not start with them.

ESP Abilities

The following advantages can be ESP abilities: Channeling (p. 41); Clairvoyance (p. 42); Danger Sense (p. 47); Detect (p. 48), for psis, psionic activity, etc.; Medium (p. 68); Oracle (p. 72); Para-Radar (see Scanning Sense, p. 81); Penetrating Vision (p. 74); Precognition (p. 77); Psychometry (p. 78); Racial Memory (p. 78); and See Invisible (p. 83).

Psychic Healing Talent

5 points/level

You have a natural talent for Psychic Healing. You get +1 per level to use any Psychic Healing ability. You can use earned points to acquire new Psychic Healing abilities, even if you did not start with them.

Psychic Healing Abilities

The following advantages can be Psychic Healing abilities: Detect (p. 48), for disease, poison, etc.; Healing (p. 59); Metabolism Control (p. 68); Regeneration (p. 80); Regrowth (p. 80); and Resistant (p. 80) against most noxious physical effects.

Psionic and Magic

Psi and magic can achieve many of the same effects, such as healing injuries. However, they are different. A spell that detects magic cannot reveal a psi effect, nor can a drug that neutralizes psi powers affect a mage. Psi power comes from unique advantages that can be powerful even if used without Talent, while magic is built around learning individual skills (spells).

However, purely physical or mental effects of the two disciplines can interact – or even cancel. If a psychokinetic creates a fire, it is like any other fire, and water magic can extinguish it normally. And if a mage casts Mind-Reading (p. 245), a telepathic Mind Shield will resist it.

So Which Is Better?

Magic can produce a more diverse range of effects, at a lower point cost, and the average wizard knows far more spells than the typical psi has advantages. So is magic better? Not exactly. Spellcasting requires energy and time, whereas psi abilities, like other advantages, usually need little or no concentration. Psi powers don’t require rituals and are not dependent on mana levels, making a psi effective even if he is bound and gagged, or operating in an area without mana. In the end, both have strengths and weaknesses – and anyone mastering psi and magic will be formidable!
Examples of Psionic Powers

Danielle is a psychokinet. She can levitate and create pyrokinetic flame. She buys these PK abilities as Burning Attack 4d (Psychokinetic, -10%) [18] and Flight (Psychokinetic, -10%) [36]. She also has PK Talent 2 [10]. This gives her +2 to hit with her Innate Attack and to rolls to maneuver with her Flight.

Dai Blackthorn is an esper and a teleporter, as mentioned in Chapter 1 (see p. 12). His ESP takes the form of Danger Sense (ESP, -10%) [14]. He buys his teleportation as Warp (Psionic Teleportation, -10%; Range Limit, 10 yards, -50%) [40]. He has no Talents yet. But he could use earned points to buy ESP Talent or Teleportation Talent later on.

PK Abilities

The following advantages can be PK abilities: Binding (p. 40); Damage Resistance (p. 46), with the Force Field enhancement; Enhanced Move (Air or Water) (p. 52); Flight (p. 56); Innate Attack (p. 60); Super Jump (p. 89); Telekinesis (p. 92); Temperature Control (p. 92); Vibration Sense (p. 96); Walk on Air (p. 97); and Walk on Liquid (p. 97).

Power Modifier: Psychokinet. The advantage is a psi ability within the PK power. Anything that blocks PK will block it. Anything that blocks PK Talent will block it. -10%.

Telepathy

Telepathy is the power of mental communication and control. In most settings, it only works on living, sentient beings such as animals or humans. If for some reason you try to use a telepathic ability on a recording, dummy, etc., your attempt automatically fails.

In most accounts of telepathy, range is highly variable. Telepaths might send signals across the world or even across interplanetary space. The emotional connection between sender and receiver is far more important.

Telepathy Talent

You have a natural talent for Telepathy. You get +1 per level to use any Telepathy ability. You can use earned points to acquire new Telepathy abilities, even if you did not start with them.

Telepathy Abilities

The following advantages can be Telepathy abilities: Animal Empathy (p. 40); Empathy (p. 51); Invisibility (p. 63); Mind Control (p. 68); Mind Probe (p. 69); Mind Reading (p. 69); Mind Shield (p. 70); Mindlink (p. 70); Possession (p. 75); Speak with Animals (p. 87); Special Rapport (p. 88); Telesend (see Telecommunication, p. 91); and Terror (p. 93).

An Affliction (p. 35) or Innate Attack (p. 61) can also qualify if it has the Malediction enhancement (p. 106) and only causes fatigue, stunning, incapacitation, a temporary mental disadvantage, or a DX, IQ, or Will penalty.

Power Modifier: Telepathic. The advantage is a psi ability within the Telepathy power. Anything that blocks Telepathy will block it. -10%.

Teleportation

This is the power of mentally moving yourself or other things across space, time, or dimensions without traversing the distance between.

Teleportation Talent

You have a natural talent for Teleportation. You get +1 per level to use any Teleportation ability. You can use earned points to acquire new Teleportation abilities, even if you did not start with them.

Teleportation Abilities

The following advantages can be Teleportation abilities: Jumper (p. 64); Snatcher (p. 86); and Warp (p. 97).

Power Modifier: Psionic Teleportation. The advantage is a psi ability within the Teleportation power. Anything that blocks Teleportation will block it. -10%.

Other Powers

The GM is free to create new psi powers. To do so, simply give the power a name, list the associated advantages, and assign a Talent and a power modifier.

This procedure also works for non-psionic powers; see Advantage Origins (p. 33) for ideas. Talent should cost 5 points/level, except for very broad powers. The power modifier depends on the rarity of countermeasures against the power. If they are common, the modifier is -10% if they include variants of Neutralize and Psi Static that can defeat the power, or -5% otherwise. If they are rare, there is no modifier. And if they are nonexistent, the Cosmic enhancement (p. 103) applies.

Example: Comic-book supers often possess powers that encompass attacks (e.g., Binding or Innate Attack), defenses (e.g., Damage Resistance or Resistant), movement powers (e.g., Flight or Permeation), and special senses (e.g., Detect or Scanning Sense) associated with a specific force or element. Each is blocked by an “opposite” power (for instance, Ice Powers can block Flame Powers). And all super powers are susceptible to variant forms of Neutralize and Psi Static.
The character-creation rules are simple, but offer a vast number of options in order to give players all the choices they could want. The sheer volume of material might overwhelm new players – especially gamers who are accustomed to RPGs that offer less flexibility. One way to make character generation less daunting is to use “templates.”

A template is a “quick start” technique. It is a partially completed character sheet that contains only those traits required for a character to fill a certain role believably. It lists the point costs of those traits, and gives the sum as the template’s “cost.”

When you select a template, pay its cost out of your starting points. Use your remaining points to customize the template by buying traits specific to the character concept you have in mind. You can customize further by choosing personal disadvantages and quirks . . . which will in turn give you a few more points you can spend on abilities that define who you are.

There are two main types of templates: character templates and racial templates.

CHARACTER TEMPLATES

A “character template” is a blueprint for a PC who can fill a specific dramatic role or function competently at a particular occupation in a given game world. By specifying many traits in advance, it reduces the work needed to create the character and guarantees that he has the abilities he needs to play his part.

Character templates aren’t just for new players! Experienced players who are pressed for time may find them a useful starting point. GMs can use them to determine the abilities of NPCs, too, but should bear in mind that character templates are intended for heroic PCs as opposed to “generic NPCs.”

HOW TO USE CHARACTER TEMPLATES

First, buy the template by spending points equal to its cost. Do this instead of buying individual attributes, secondary characteristics, advantages, disadvantages, or skills.

Next, select any options detailed in the template. Many templates give you a number of choices from subsets of advantages, disadvantages, or skills. Some also let you increase or decrease attributes and secondary characteristics (if so, these options appear with the advantages and disadvantages).

After you have finished selecting the template’s options, customize it by spending your remaining character points. The template does not affect how you spend these points! You decide this – subject to GM approval, of course.

If the template has fewer disadvantages than the campaign permits (see Disadvantage Limit, p. 11), you may take more, up to the limit. This gives you extra points to spend. The same goes for quirks, which you should always select yourself.

You also need to determine your character’s build, and details such as age and hair and eye color. Assume your tech level is that of the campaign unless otherwise indicated.

Alternating Character Templates

Character templates are not rules! When customizing a template, you are free to alter anything that came with it. After all, a hero plays a leading role
in his saga, and starring roles are rarely typical ones. You can add, subtract, or substitute abilities – but be aware that subtracting items from an occupational template might result in someone who is regarded as incompetent by his peers.

**Combining Character Templates**

You may wish to select more than one template, especially if the GM designs many for the campaign (see Chapter 15). For instance, you might want to take separate templates that define your job, membership in one or more organizations, ethnic origin, and place in the story. But since most templates assume you are taking just the one template, “stacking” them can be a problem. The guidelines below attempt to solve this.

When you combine templates, choose the highest level of each attribute and secondary characteristic from among the templates. Combine the advantage, disadvantage, and skill lists of all the templates, and take all required traits. If multiple templates require a leveled trait, such as a skill, meet the most difficult requirement – do not take repeated traits at higher levels (e.g., a Status 2 knight who is also a Status 1 merchant is Status 2, not Status 3). Add the point costs of all these requirements and pay it. If you have points remaining, consider customizing your character by choosing neglected options from the templates.

If you encounter conflicting advantages and disadvantages, they do not simply cancel out! This is a sign that the templates are incompatible, and that you should not take both. For instance, in most settings, it would be illogical to combine a Status -3 beggar template and Status 2 knight template to create a Status 2 beggar-knight.

**SAMPLE CHARACTER TEMPLATES**

Below are three sample templates for use in a wide variety of settings, from medieval fantasy to modern day. They assume a 100- to 150-point campaign. Note that skills appear in the following format: **Skill Name (Difficulty) Relative Level [Point Cost]-Actual Level.** For instance, “First Aid (E) IQ [1]-11.”

**Investigator**

100 points

You are a detective, investigative reporter, occult investigator, spy, or thief.

**Attributes:** ST 10 [0]; DX 12 [40]; IQ 12 [40]; HT 11 [10].

**Secondary Characteristics:** Dmg 1d-2/1d; Bl. 20 lbs.; HP 11 [2]; Will 12 [0]; Per 13 [5]; FP 11 [0]; Basic Speed 5.75 [0]; Basic Move 5 [0].

**Advantages:** 15 points chosen from among Alternate Identity [5 or 15], Charisma 1-3 [5-15], Contacts [Varies], Cultural Familiarity [1 per culture], Danger Sense [15], Gizmos 1-3 [5-15], Languages (any) [2-6 per language], Legal Enforcement Powers [5-15], Luck [15], Rapid Healing [5], Security Clearance [5-15], Smooth Operator 1 [15], Zeroed [10], +1 to +3 to Per [5-15], and Appearance (Attractive) [4] or (Handsome) [12].

**Disadvantages:** -30 points chosen from among Alcoholism [-15], Curious [-5*], Duty [-2 to -15], Greed [-15*], Honesty [-10*], Pacifism [-5 to -15], Secret [-5 to -30], Sense of Duty (Comrades) [-5], Stubbornness [-5], Wealth (Struggling) [-10], Workaholic [-5], and -1 to ST [-10].

**Primary Skills:** Select three skills from: Climbing, Filch, or Stealth, all (A) DX+1 [4-13]; Criminality, Disguise, Electronics Operation (any), Holdout, Interrogation, Lockpicking, Occultism, Photography, Research, Shadowing, Smuggling, Traps, or Writing, all (A) IQ+1 [4-13]; Observation or Search, both (A) Per+1 [4-14]; Pickpocket (H) DX [4-12]; Computer Programming, Diagnosis, Expert Skill (any), Forensics, Intelligence Analysis, or Law (any), all (H) IQ [4-12]; Detect Lies (H) Per [4-13]; or Computer Hacking (VH) IQ-1 [4-11]. You may opt to trade one choice for two extra secondary or background skills.

**Uniqueness**

You might think that two characters built on the same template would be rather alike. In practice, though, players rarely pick the same options on a given template, and almost always make different purchases with their remaining points. These choices, being the players’ own, color how the characters are played, which in turn keeps them distinct, even though they share a template.

**Are Character Templates “Character Classes”?**

No.

Many RPGs employ “character classes,” which superficially resemble character templates in **GURPS**, but there are several important differences. For one thing, you don’t have to choose a template. And if you do choose one, this does not limit your options; you’re free to customize the template, and you can spend earned points to improve your character in any way you wish.

Even in a campaign where many templates are available, you are free to create your character from whole cloth – and many experienced players will wish to do so. This is fine, because templates don’t contain hidden penalties or drawbacks and aren’t specially priced package deals. Characters built on templates are 100% compatible with those created by hand, and the two can mix freely in a campaign.
**Secondary Skills:** Select two skills from: Beam Weapons (Pistol or Rifle), Brawling, Crossbow, Forced Entry, Garrote, Guns (Pistol, Rifle, or Shotgun), Knife, or Thrown Weapon (any), all (E) DX+1 [2]-13; Boxing, Cloak, Rapier, or Shortsword, all (A) DX [2]-12; Acting or Fast-Talk, both (A) IQ [2]-12; Sex Appeal (A) HT [2]-11; or Acrobatics, Judo, or Karate, all (H) DX-1 [2]-11.

**Background Skills:** Select one skill from: Area Knowledge (any), Computer Operation, or Current Affairs (any), all (E) IQ+1 [2]-13; Carousing or Swimming, both (E) HT+1 [2]-12; Boating (any), Driving (any), Piloting (any), or Riding (any), all (A) DX [2]-12; Streetwise (A) IQ [2]-12; or Hiking or Running, both (A) HT [2]-11.

* Multiplied for self-control number; see p. 120.

---

**Mage**

100 points

You’re a sorcerer, a wizard, a witch, an adept of the black arts . . .

**Attributes:** ST 9 [10]; DX 11 [20]; IQ 13 [60]; HT 11 [10].

**Secondary Characteristics:** Dmg 1d-2/1d-1; BL 16 lbs.; HP 10 [2]; Will 13 [0]; Per 10 [-15]; FP 13 [6]; Basic Speed 5.50 [0]; Basic Move 5 [0].

**Advantages:** Language (Accented) [4]; Magery 2 [25]; and one of Eidetic Memory [5]; Reputation +1 [5], Single-Minded [5], Status 1 [5], Versatile [5], or +1 to Will [5].

**Disadvantages:** -30 points chosen from among Absent-Mindedness [-15], Bad Sight (Mitigator: Glasses, -60% [-10], Bad Temper [-10*], Curious [-5*], Duty [-2 to -15], Gluttony [-5*], Obsession [-5* or -10*], Secret [-5 to -30], Sense of Duty [-2 to -15], and Shyness [-5, -10, or -20].

**Primary Skills:** Select two spells, each (H) IQ+2 [4]-15† or (VH) IQ+1 [4]-14†; Select 10 more spells, each (H) IQ [1]-13† or (VH) IQ-1 [1]-12†; See Chapter 5 for spell list.

**Secondary Skills:** Select two skills from: Hidden Lore (any), Occultism, or Research, all (A) IQ [2]-13; Expert Skill (any), Mathematics (any), Naturalist, or Theology (any), all (H) IQ-1 [2]-12; Dreaming or Meditation, both (H) Will-1 [2]-12; or Alchemy or Thaumatology, both (VH) IQ-2 [2]-11.

**Background Skills:** Select one skill from: Guns (Pistol or Shotgun) or Knife, both (E) DX [1]-11; Computer Operation (E) IQ [1]-13; or Driving (any), Riding (any), Shortsword, or Staff, all (A) DX-1 [1]-10.

* Multiplied for self-control number; see p. 120.
† Includes +2 for Magery.

**Note:** Choose your 12 spells from pp. 242-253. Be sure to give each spell the proper prerequisite. You can modify template cost and your skill with spells by taking a higher or lower level of Magery, or by applying a limitation such as Dark-Aspected.

---

**Soldier of Fortune**

100 points

You’re a warrior. You could be a soldier, pirate, knight-errant, gunslinger, street fighter, or guerrilla.

**Attributes:** ST 11 [10]; DX 13 [60]; IQ 11 [20]; HT 11 [10].

**Secondary Characteristics:** Dmg 1d-1 [2]-1; BL 24 lbs.; HP 11 [0]; Will 11 [0]; Per 11 [0]; FP 11 [0]; Basic Speed 6.00 [0]; Basic Move 6 [0].

**Advantages:** 20 points chosen from among Ambidexterity [5], Charisma 1-4 [5-20], Combat Reflexes [15], Fit or Very Fit [5 or 15], High Pain Threshold [10], Luck [15], Magic Resistance 1-10 [2-20], Outdoorsman 1 [10], Rank 1-4 [5-20], Rapid Healing [5], Reputation [varies], Status 1-4 [5-20], Wealth (Comfortable) [10], +1 to ST or HT [10], +1 to +4 to HP [2-8], and +1 to +4 to Per [5-20].

**Disadvantages:** -35 points chosen from among Alcoholism [-15], Bad Temper [-10*], Bloodlust [-10*], Code of Honor [-5 to -15], Compulsive Carousing or Spending [-5*], Duty [-2 to -15], Fanaticism [-15], Flashbacks (Mild) [-5], Honesty [-10*], Impulsiveness [-10*], Lecherousness [-15*], Overconfidence [-5*], Sense of Duty (Comrades) [-5], and Trademark (Simple) [-5].

**Primary Skills:** Select two skills from: Beam Weapons (any), Crossbow, or Guns (any), all (E) DX+2 [4]-15; Axe/Mace, Bow, Broadsword, Lance, Rapier, or Spear, all (A) DX-1 [4]-14; Karate (H) DX [4]-13; or Tactics (H) IQ [4]-11.

**Secondary Skills:** Select one skill from: Brawling, Fast-Draw (any), Gunner (any), Knife, or Shield (any), all (E) DX+1 [2]-14; or Artillery (any) or Forward Observer, both (A) IQ [2]-11. Select one skill from: Crewman (any) (E) IQ+1 [2]-12; Driving (any), Environment Suit (any), Piloting (any), Riding (any), all (A) DX-1 [2]-13; Hiking (A) HT [2]-11; or Acrobatics (H) DX-1 [2]-12.

**Background Skills:** First Aid (E) IQ [1]-11. Select two skills from: Camouflage or Savoir-Faire (any), both (E) IQ [1]-11; Carousing or Swimming, both (E) HT [1]-11; Free Fall or Stealth, both (A) DX-1 [1]-12; Electronics Operation (Comm or Sensors), Explosives (any), or Leadership, all (A) IQ [1]-10; or Observation, Survival (any), Tracking, or Urban Survival, all (A) Per-1 [1]-10.

* Multiplied for self-control number; see p. 120.

---

**Racial Templates**

In many game worlds, you can play a character that does not belong to the human race. These rules define a “race” as a single, distinct nonhuman species; or one specific type of supernatural being (which might be a ghost, vampire, or other undead, regardless of its species in life; or a particular variety of artificial construct (e.g., a given model of robot).

A “racial template” is a collection of traits that apply to every member of a race. These traits might define the race’s physiology, its psychology, its supernatural powers (if any), and even its dominant culture (at least for a sapient race).
Characteristic Modifiers

Attribute and Secondary

RACIAL TEMPLATES

HOW TO USE

Racial Templates

When you play a member of a non-human race, you must normally take all the traits in its racial template.

Unlike the traits in a character template, racial traits are rarely optional. The sum of the point costs of these traits is the race’s “racial cost.” You must pay this cost to belong to the race. Racial templates express deviations from the human norm; therefore, it costs 0 points to play a human.

Some templates are too expensive for PCs in low-powered campaigns, but the GM may still use them for powerful villains or patrons. The GM might wish to produce weaker versions of such templates for PCs (e.g., a vampire that lacks some of the powers given in legend), but he is also free to reserve such templates for NPCs.

Guidelines for creating racial templates appear in Chapter 15. These are intended for GMs, but the GM might allow players to create their own racial templates in campaigns that feature a vast array of nonhumans – especially supers games, where lone aliens with vast arrays of nonhumans – especially templates in campaigns that feature a human norm.

Many GURPS books also feature racial templates.

Attribute and Secondary Characteristic Modifiers

Racial templates often have attribute or secondary characteristic modifiers; e.g., ST+2 or HP-3. Apply attribute modifiers to the attributes you purchase for your character. Next, recalculate your secondary characteristics to reflect your modified attributes. Finally, apply secondary characteristic modifiers. There is no added point cost for any of this! You paid for these bonuses or penalties when you paid your racial cost.

If an attribute or secondary characteristic does not appear in the racial template, assume it is unchanged from the human norm.

Example: Sangria spends 10 points to buy ST 11. This gives her HP 11, and she spends another 4 points to get HP 13. She then buys the Vampire template (p. 262). This template includes ST+6, giving Sangria ST 17. This ST improvement raises her HP to 19. Since the template gives HP+4 as well, she ends up with HP 23! The racial ST and HP bonuses have no extra cost – Sangria paid for these when she purchased her racial template.

Features and Taboo Traits

A “feature” is a note on how the race differs from humanity when that difference does not grant an advantage or a disadvantage. Features cost 0 points. Examples of features include sterilization and an ordinary tail.

A “taboo trait” is an attribute level, advantage, disadvantage, or skill that is off-limits to members of the race. This, too, is worth 0 points. Normally, only mundane traits are labeled “taboo,” as exotic or supernatural traits require the GM’s permission in any case.

Stacking Templates

You can buy both a racial template and a character template, if you have enough points. Use the guidelines given under Combining Character Templates (p. 259), but bear in mind that while you can discard elements of character templates, you cannot do the same with racial traits.

You might even be able to stack two racial templates in some situations. For instance, an Elf might also be a Vampire. Keep all compatible traits from both templates. Add traits that come in levels (e.g., if an Elf has ST-1 and a Vampire has ST+6, a Vampire Elf has ST+5). Where two traits conflict (e.g., Acute Vision and Blindness), the GM decides which to keep and which to discard. Adjust the combined template cost appropriately.

SAMPLE RACIAL TEMPLATES

Below are four examples of racial templates.

Dragon

260 points

A winged, fire-breathing “lizard,” as smart as a man, and around 20 feet long excluding its tail. It can be good or evil, but it always lusts for treasure. This is a young dragon, but still a fierce foe for a group of adventurers. It might even be suitable as a PC in a high-powered game. Some dragons are reputed to have other abilities, including Alternate Form (Human) (p. 83), Indomitable (p. 60), Terror (p. 93), Unaging (p. 95), and Unfazeable (p. 95).

Attribute Modifiers: ST+15 (Size, -20%) [120].

Secondary Characteristic Modifiers:

SM +2; Will+3 [15]; Per+3 [15].

Advantages: Burning Attack 4d (Cone, 5 yards, +100%; Limited Use, 3/day, -20%; Reduced Range, x1/5, -20%) [32]; Claws (Talons) [8]; Discriminatory Smell [15]; DR 6 (Can’t Wear Armor, -40%) [18]; Enhanced Move 1/2 (Air) [10]; Extra Attack [25]; Extra Legs (Four Legs) [5]; Flight (Winged, -25%) [30]; Longevity [2]; Magery 0 [5]; Night Vision 8 [8]; Striker (Tail; Crushing) [5]; Teeth (Fangs) [2].

Disadvantages: Bad Grip 3 [-15]; Gluttony (12) [-5]; Greed (12) [-15]; Horizontal [-10]; Miserliness (12) [-10].

Dwarf

35 points

Dwarves might be only 2/3 as tall as humans, but they are much longer-lived, with a nose for gold and a flair for all forms of craftsmanship. Dwarves often live in underground halls, and their eyes are adapted to dim light. Many dwarves have Greed or Miserliness, but these are not racial traits.

Attribute Modifiers: HT+1 [10].

Secondary Characteristic Modifiers:

SM -1; Will+1 [5].

Advantages: Artificer 1 [10]; Detect Gold (Vague, -50%) [3]; Extended Lifespan 1 [2]; Night Vision 5 [5].

Felinoind

35 points

“Cat people” often appear in science fiction, fantasy, and horror settings. This is a typical felinoind: humanoid, but with a number of catlike features, including a tail. This could also be the “were-form” of a human with the Alternate Form advantage (p. 83).

Attribute Modifiers: ST-1 [-10]; DX+1 [20].

Advantages: Acute Hearing 2 [4]; Acute Taste and Smell 1 [2]; Catfall [10]; Claws (Sharp) [5]; Combat Reflexes [15]; DR 1 [5]; Teeth (Sharp) [1]; Temperature Tolerance 1 [1].

Disadvantages: Impulsiveness (12) [-10]; Sleepy (1/2 of the time) [-8].

Features: Purring Voice; Tail.
Vampire

150 points

This is a "Bram Stoker"-style vampire. It possesses some, but not all, of the powers and weaknesses that fiction ascribes to bloodsucking undead. Notably, horror-movie vampires often have Supernatural Durability instead of Unkillable (increases cost by 100 points).

Attribute Modifiers: ST+6 [60]; HP+4 [8]; Per+3 [15].

Secondary Characteristic Modifiers:

Advantages: Alternate Forms (Bat, Wolf) [30]; Doesn't Breathe [20]; Dominance [20]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Unliving) [20]; Insubstantiality (Costs Fatigue, 2 FP, -10%) [72]; Night Vision 5 [5]; Speak With Animals (Wolves and bats, -60%) [10]; Unaging [15]; Unkillable 2 (Achilles’ Heel: Wood, -50%) [50]; Vampiric Bite [30].

Disadvantages: Dependency (Coffin with soil of homeland; Daily) [-60]; Divine Curse (Cannot enter dwelling for first time unless invited) [-10]; Draining (Human Blood; Illegal) [-10]; Dread (Religious Symbols; 5 yards) [-14]; Dread (Wolves and bats) [-10]; Unhealing 1d (Human Blood) [-15]; Weakness (Sunlight; 1d/minute) [-60].

Features: Sterile.

Omitting Racial Traits

If you have a good explanation, the GM may permit you to omit a racial trait. If the missing trait has a positive point value, you have a disadvantage that exactly cancels its cost; e.g., omitting racial Combat Reflexes gives "No Combat Reflexes [-15]." Such disadvantages do count against campaign disadvantage limits. If the missing trait has a negative point value, you have an advantage worth just enough to negate it; e.g., omitting racial Paranoia [-10] results in "No Paranoia [10]." You can apply enhancements and limitations to either kind of "replacement trait."

META-TRAITS

A “meta-trait” is a collection of traits that are typical of a particular mental, physical, or supernatural state. In game terms, it functions much like a regular advantage or disadvantage. A meta-trait can be part of a racial template or bought by an individual with exotic abilities. Record a meta-trait instead of its components on templates and character sheets.

With GM approval, you may modify elements of a meta-trait, altering its cost; e.g., to be able to carry things when you have Body of Air (see below), reduce the ST penalty and the corresponding HP bonus, and delete No Manipulators.

Elemental Meta-Traits

Body of Air: Your body is made of gas. ST 0 [-100]; +10 HP [20]; Doesn't Breathe [20]; Flight (Lighter Than Air, -10%) [36]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse) [100]; No Legs (Aerial) [0]; No Manipulators [-50]; Vulnerability (Vacuum and wind-based attacks ¥2) [-20]; and Taboo Trait (Fixed ST) [0]. 36 points.

Body of Air: Your body is made of sand or earth. Doesn't Breathe [20]; DR 2 [10]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse) [100]; Pressure Support 3 [15]; Sealed [15]; Vacuum Support [5]; and Invertebrate [-20]. 175 points.

Body of Fire: Your body is a living flame! If your flames are very hot, increase Burning Attack and DR. ST 0 [-100]; +10 HP [20]; Burning Attack 1d (Always On, -40%; Aura, +80%; Melee Attack, Reach C, -30%) [6]; Doesn't Breathe (Oxygen Combustion, -50%) [10]; DR 10 (Limited: Heat/Fire, -40%) [30]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Diffuse) [100]; No Manipulators [-50]; Weakness (Water; 1d/minute) [-40]; and Taboo Trait (Fixed ST) [0]. 6 points.

Body of Ice: Your body is made of ice. Doesn't Breathe [20]; DR 3 [15]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Homogenous, No Blood) [45]; Pressure Support 3 [15]; Sealed [15]; Slippery 3 [6]; Terrain Adaptation (Ice) [5]; Vacuum Support [5]; Fragile (Brittle) [-15]; Vulnerability (Heat/fire attacks ¥2) [-30]; and Weakness (Intense normal heat; 1d/minute; Variable, -40%) [-12]. 99 points.

Body of Metal: Your body is made of metal. Doesn't Breathe [20]; DR 9 [45]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Homogenous, No Blood) [45]; Pressure Support 3 [15]; Sealed [15]; and Vacuum Support [5]. 175 points.

Body of Stone: Your body is made of rock. Doesn't Breathe [20]; DR 5 [25]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Homogenous, No Blood) [45]; Pressure Support 3 [15]; Sealed [15]; Vacuum Support [5]; and Fragile (Brittle) [-15]. 140 points.

Body of Water: Your body is made of liquid. Amphibious [10]; Chameleon 1 [5]; Constriction Attack [15]; Doesn't...
Machine 25 points

Your body is mostly or completely mechanical, composed of non-living materials such as metal, plastic, and composites – although you might have a few organic parts, such as an outer layer of skin or a brain. Examples include robots, vehicles, and full cyborgs.

This meta-trait includes Immunity to Metabolic Hazards [30], Injury Tolerance (No Blood, Unliving) [25], Unhealing (Total) [-30], and several 0-point features:

- Unhealing (Total) [-30]
- Tolerance (No Blood, Unliving) [25]
- Insubstantiality (Affect Usually On, -50%) [5]; Photographic Memory [10]; and Reprogrammable [-10], 32 points.
- Automaton: A mind lacking self-awareness and creativity. This is typical of many hive-creatures, magical constructs, undead, and simple AIs. You can combine this with the AI meta-trait. Hidebound [-5]; Incurious (6) [-10]; Low Empathy [-20]; No Sense of Humor [-10]; and Slave Mentality [-40], -85 points.

Mentality Meta-Traits Variable

These traits represent common types of nonhuman intelligence:

- AI: A computer mind. Absolute Timing [2]; Digital Mind [5]; Doesn’t Sleep [20]; Intuitive Mathematician [5]; Photographic Memory [10]; and Reprogrammable [-10], 32 points.
- Automaton: A mind lacking self-awareness and creativity. This is typical of many hive-creatures, magical constructs, undead, and simple AIs. You can combine this with the AI meta-trait. Hidebound [-5]; Incurious (6) [-10]; Low Empathy [-20]; No Sense of Humor [-10]; and Slave Mentality [-40], -85 points.

Morphology Meta-Traits Variable

These meta-traits describe some nonhumanoid body configurations that might appear on the racial templates of animals, robots, etc. Feel free to create meta-traits for other body layouts, using these examples as guidelines.

- Domestic Animal: A farm animal, pet, mount, or a trained wild animal. Cannot Speak [-15]; Hidebound [-5]; Social Stigma (Valuable Property) [-10]; and Taboo Trait (Fixed IQ) [0], -30 points.
- Wild Animal: An ordinary animal found in nature. Bestial [-10]; Cannot Speak [-15]; Hidebound [-5]; and Taboo Trait (Fixed IQ) [0], -30 points.

A “meta-trait” is a collection of traits that are typical of a particular mental, physical, or supernatural state; e.g., “machine,” “spirit,” or “quadruped.”

- You have an eight-hour energy reserve and need refueling three times a day. You can modify this with appropriate advantages (e.g., Doesn’t Eat or Drink, for a reactor that can run for years) or disadvantages (e.g., Increased Consumption, for a “gas-guzzler” engine).
- You neither have nor can spend Fatigue Points; see Machines and Fatigue (p. 16).
- Your body does not age. Instead, it wears out, with effects similar to aging.

Note that your Unhealing disadvantage means that the only way for you to regain lost HP is through repairs with Mechanic or Electronics Repair skill (as appropriate).

Several traits not included above are common among machines, notably the advantages Digital Mind, Doesn’t Breathe, Pressure Support, Sealed, and Vacuum Support, and the disadvantages Electrical, Fragile, Maintenance, Numb, Restricted Diet, and Social Stigma (Valuable Property).

Spirit 261 points

You are a noncorporeal entity: ghost, being of pure thought, etc. You are invisible and intangible (except to others with this meta-trait!). You can temporarily become visible, or even solid, but this is draining. However, your senses can perceive the material world at all times, and your magical or psionic abilities, if any, can always affect the physical world.

Spirit includes Doesn’t Breathe [20], Doesn’t Eat or Drink [10], Doesn’t Sleep [20], Immunity to Metabolic Hazards [30], Insubstantiality (Affect Substantial, +100%; Usually On, -40%) [128], Invisibility (Substantial Only, -10%; Usually On, +5%) [38], and Unaging [15].

Many spirit abilities from folklore are not part of this meta-trait; e.g., Injury Tolerance (Homogenous or Diffuse), Magery, and almost any ESP, PK, Telepathy, or Teleportation psi ability (see Chapter 6). Common spirit disadvantages include Compulsive Behavior, Dependency, Divine Curse, Dread, Maintenance, Obsession, and Weakness.

Astral Entity: An astral entity is a spirit that cannot materialize, become visible, or use its supernatural powers in the physical world. Doesn’t Breathe [20]; Doesn’t Eat or Drink [10]; Doesn’t Sleep [20]; Immunity to Metabolic Hazards [30]; Insubstantiality (Always On, -50%) [40]; Invisibility (Substantial Only, -10%) [36]; and Unaging [15], 171 points.
Now it’s time to decide what possessions you have! You can skip this step if you’re Dead Broke or plan to buy equipment only as needed . . . but otherwise, you should choose your gear and figure out how much it costs. If you are a warrior, you need to know how powerful your weapons are and how well your armor protects you. And if you plan to fight or travel, you need to determine the weight of your gear, and specify how you are carrying it.

Starting Wealth
The amount of money you have available to spend on equipment at the start of your career is your “starting wealth” – see Starting Wealth (p. 26). To calculate this, start with the basic amount appropriate to your campaign’s tech level, found under Tech Level and Starting Wealth (p. 27), and multiply it for your “wealth level” (see Wealth, p. 25).

Prices
All prices in GURPS appear in “$: a convenient abbreviation for any baseline unit of currency suitable to the setting. One $ may be one dollar, one credit, one copper piece, or whatever else is appropriate – see Tech Level and Starting Wealth. Prices in this chapter assume a typical sale made by an ordinary merchant, in a locale where the item is usually found, at a time when there is neither a shortage nor a surplus.

Money
The currency in use depends on the game world; see Economics (p. 514). Coin is almost universal. Paper money is conceivable at TL3, common by TL5, and ubiquitous at TL6. Electronic credit and debit cards supplement or possibly replace other currency at TL8.

Two specific examples:

Medieval Coinage: The default assumption is that $1 is a copper farthing, $4 is a silver coin, and $1,000 in silver weighs 1 pound. Gold coins of the same weight are worth about 20 times as much.

Modern Money: The default assumption is that $1 is a bank note (or alloy coin), its value backed by a government or private bank.

These assumptions may vary from world to world.
**Cost of Living**

Your monthly “cost of living” is an average of your typical expenses for one month. It covers food, housing, clothing, and entertainment . . . and, at Status 1 or higher; servants, if this is customary in your society.

Your cost of living depends on your Status (p. 28). The Cost of Living Table (below) gives a “generic” cost of living for each Status level; you must normally pay this at the beginning of each month. However, the GM is free to vary both the amount of money involved and the payment scheme; for instance, he could ask for half at the start of the month and half in the middle.

In most game worlds, you may opt to pay the cost of living for a Status level higher or lower than your own (but never more than Status 8 or less than Status -2). This affects how NPCs react to you, and may have other effects as well.

Living below your Status saves you money, but has negative repercussions. Depending on the level you drop to, these might include unpaid servants quitting, threats from your landlord, malnutrition, eviction, or anything else the GM feels appropriate. The GM may also reduce your effective Status to the level you’re supporting in any situation where your reduced circumstances would cause a negative reaction; e.g., at a “society” function or when meeting strangers who do not recognize your face.

Living above your Status costs more, but gives you a more comfortable lifestyle. It might even let you pose as someone of higher Status – although the GM is free to require a Savoir-Faire (High Society) skill roll as well. But be aware that claiming more Status than you actually possess can lead to a reaction penalty! Actually living above your Status can earn you a bad Reputation – or even qualify as an Odious Personal Habit.

If you get Status free from Rank (p. 29), you need only pay the cost of living for your Status before this bonus, not for your final Status level. Someone else – your organization, the taxpayers, etc. – covers the difference.

**Example:** A person from a good family (Status 1) who becomes president of a sizable country (Status 7) does not need to pay $60 million per month to support the associated lifestyle: personal jet liner, multiple mansions, security service, etc. He pays only the $1,200 per month for Status 1; the state pays the difference. Someone who just wanted to live in a presidential style would have to pay the full amount himself!

**“There’s a lot of statues in Europe you haven’t bought yet.”**

“You can’t blame me. They’ve been making statues for some two thousand years, and I’ve only been collecting for five.”

– Bernstein and Kane, *Citizen Kane*

If you’re on vacation or traveling for most of a month, your expenses will be higher – usually about six times your cost of living, unless you have a Claim to Hospitality (p. 41).

<table>
<thead>
<tr>
<th>Status</th>
<th>Examples</th>
<th>Cost of Living</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Emperor, god-king, lord</td>
<td>$600,000,000</td>
</tr>
<tr>
<td>7</td>
<td>King, pope, president</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>6</td>
<td>Royal family, governor</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>5</td>
<td>Great noble, multinational boss</td>
<td>$600,000</td>
</tr>
<tr>
<td>4</td>
<td>Lesser noble, representative</td>
<td>$60,000</td>
</tr>
<tr>
<td>3</td>
<td>Landed knight, guild master</td>
<td>$12,000</td>
</tr>
<tr>
<td>2</td>
<td>Landless knight, mayor</td>
<td>$3,000</td>
</tr>
<tr>
<td>1</td>
<td>Squire, merchant, priest</td>
<td>$1,200</td>
</tr>
<tr>
<td>0</td>
<td>Freeman, apprentice</td>
<td>$600</td>
</tr>
<tr>
<td>-1</td>
<td>Bondsman, poor citizen</td>
<td>$300</td>
</tr>
<tr>
<td>-2</td>
<td>Serf, street person</td>
<td>$100</td>
</tr>
</tbody>
</table>

**Inns, Hotels, and Other Temporary Accommodations**

When living away from home, you must pay a daily cost of living equal to 20% of your usual monthly cost of living – but if you wish, you can live at one level below your Status without meaningful repercussions. The quality of your accommodations depends on Status. In the modern world, Status -1 means a dingy flophouse; Status 0, a typical hotel or motel; Status 1, a good hotel; Status 2, a luxury hotel suite; and Status 3 and higher, a swanky resort.

You can also use this price tag as a guideline for how much it costs to entertain guests at the Status to which they’re accustomed, and as a rough guide to suitable bribes.

**Food**

Cost of living assumes that you buy groceries and that you, your family, or your staff prepares your meals at home – or that if you always eat out, it’s at places one level below your Status. When you eat out or purchase travel rations, use these guidelines. Treat Status greater than 3 as Status 3, except in unusual cases.

**Restaurant:** 1% of cost of living for breakfast or lunch, or 2% for dinner, based on the Status of the restaurant’s typical patron.

**Travel Rations:** 5% of cost of living for one week. Weighs 14 lbs.

**Liquor:** 1% of cost of living per bottle.
Clothing
You start with a full wardrobe appropriate to your Status — you need not purchase this separately. Cost of living covers normal wear and tear and gradual replacements, but if you suddenly need to replace your clothing, use the rules below.

What Cost of Living Gets You: A Modern Example
Your lifestyle will depend greatly on the campaign tech level. At TL3, Status 7 means you will live like a medieval king: a couple of castles or palaces, lands, and plenty of servants. At TL12, Status 7 is unimaginable . . . you probably have your own private planetoid!
Here’s a modern (TL8) example of how housing and transportation would reflect Status:

- **Status 8**: An estate the size of a small country, multiple palatial mansions, an entire private airline, a yacht the size of an ocean liner, and an army of guards.
- **Status 7**: A palatial mansion, multiple rural estates or retreats, a private jumbo jet, a large yacht, a fleet of vehicles, and an entire agency of security guards.
- **Status 6**: A huge mansion on an estate, a couple of more modest residences, a private jet, a yacht, a fleet of vehicles, and hundreds of functionaries (including a platoon of bodyguards).
- **Status 5**: A large mansion on an estate, one or two smaller townhouses, an executive jet, a yacht, a small fleet of cars, and dozens of functionaries (often including a team of bodyguards).
- **Status 4**: A mid-sized mansion, several other properties, a yacht or private light aircraft, a limousine, a few luxury cars, and many servants (often including at least one bodyguard).
- **Status 3**: A small mansion, a few other properties, a small yacht, a number of luxury cars or other vehicles, and a handful of servants.
- **Status 2**: A large house with grounds, one or two other properties, a couple of expensive cars, a few other vehicles, and a housekeeper.
- **Status 1**: A comfortable house or condominium, a nice new car or a couple of older ones, and perhaps a boat or other recreational vehicle.
- **Status 0**: A house (heavily mortgaged) or large apartment, and a car.
- **Status -1**: A small or shared apartment, or a decaying or derelict house in a bad neighborhood, and possibly a used (or stolen!) car.
- **Status -2**: A room in a flophouse or shelter . . . or a patch of sidewalk.

BUYING EQUIPMENT

You are usually able to buy what you want, within the limits of your starting wealth and your society’s laws. But sometimes, the GM or the adventure may specify some or all of your equipment. For instance, if you’re a soldier on a military mission, you’ll be issued your gear; you don’t have to pay for it, but you can’t choose it yourself. If the adventure calls for it, the GM might impose more severe restrictions — your choices will be extremely limited if you are supposed to be a castaway on an uninhabited island! The GM is the final judge of what you can buy in all cases.

However you acquire your equipment, you should list it on your character sheet. If you accumulate a lot of gear, consider keeping it on a separate sheet. In all cases, you should list possessions you leave at home separately from those you carry in order to keep track of encumbrance (see Encumbrance and Move, p. 17).

Equipment Lists
Each game world has one or more equipment lists that give cost, weight, and other statistics for important items. You can buy items that aren’t on
some equipment has a “Legality Class” (LC). LC rates how likely an item is to be legally or socially acceptable to own and carry. The availability of a given item in a particular society depends on the interaction between the item’s LC and the society’s “Control Rating”; see Control Rating and Legality Class (p. 507).

An item has a LC only if it is likely to be controlled. Ordinary clothing and tools normally do not require a LC. Of course, every society will have exceptions; for instance, revealing clothing might be LC4 in a puritanical society.

**LC4 – Open.** The item is openly available in most societies, but tightly controlled societies might restrict access or use. Examples: Computer; sword; shotgun; motor scooter.

**LC3 – Licensed.** The item requires registration with the authorities in most societies. Registration might involve a fee or examination, and might be denied to criminals, minors, etc. Examples: Automobile; handgun; hunting rifle.

**LC2 – Restricted.** Only military, police, or intelligence agencies may possess the item in most societies – although some licensed civilians might be permitted to keep it on their own property. Examples: Assault rifle; armored vehicles.

**LC1 – Military.** The item is available only to armed forces or secret spy agencies in most societies. Examples: Anti-tank weapons; fighting vehicles.

**LC0 – Banned.** The item is restricted to the armed forces of certain governments, who will go to extremes to keep it out of the hands of individuals and “have-not” governments. Examples: Nuclear and biological weapons.

### Weapons

Adventurers often carry weapons of some sort, whether it's a knight's broadsword, a detective's snub-nosed .38, or a space pirate's blaster pistol.

#### Choosing Your Weapons

To determine what weapons to carry, consider your situation first, and then your skills, strength, and budget. If you can't use it or don't need it... don't buy it.

First, decide why you carry a weapon. Is it for self-defense, intimidation ("Stop or I'll shoot!") battle, or hunting? Do you need a concealed weapon – or a quiet one – or does law or custom let you carry it openly? If you're a pacifist, do you want a weapon just as a threat, or one that you can use to disarm or subdue a foe?

Consider what the law allows, too. Most settings have laws or customs that govern the weapons and armor you may wear on the street or on the job without attracting attention (see Legality Class, box). This applies in historical settings as well. A stranger visiting the average medieval village wearing a suit of plate armor would be every bit as conspicuous – and threatening – as a person carrying an assault rifle into a corner grocery store today!

Also review your skills and Strength. High-tech weapons (such as guns) work equally well for anyone who knows how to use them. Low-tech weapons – clubs, swords, etc. – do much more damage if wielded by a strong person. Either may have a minimum ST.

Finally, look at the weapon's statistics. Each weapon is rated for its TL, weight, cost, and relative legality. A weapon's damage rating is the basic measure of its effectiveness, but there are also factors such as reach, range, rate of fire, and accuracy to consider. To learn what the various statistics imply for combat, read Chapters 11-13.

This section contains information to help you make the choices discussed above. If you are a total nonfighter, you can skim or skip this material!
WEAPON
STATISTICS

Weapon tables provide the items of information explained below. A given column will only appear on a table if it is germane to the weapons on that table. In all cases, “–” means the statistic does not apply, “var.” means the value varies, and “spec.” means to see the relevant weapon skill in Chapter 4 or applicable section of Chapter 13 for special rules.

TL (Tech Level)
The tech level at which the weapon first becomes widespread. You may only buy weapons of your campaign's TL or less, unless you have the High TL trait (p. 23).

Weapon
The general class of weapon in question; e.g., "shortsword" or "assault rifle." Each entry represents a wide range of individual types.

For guns, this entry includes a projectile diameter, or "caliber," given in millimeters (e.g., 9mm) or fractions of an inch (e.g., .50), as customary for the weapon. The letters M (Magnum), P (Pistol), R (Revolver), and S (Short) appear after caliber in situations where different guns have the same caliber but fire different ammunition; for instance, 7.62mm ammo is not interchangeable with shorter 7.62mmS ammo.

Damage
For muscle-powered melee and missile weapons, such as swords and bows, damage is ST-based and expressed as a modifier to the wielder's basic thrusting (thr) or swinging (sw) damage, as given on the Damage Table (p. 16). For example, a spear does "thr+2," so if you have ST 11, which gives a basic thrusting damage of 1d-1, you inflict 1d+1 damage with a spear. Note that swung weapons act as a lever, and so do more damage.

For firearms, grenades, and some powered melee weapons, damage is given as a fixed number of dice plus adds; e.g., a 9mm auto pistol lists “2d+2,” which means that any user would roll 2d and add 2 to get damage.

Armor Divisors: A parenthetical number after damage – e.g., (2) – is an armor divisor. Divide the target’s DR from armor or other sources by this number before subtracting it from your damage (or adding it to the target's HT roll to resist an affliction). For instance, an attack with a divisor of (2) would halve DR. A fractional divisor increases DR: (0.5) multiplies DR by 2; (0.2) multiplies it by 5; and (0.1) multiplies it by 10.

Damage Type: An abbreviation indicating the type of injury or effect the attack causes.

Glossary of Arms and Armor

The following terms and abbreviations appear on the various weapon tables.

8G, 10G, 12G: The gauge of a shotgun – the number of lead balls of its bore size that weigh one pound. Thus, 10G shot is larger than 12G shot.

ATGM: Anti-Tank Guided Missile. An anti-vehicular missile steered to its target by the firer.

auto: A term that designates a semi-automatic firearm.

blaster: A particle-beam weapon.

cartridge rifle: A breech-loading, single-shot rifle.

coif: A hood, usually made of mail.

electrolaser: A weapon that transmits an electrical charge to its target along a path ionized by a low-powered laser beam.

Gauss: Jargon for any electromagnetic gun.

GL: Grenade Launcher.

glaive: A staff tipped with a heavy blade.

gyro: A spin-stabilized (“gyrostabilized”) rocket.

HMG: Heavy Machine Gun.


katana: A long, slightly curved sword used by Japanese samurai.

laminated steel plate: Japanese samurai armor.


lorica segmentata: Roman legionary armor.

morningstar: A flail consisting of a metal ball attached to a haft with a chain.

musket: A single-shot, smoothbore, muzzle-loading long gun.

naginata: A staff tipped with a lightweight blade.

nunchaku: A flail consisting of a pair of short clubs joined by a chain.

PDW: Personal Defense Weapon. A pistol- to SMG-sized automatic weapon that fires powerful ammunition, intended as an emergency weapon for vehicle crews.

prodd: A crossbow that fires lead or stone pellets.

rifle-musket: A single-shot, rifled, muzzle-loading long gun.

RPG: Rocket-Propelled Grenade.

SAM: Surface to Air Missile (e.g., Stinger).


scorpion: A bolt-throwing engine that resembles a giant crossbow.

shuriken: A throwing star. Purportedly used by ninjas.

SMG: Submachine Gun.

sollerets: Metal-plated shoes.
Abbreviation | Damage Type
---|---
aff | affliction
burn | burning
cor | corrosion
cr | crushing
cut | cutting
fat | fatigue
imp | impaling
pi- | small piercing
pi | piercing
pi+ | large piercing
pi++ | huge piercing
spec. | special – see weapon notes

tox | toxic

A victim loses HP equal to the damage that penetrates his DR. Halve this for small piercing attacks; increase it by 50% for cutting and large piercing attacks; and double it for impaling and huge piercing attacks. Subtract fatigue damage from FP instead of HP.

Afflictions cause no injury, but impose a particular affliction on a failed HT roll, as specified in the weapon’s notes. See Damage and Injury (p. 377) for additional rules.

Explosions: An “ex” after crushing or burning damage indicates the attack produces an explosion. This may injure those nearby: divide damage by three times distance in yards from the center of the blast. Some explosions scatter fragments that inflict cutting damage on anyone nearby (see Fragmentation Damage, p. 414). Fragmentation damage appears in brackets; e.g., “3d [2d] cr ex” means an explosion that inflicts 3d crushing damage and throws fragments that do 2d cutting damage. The “danger radius” for fragments is five yards times the dice of fragmentation damage; e.g., 10 yards for [2d]. If an explosive attack has an armor divisor, this only applies to the DR of a target that takes a direct hit – not to those caught in the blast radius or hit by fragments.

Afflictions: Some special weapons don’t list dice of damage. Instead, they give a HT modifier; e.g., “HT-3.” Anyone who is hit must attempt a HT roll at the listed penalty to avoid the effects of the affliction (e.g., unconsciousness). For example, a stun gun calls for a HT-3 roll to avoid being stunned for (20 - HT) seconds. Note that DR (modified by any armor divisor) normally adds to the victim’s HT; for instance, a DR 2 leather jacket would give +2 to your HT roll to resist that stun gun.

Other Effects: A few weapons have additional linked or follow-up effects, noted on a second line. These occur simultaneously with the primary attack on a successful hit. For details, see Linked Effects (p. 381) and Follow-Up Damage (p. 381).

Reach

Melee weapons only. This is the distance in yards at which a human-sized or smaller wielder can strike with the weapon. For example, reach “2” means the weapon can only strike a foe two yards away – not a closer or more distant one.

“C” indicates you can use the weapon in close combat; see Close Combat (p. 391).

Some weapons have a continuum of reaches; e.g., a spear with reach “1, 2” can strike targets either one or two yards away. An asterisk (*) next to reach means the weapon is awkward enough that it requires a Ready maneuver to change reach (e.g., between 1 and 2). Otherwise, you can strike at foes that are at any distance within the weapon’s reach.

Parry

Melee weapons only. A number, such as “+2” or “-1,” indicates the bonus or penalty to your Parry defense when using that weapon (see Parrying, p. 376). For most weapons, this is “0,” meaning “no modifier.”

“F” means the weapon is a fencing weapon (see p. 404).

“U” means the weapon is unbalanced: you cannot use it to parry if you have already used it to attack this turn (or vice versa).

“No” means the weapon cannot parry at all.

Acc (Accuracy)

Ranged weapons only. Add Accuracy to your skill if you took an Aim maneuver on the turn prior to your attack. If the weapon has a built-in scope, the bonus for this appears as a separate modifier after the weapon’s base Acc; e.g., “7+2.”

Range

Ranged weapons only. If a weapon has only one range number, this is the...
**Maximum Range** (Max) in yards at which it can attack a target. If two numbers appear, separated by a slash, the first is Half-Damage Range (1/2D) and the second is Max. Damaging attacks on targets at or beyond 1/2D inflict half damage, and those that require a HT roll to resist are resisted at +3.

Muscle-powered weapons usually list 1/2D and Max as multiples of the wielder's ST, not as a fixed range. For example, "x10x15" means 1/2D is 10xST and Max is 15xST, so someone with ST 10 would have 1/2D 100 and Max 150. For bows, crossbows and mechanical artillery, use the weapon's ST in these formulas.

A few weapons have a **minimum range**, given in their Notes. The weapon cannot attack a target closer than this range – usually because it fires in a high arc, or has safety, fusing, or guidance limitations.

**RoF (Rate of Fire)**

_Ranged weapons only._ The maximum number of shots an ordinary shooter can fire in a one-second turn. A weapon can normally fire fewer shots (to a minimum of 1), if you wish, but some special notes apply:

- "t" means the weapon can only fire on "full auto," like many machine guns. Minimum RoF is 1/4 the listed RoF, rounded up.
- "mvn" (e.g., 3x9) means the weapon can fire a number of shots per attack equal to the first number (m), and that each shot releases smaller projectiles equal to the second number (n); see _Shotguns and Multiple Projectiles_ (p. 409).
- "Jet" means the weapon shoots a continuous stream of fluid or energy, using the jet rules (p. 106).

**Shots**

_Ranged weapons only._ The number of shots the weapon can fire before you must reload or recharge it. "T" means the weapon is **thrown**. To "reload," pick it up or ready a new weapon!

The parenthetical number following Shots indicates the number of one-second Ready maneuvers needed to reload _all_ of the weapon's shots (e.g., by changing magazines) – or, for a thrown weapon, the time needed to ready another weapon. An "i" next to this means you must load shots individually: the time listed is per shot rather than for all shots.

A crossbow or prod takes the indicated time to ready (4 turns) only if its ST is no greater than yours (see _Crossbows and ST_, below). _Double_ this if the bow's ST is 1 or 2 greater. If its ST is 3 or 4 greater, you need a "goat's foot" device to cock it; this takes 20 turns, and requires you to stand. If its ST is 5 or more above yours, you cannot reload it at all.

**Cost**

The price of a new weapon, in $. For swords and knives, this includes a sheath or a scabbard. For firearms, this includes the minimal necessary cleaning kit.

**Weight**

The weight of the weapon, in pounds; "neg." means "negligible." For missile weapons with Shots 2+ this is the _loaded_ weight. The weight of one full reload appears after a slash.

_**Exception:** If the weapon has Shots 1 (like a bow or guided missile launcher) or has a backpack power supply (noted with a "p"), the _unloaded_ weight is given. The weight after the slash is that of one shot (e.g., one arrow or guided missile) or the backpack.

**ST (Strength)**

The minimum Strength required to use the weapon properly. If you try to use a weapon that requires more ST than you have, you will be -1 to weapon skill per point of ST you lack and lose one extra FP at the end of any fight that lasts long enough to fatigue you.

For a melee weapon, your effective ST for damage purposes cannot exceed _triple_ the weapon's minimum ST. For instance, a large knife has minimum ST 6, so its "maximum ST" is 18; if your ST were 19+, you would compute your damage as if you had ST 18.

_Natural_ weapons (e.g., a punch or kick) have neither minimum nor maximum ST.

"f" means the weapon requires two hands. If you have at least 1.5 times the listed ST (round up), you can use such a weapon in one hand, but it becomes _unready_ after you attack with it. If you have at least twice the listed ST, you can wield it one-handed with no readiness penalty. But if it requires one hand to hold it and another to operate a moving part, like a bow or a pump shotgun, _it always requires two hands_, regardless of ST.

"f" means the weapon requires two hands _and_ becomes unready after you attack with it, unless you have at least 1.5 times the listed ST (round up). To use it in one hand without it becoming unready, you need at least _three times_ the listed ST.

"R" indicates a firearm that uses a musket rest. The weapon's weight _includes_ that of the rest. It takes a Ready maneuver to balance the weapon on the rest – but after that, any aimed shot fired while stationary and standing up is automatically braced (see _Aim_, p. 364).

"B" indicates a firearm with an attached bipod. When firing from a prone position using the bipod, treat the weapon as if it were braced and reduce its ST requirement to 2/3 of the listed value (round up); e.g., ST 13 becomes ST 9.

"M" means the weapon is usually mounted in a vehicle or gun carriage, or on a tripod. _Ignore_ the listed ST and Bulk when firing the weapon from its tripod or mount; the ST requirement only applies when firing the weapon _without_ its mount. Removing the weapon from its mount (or reattaching it) takes at least three one-second Ready maneuvers.

_Crossbows and ST:_ Bows, crossbows, and prods have their own ST value. Use this instead of your ST to determine range and damage. You must specify the ST of such a weapon when you buy it. You can always use a weapon that is _weaker_ than you. You can use a stronger crossbow or prod; it does more damage but take longer to cock (see _Shots_, above). You cannot use a stronger bow.

**Bulk**

_Ranged weapons only._ A measure of the weapon's size and handiness. Bulk modifies your weapon skill when you take a Move and Attack maneuver (see _Move and Attack_, p. 365). It also serves as a penalty to Holdout skill when you attempt to conceal the weapon.
Rcl (Recoil)

Firearms only. A measure of how easy the weapon is to control when firing rapidly: the higher the value, the less controllable the weapon. Rcl 1 means the weapon is recoilless, or nearly so.

When firing at RoF 2+, every full multiple of Rcl by which you make your attack roll means you score one extra hit, to a maximum number of hits equal to total shots fired; see Rapid Fire (p. 373). (Firearms with RoF 1 still list Rcl, for use with certain rules.)

LC (Legality Class)

This is only noted for firearms and grenades. All melee weapons and muscle-powered ranged weapons intended for combat are LC4. An exception is the force sword, which is LC2. Ignore LC for “weapons” intended as tools, or for hunting or recreation, and for those that are completely improvised (like a wooden stake). See Legality Class (p. 267).

Notes

The numbers listed here refer to applicable footnotes (if any) at the end of the table.

Melee Weapon Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Axe</td>
<td>sw+2 cut</td>
<td>1</td>
<td>0U</td>
<td>$50</td>
<td>4</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Hatchet</td>
<td>sw cut</td>
<td>1</td>
<td>0</td>
<td>$40</td>
<td>2</td>
<td>8</td>
<td>[1]</td>
</tr>
<tr>
<td>0</td>
<td>Throwing Axe</td>
<td>sw+2 cut</td>
<td>1</td>
<td>0U</td>
<td>$60</td>
<td>4</td>
<td>11</td>
<td>[1]</td>
</tr>
<tr>
<td>2</td>
<td>Mace</td>
<td>sw+3 cr</td>
<td>1</td>
<td>0U</td>
<td>$50</td>
<td>5</td>
<td>12</td>
<td>[1]</td>
</tr>
<tr>
<td>2</td>
<td>Small Mace</td>
<td>sw+2 cr</td>
<td>1</td>
<td>0U</td>
<td>$35</td>
<td>3</td>
<td>10</td>
<td>[1]</td>
</tr>
<tr>
<td>3</td>
<td>Pick</td>
<td>sw+1 imp</td>
<td>1</td>
<td>0U</td>
<td>$70</td>
<td>3</td>
<td>10</td>
<td>[1]</td>
</tr>
</tbody>
</table>

BOXING, BRAWLING, KARATE, or DX

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>Punch</td>
<td>thr-1 cr</td>
<td>C</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>[3]</td>
</tr>
<tr>
<td>1</td>
<td>Brass Knuckles</td>
<td>thr cr</td>
<td>C</td>
<td>0</td>
<td>$10</td>
<td>0.25</td>
<td>–</td>
<td>[3]</td>
</tr>
</tbody>
</table>

BRAWLING-2, KARATE-2, or DX-2

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>Kick</td>
<td>thr cr</td>
<td>C, I</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>[3, 4]</td>
</tr>
<tr>
<td>–</td>
<td>Kick w. Boots</td>
<td>thr+1 cr</td>
<td>C, I</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>[3, 4]</td>
</tr>
</tbody>
</table>

BRAWLING or DX

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>Blunt Teeth</td>
<td>thr-1 cr</td>
<td>C</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>[3]</td>
</tr>
<tr>
<td>–</td>
<td>Fangs</td>
<td>thr-1 imp</td>
<td>C</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>[3]</td>
</tr>
<tr>
<td>–</td>
<td>Sharp Beak</td>
<td>thr-1 pi+</td>
<td>C</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>[3]</td>
</tr>
<tr>
<td>–</td>
<td>Sharp Teeth</td>
<td>thr-1 cut</td>
<td>C</td>
<td>No</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>[3]</td>
</tr>
<tr>
<td>–</td>
<td>Striker</td>
<td>var</td>
<td>var.</td>
<td>var.</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Blackjack or Sap</td>
<td>thr cr</td>
<td>C</td>
<td>0</td>
<td>$20</td>
<td>1</td>
<td>7</td>
<td>[3]</td>
</tr>
<tr>
<td>8</td>
<td>Stun Gun</td>
<td>HT-3(0.5) aff</td>
<td>C, 1</td>
<td>No</td>
<td>$100</td>
<td>1</td>
<td>2</td>
<td>[5]</td>
</tr>
</tbody>
</table>

BROADSWORD (DX-5, Force Sword-4, Rapier-4, Saber-4, Shortsword-2, or Two-Handed Sword-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Light Club</td>
<td>sw+1 cr</td>
<td>1</td>
<td>0</td>
<td>$5</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Broadsword</td>
<td>sw+1 cut</td>
<td>1</td>
<td>0</td>
<td>$500</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Thrusting Broadsword</td>
<td>sw+1 cut</td>
<td>1</td>
<td>0</td>
<td>$600</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bastard Sword</td>
<td>sw+1 cut</td>
<td>1, 2</td>
<td>0U</td>
<td>$650</td>
<td>5</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Katana</td>
<td>sw+1 cut</td>
<td>1, 2</td>
<td>0</td>
<td>$650</td>
<td>5</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Thrusting Bastard Sword</td>
<td>sw+1 cut</td>
<td>1, 2</td>
<td>0U</td>
<td>$750</td>
<td>5</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cavalry Saber</td>
<td>sw+1 cut</td>
<td>1</td>
<td>0</td>
<td>$500</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Meelee WEAPONS

Melee weapons are grouped under the skills required to use them. Skill names appear in capital letters, with defaults in parentheses; e.g., “AXE/MACE (DX-5, Flail-4, or Two-Handed Axe/Mace-3).” If there is more than one way to use a weapon, each method gets its own line. If multiple skills let you use a weapon, the weapon appears under each skill. For example, both Staff skill and Two-Handed Sword skill let you wield a quarterstaff – and either lets you swing the staff or thrust with it.
<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Morningstar</td>
<td>sw+3 cr</td>
<td>1</td>
<td>0U</td>
<td>$80</td>
<td>6</td>
<td>12</td>
<td>[6]</td>
</tr>
<tr>
<td>3</td>
<td>Nunchaku</td>
<td>sw+1 cr</td>
<td>1</td>
<td>0U</td>
<td>$20</td>
<td>2</td>
<td>7</td>
<td>[6]</td>
</tr>
</tbody>
</table>

**FLAIL (DX-6, Axe/Mace-4, or Two-Handed Flail-3)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Force Sword</td>
<td>8d(5)</td>
<td>burn</td>
<td>1, 2</td>
<td>$10,000</td>
<td>2</td>
<td>3</td>
<td>[7]</td>
</tr>
</tbody>
</table>

**GARROTE (DX-4)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Garrote</td>
<td>spec.</td>
<td>C</td>
<td>No</td>
<td>$2</td>
<td>neg.</td>
<td>–</td>
<td>[8]</td>
</tr>
</tbody>
</table>

**FORCE SWORD (DX-5 or any sword skill at -3)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Long Knife</td>
<td>sw-2 cut</td>
<td>C, 1</td>
<td>-1</td>
<td>$40</td>
<td>1</td>
<td>6</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td>or Small Knife</td>
<td>sw-3 cut</td>
<td>C, 1</td>
<td>-1</td>
<td>$30</td>
<td>0.5</td>
<td>5</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td>or Wooden Stake</td>
<td>thr(0.5)</td>
<td>C</td>
<td>-1</td>
<td>$4</td>
<td>0.5</td>
<td>5</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Dagger</td>
<td>thr-1 imp</td>
<td>C</td>
<td>-1</td>
<td>$20</td>
<td>0.25</td>
<td>5</td>
<td>[1]</td>
</tr>
</tbody>
</table>

**KNIFE (DX-4, Force Sword-3, Main-Gauche-3, or Shortsword-3)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Kusari</td>
<td>sw+2 cr</td>
<td>1-4*</td>
<td>-2U</td>
<td>$70</td>
<td>5</td>
<td>11</td>
<td>[6]</td>
</tr>
</tbody>
</table>

**LANCE (DX-5 or Spear-3)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Lance</td>
<td>thr+3 imp</td>
<td>4</td>
<td>No</td>
<td>$60</td>
<td>6</td>
<td>12</td>
<td>[9]</td>
</tr>
</tbody>
</table>

**MONOWIRE WHIP (DX-6, Kusari-3, or Whip-3)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Monowire Whip</td>
<td>sw+1d-2(10) cut</td>
<td>1-7*</td>
<td>-2U</td>
<td>$900</td>
<td>0.5</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**POLEARM (DX-5, Spear-4, Staff-4, or Two-Handed Axe/Mace-4)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Glave</td>
<td>sw+3 cut</td>
<td>2, 3*</td>
<td>0U</td>
<td>$100</td>
<td>8</td>
<td>11†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+3 imp</td>
<td>1-3*</td>
<td>0U</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Naginata</td>
<td>sw+2 cut</td>
<td>1, 2*</td>
<td>0U</td>
<td>$100</td>
<td>6</td>
<td>9†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+3 imp</td>
<td>2</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Halberd</td>
<td>sw+5 cut</td>
<td>2, 3*</td>
<td>0U</td>
<td>$150</td>
<td>12</td>
<td>13†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>sw+4 imp</td>
<td>2, 3*</td>
<td>0U</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+3 imp</td>
<td>1-3*</td>
<td>0U</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Poleaxe</td>
<td>sw+4 cut</td>
<td>2, 3*</td>
<td>0U</td>
<td>$120</td>
<td>10</td>
<td>12‡</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>sw+4 cr</td>
<td>2, 3*</td>
<td>0U</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>
### RAPIER (DX-5, Broadsword-4, Main-Gauche-3, Saber-3, or Smallsword-3)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Rapier</td>
<td>thr+1 imp</td>
<td>1, 2</td>
<td>0F</td>
<td>$500</td>
<td>2.75</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

### SABER (DX-5, Broadsword-4, Main-Gauche-3, Rapier-3, Shortsword-4, or Smallsword-3)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Saber</td>
<td>sw-1 cut</td>
<td>1</td>
<td>0F</td>
<td>$700</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+1 imp</td>
<td>1</td>
<td>0F</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

### SHIELD (DX-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Shield Bash</td>
<td>thr cr</td>
<td>1</td>
<td>No</td>
<td>var.</td>
<td>var.</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Shield Bash w. Spike</td>
<td>thr+1 cr</td>
<td>1</td>
<td>No</td>
<td>+$20</td>
<td>+5</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

### SHORTSWORD (DX-5, Broadsword-2, Force Sword-4, Jitte/Sai-3, Knife-4, Saber-4, Smallsword-4, or Tonfa-3)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Baton</td>
<td>sw cr</td>
<td>1</td>
<td>0</td>
<td>$20</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr cr</td>
<td>1</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Shortsword</td>
<td>sw cut</td>
<td>1</td>
<td>0</td>
<td>$400</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr imp</td>
<td>1</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cutlass</td>
<td>sw cut</td>
<td>1</td>
<td>0</td>
<td>$300</td>
<td>2</td>
<td>8</td>
<td>[10]</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr imp</td>
<td>1</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Cattle Prod</td>
<td>1d-3 burn</td>
<td>1</td>
<td>0</td>
<td>$30</td>
<td>2</td>
<td>3</td>
<td>[5]</td>
</tr>
</tbody>
</table>

### SMALLSWORD (DX-5, Main-Gauche-3, Rapier-3, Saber-3, or Shortsword-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Short Staff</td>
<td>sw cr</td>
<td>1</td>
<td>0F</td>
<td>$20</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr cr</td>
<td>1</td>
<td>0F</td>
<td>–</td>
<td>–</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Smallsword</td>
<td>thr+1 imp</td>
<td>1</td>
<td>0F</td>
<td>$400</td>
<td>1.5</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

### SPEAR (DX-5, Polearm-4, or Staff-2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Spear</td>
<td>thr+2 imp</td>
<td>1*</td>
<td>0</td>
<td>$40</td>
<td>4</td>
<td>9</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td>two hands</td>
<td>thr+3 imp</td>
<td>1, 2*</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Javelin</td>
<td>thr+1 imp</td>
<td>1</td>
<td>0</td>
<td>$30</td>
<td>2</td>
<td>6</td>
<td>[1]</td>
</tr>
<tr>
<td>2</td>
<td>Long Spear</td>
<td>thr+2 imp</td>
<td>2, 3*</td>
<td>0U</td>
<td>$60</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>two hands</td>
<td>thr+3 imp</td>
<td>2, 3*</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>10†</td>
</tr>
</tbody>
</table>

### STAFF (DX-5, Polearm-4, or Spear-2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Quarterstaff</td>
<td>sw+2 cr</td>
<td>1, 2</td>
<td>+2</td>
<td>$10</td>
<td>4</td>
<td>7†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+2 cr</td>
<td>1, 2</td>
<td>+2</td>
<td>–</td>
<td>–</td>
<td>7†</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Naginata</td>
<td>sw+2 cr</td>
<td>1, 2</td>
<td>0U</td>
<td>$100</td>
<td>6</td>
<td>9†</td>
<td>Blunt end.</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+2 cr</td>
<td>1, 2</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>9†</td>
<td></td>
</tr>
</tbody>
</table>
### TWO-HANDED AXE/MACE (DX-5, Axe/Mace-3, Polearm-4, or Two-Handed Flail-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Maul</td>
<td>sw+4 cr</td>
<td>1, 2*</td>
<td>0U</td>
<td>$80</td>
<td>12</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Great Axe</td>
<td>sw+3 cut</td>
<td>1, 2*</td>
<td>0U</td>
<td>$100</td>
<td>8</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Scythe</td>
<td>sw+2 cut</td>
<td>1</td>
<td>0U</td>
<td>$15</td>
<td>5</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>sw imp</td>
<td>1</td>
<td>0U</td>
<td>–</td>
<td>–</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Warhammer</td>
<td>sw+3 imp</td>
<td>1, 2*</td>
<td>0U</td>
<td>$100</td>
<td>7</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Chainsaw</td>
<td>sw+1d cut</td>
<td>1</td>
<td>No</td>
<td>$150</td>
<td>13</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>or</td>
<td>sw imp</td>
<td>1</td>
<td>0U</td>
<td>–</td>
<td>–</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

### TWO-HANDED FLAIL (DX-6, Flail-3, Kusari-4, or Two-Handed Axe/Mace-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Flail</td>
<td>sw+4 cr</td>
<td>1, 2*</td>
<td>0U</td>
<td>$100</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

### TWO-HANDED SWORD (DX-5, Broadsword-4, or Force Sword-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Quarterstaff</td>
<td>sw+2 cut</td>
<td>1, 2</td>
<td>0 U</td>
<td>$10</td>
<td>4</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+1 cr</td>
<td>2</td>
<td>0 U</td>
<td>–</td>
<td>–</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Naginata</td>
<td>sw+3 cut</td>
<td>2</td>
<td>0 U</td>
<td>$100</td>
<td>6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+3 imp</td>
<td>2</td>
<td>0 U</td>
<td>–</td>
<td>–</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bastard Sword</td>
<td>sw+2 cut</td>
<td>1, 2</td>
<td>0</td>
<td>$650</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+2 cr</td>
<td>2</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Greatsword</td>
<td>sw+3 cut</td>
<td>1, 2</td>
<td>0</td>
<td>$800</td>
<td>7</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+2 cr</td>
<td>2</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Katana</td>
<td>sw+2 cut</td>
<td>1, 2</td>
<td>0</td>
<td>$650</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+1 imp</td>
<td>1</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Thrusting Bastard Sword</td>
<td>sw+2 cut</td>
<td>1, 2</td>
<td>0</td>
<td>$750</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+3 imp</td>
<td>2</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Thrusting Greatsword</td>
<td>sw+3 cut</td>
<td>1, 2</td>
<td>0</td>
<td>$900</td>
<td>7</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>thr+3 imp</td>
<td>2</td>
<td>0</td>
<td>–</td>
<td>–</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

### WHIP (DX-5, Kusari-3, or Monowire Whip-3)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Reach</th>
<th>Parry</th>
<th>Cost</th>
<th>Weight</th>
<th>ST</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Whip</td>
<td>sw-2(0.5) cm</td>
<td>1-7*</td>
<td>-2U</td>
<td>$20</td>
<td>2</td>
<td>var.</td>
<td>[12]</td>
</tr>
</tbody>
</table>

**Notes**

[1] Can be thrown. See Muscle-Powered Ranged Weapon Table (p. 275).
[2] May get stuck; see Picks (p. 405).
[3] Brawling (p. 182) increases all unarmed damage; Claws (p. 42) and Karate (p. 203) improve damage with punches and kicks (Claws don't affect damage with brass knuckles or boots); and Boxing (p. 182) improves punching damage.

[4] If you miss with a kick, roll vs. DX to avoid falling.

[5] On a failed HT roll, victim is stunned for as long as weapon is in contact plus (20 - HT) seconds longer, and then can roll vs. HT-3 to recover.

[6] Attempts to parry flails are at -4, and fencing weapons ("F" parry) cannot parry at all! Attempts to block flails are at -2. A nunchaku is small, and gives half these penalties.

[7] This is an energy blade. Take a Ready maneuver to activate/deactivate. The blade cannot break, and damages any weapon or body part it parries or which parries or blocks it. Extra energy cells cost $100, weigh 0.5 lb., and last 300 seconds.

[8] A piece of rope used to strangle; see Garrottes (p. 405).

[9] Damage increases in a mounted charge; see Cavalry Weapons (p. 397).

[10] Hilt counts as brass knuckles in close combat.


[12] Specify maximum reach (up to 7 yards) when bought. Cost and weight are per yard. ST is 5, +1 per yard. Many special rules apply; be sure to see Whips (p. 406).

**Melee Weapon Quality**

Muscle-powered melee and thrown weapons come in several quality grades, described below. Quality influences the odds of breakage when you parry a very heavy weapon; see Parrying Heavy Weapons (p. 376). The prices listed on the weapon tables buy good-quality weapons at TL6 or less, fine-quality ones at TL7+. At TL7+, good-quality weapons cost 40% of list price.

**Cheap:** A cheap weapon is +2 to break – and if it can be thrown, it has -1 Acc. It costs 40% of list price at TL6 or less, or 20% of list price at TL7+. The mass-produced swords issued to ordinary soldiers are often of cheap quality. _**Good:**_ A good weapon has no breakage modifier. This is the standard quality through TL6. At TL7+, good-quality weapons cost 40% of list price.

**Fine:** Any fine weapon is -1 to break. A fine blade (cutting or impaling weapon) also gets +1 to cutting and impaling damage. At TL6 or less, a fine-quality fencing- or sword-class weapon of any type costs 4 times list price. (Katanas are often fine!) Other weapon types cost 3 times list price if they do only crushing or impaling damage (e.g., a mace or spear), or 10 times list price if they can do cutting damage (e.g., an axe or halberd). At TL7+, all weapons are "fine" at no extra cost.

**Very Fine:** Only fencing weapons and swords can be very fine. A very fine blade also gets +1 to cutting and impaling damage. At TL6 or less, a very fine weapon costs 10 times list price; at TL7+, they cost only 4 times list price.

_Presentation_ weapons (decorated, bejeweled, gilded, etc.) are also available. This will further increase cost (and resale value) by 5-20 times.

---

274 **Equipment**
Blade Composition

The tip or blade of any muscle-powered melee or thrown weapon that inflicts cutting or impaling damage (excluding wooden stakes, and powered weapons such as chainsaws) is assumed to be stone at TL0, bronze at TL1, iron at TL2, and steel at TL3+. For instance, a knife would be stone at TL0 but steel at TL3, while a greatsword would always be steel, as greatswords don’t exist before TL3. Blade composition modifies effective quality when parrying a very heavy weapon.

Weapons made from outdated materials are usually available at cheap-quality prices.

**Stone (TL0):** A stone blade has an armor divisor of (0.5) on its cutting and impaling damage, and receives no damage bonus for being of fine or better quality. Regardless of actual quality, treat a stone blade as cheap for breakage purposes when parrying an swung weapon made of metal or other high-tech materials.

**Obsidian (TL1):** A blade made of volcanic glass is very sharp, but easily broken or blunted. Treat as a good-quality stone blade, but with +1 to cutting and impaling damage (as if fine) and +2 to breakage (as if cheap). It loses its damage bonus if used to parry any weapon (but not an unarmed attack) or to strike DR 2+.

**Bronze (TL1):** A bronze blade receives no damage bonus for being of fine or better quality. Regardless of actual quality, treat a bronze blade as cheap for breakage purposes when parrying a swung weapon made of metal or other high-tech materials.

**Iron (TL2):** An iron blade receives no damage bonus for being of fine or better quality. Regardless of actual quality, treat an iron blade as cheap for breakage purposes when parrying a swung weapon made of superior materials (e.g., steel).

**Steel (TL3):** Steel is the “default” material for blades. Use all rules as written.

**Plastic (TL7):** “Plastic” includes carbon composites and other advanced, nonmetallic materials. Halve weight and double cost. Blades cannot exceed good quality (and are often cheap). Treat them as equivalent to steel for breakage – but their low weight means they’re more likely to encounter a heavier weapon. Weapons that do only crushing damage (clubs, batons, etc.) are also available, in the usual quality grades. The primary benefit of plastic weapons is that metal detectors cannot detect them!

### Muscle-Powered Ranged Weapons

Muscle-powered ranged weapons are hurled weapons (axes, spears, etc.) and low-tech missile weapons such as bows and slings. Weapons appear under the skill required to use them, along with skill defaults. Some thrown weapons also appear on the Melee Weapon Table; use the statistics below when they are thrown.

#### Muscle-Powered Ranged Weapon Table

**BLOWPIPE (DX-6)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Blowpipe</td>
<td>1d-3 pi</td>
<td>1</td>
<td>x4</td>
<td>1/0.05</td>
<td>1</td>
<td>1(2)</td>
<td>$30</td>
<td>2</td>
<td>-6</td>
<td>[1, 2, 3]</td>
</tr>
</tbody>
</table>

**BOLAS (No default)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Bolas</td>
<td>thr-1 cr</td>
<td>0</td>
<td>x3</td>
<td>2</td>
<td>1</td>
<td>T(1)</td>
<td>$20</td>
<td>7</td>
<td>-2</td>
<td>[4]</td>
</tr>
</tbody>
</table>

**BOW (DX-5)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Longbow</td>
<td>thr+2 imp</td>
<td>3</td>
<td>x15/x20</td>
<td>3/0.1</td>
<td>1</td>
<td>1(2)</td>
<td>$200</td>
<td>11†</td>
<td>-8</td>
<td>[3]</td>
</tr>
<tr>
<td>0</td>
<td>Regular Bow</td>
<td>thr+1 imp</td>
<td>2</td>
<td>x15/x20</td>
<td>2/0.1</td>
<td>1</td>
<td>1(2)</td>
<td>$100</td>
<td>10†</td>
<td>-7</td>
<td>[3]</td>
</tr>
<tr>
<td>0</td>
<td>Short Bow</td>
<td>thr imp</td>
<td>1</td>
<td>x10/x15</td>
<td>2/0.1</td>
<td>1</td>
<td>1(2)</td>
<td>$50</td>
<td>7†</td>
<td>-6</td>
<td>[3]</td>
</tr>
<tr>
<td>1</td>
<td>Composite Bow</td>
<td>thr+3 imp</td>
<td>3</td>
<td>x20/x25</td>
<td>4/0.1</td>
<td>1</td>
<td>1(2)</td>
<td>$900</td>
<td>10†</td>
<td>-7</td>
<td>[3]</td>
</tr>
</tbody>
</table>

**CLOAK (DX-5, Net-4, or Shield-4)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heavy Cloak</td>
<td>spec.</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>T(1)</td>
<td>$50</td>
<td>8</td>
<td>-6</td>
<td>[4]</td>
</tr>
<tr>
<td>1</td>
<td>Light Cloak</td>
<td>spec.</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>T(1)</td>
<td>$20</td>
<td>5</td>
<td>-4</td>
<td>[4]</td>
</tr>
</tbody>
</table>
### CROSSBOW (DX-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Crossbow</td>
<td>thr+4</td>
<td>imp</td>
<td>4 x20/25</td>
<td>6/0.06</td>
<td>1</td>
<td>1(4)</td>
<td>$150</td>
<td>7†</td>
<td>-6</td>
<td>[3]</td>
</tr>
<tr>
<td>3</td>
<td>Pistol Crossbow</td>
<td>thr+2</td>
<td>imp</td>
<td>1 x15/20</td>
<td>4/0.06</td>
<td>1</td>
<td>1(4)</td>
<td>$150</td>
<td>7</td>
<td>-4</td>
<td>[2, 3]</td>
</tr>
<tr>
<td>3</td>
<td>Prodd</td>
<td>thr+4 pi</td>
<td>–</td>
<td>2 x20/25</td>
<td>6/0.06</td>
<td>1</td>
<td>1(4)</td>
<td>$150</td>
<td>7†</td>
<td>-6</td>
<td>[3]</td>
</tr>
<tr>
<td>3</td>
<td>“Goat’s Foot”</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>(20)</td>
<td>$50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LASSO (No default)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lariat</td>
<td>spec.</td>
<td>0</td>
<td>spec.</td>
<td>3</td>
<td>1</td>
<td>T(spec.)</td>
<td>$40</td>
<td>7†</td>
<td>-2</td>
<td>[4]</td>
</tr>
</tbody>
</table>

### NET (Cloak-5)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Large Net</td>
<td>spec.</td>
<td>1</td>
<td>spec.</td>
<td>20</td>
<td>1</td>
<td>T(1)</td>
<td>$40</td>
<td>11</td>
<td>-6</td>
<td>[4, 6]</td>
</tr>
<tr>
<td>2</td>
<td>Melee Net</td>
<td>spec.</td>
<td>1</td>
<td>spec.</td>
<td>5</td>
<td>1</td>
<td>T(1)</td>
<td>$20</td>
<td>8</td>
<td>-4</td>
<td>[4, 6]</td>
</tr>
</tbody>
</table>

### SLING (DX-6)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Sling</td>
<td>sw</td>
<td>0</td>
<td>x6/10</td>
<td>0.5</td>
<td>1</td>
<td>T(1)</td>
<td>$20</td>
<td>6</td>
<td>-4</td>
<td>[2, 3, 7]</td>
</tr>
<tr>
<td>1</td>
<td>Staff Sling</td>
<td>sw+1</td>
<td>1</td>
<td>x10/15</td>
<td>2.05</td>
<td>1</td>
<td>T(1)</td>
<td>$20</td>
<td>7†</td>
<td>-6</td>
<td>[3, 7]</td>
</tr>
</tbody>
</table>

### SPEAR THROWER (DX-5 or Thrown Weapon (Spear)-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Atlatl</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>1</td>
<td>T(1)</td>
<td>$20</td>
<td>–</td>
<td>–</td>
<td>[2]</td>
</tr>
<tr>
<td></td>
<td>with Dart</td>
<td>sw-1</td>
<td>1</td>
<td>x3/4</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>$20</td>
<td>5</td>
<td>-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with Javelin</td>
<td>sw+1</td>
<td>3</td>
<td>x2/3</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>$30</td>
<td>6</td>
<td>-4</td>
<td></td>
</tr>
</tbody>
</table>

### THROWN WEAPON (AXE/MACE) (DX-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Hatchet</td>
<td>sw</td>
<td>1</td>
<td>x1.5/2.5</td>
<td>2</td>
<td>1</td>
<td>T(1)</td>
<td>$40</td>
<td>8</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Throwing Axe</td>
<td>sw+2</td>
<td>2</td>
<td>x1/1.5</td>
<td>4</td>
<td>1</td>
<td>T(1)</td>
<td>$60</td>
<td>11</td>
<td>-3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mace</td>
<td>sw+3</td>
<td>1</td>
<td>x0.5/1</td>
<td>5</td>
<td>1</td>
<td>T(1)</td>
<td>$50</td>
<td>12</td>
<td>-4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Small Mace</td>
<td>sw+2</td>
<td>1</td>
<td>x1/1.5</td>
<td>3</td>
<td>1</td>
<td>T(1)</td>
<td>$35</td>
<td>10</td>
<td>-3</td>
<td></td>
</tr>
</tbody>
</table>

### THROWN WEAPON (HARPOON) (DX-4 or Thrown Weapon (Spear)-2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Harpoon</td>
<td>thr+5</td>
<td>2</td>
<td>x1/1.5</td>
<td>6</td>
<td>1</td>
<td>T(1)</td>
<td>$60</td>
<td>11</td>
<td>-6</td>
<td>[8]</td>
</tr>
</tbody>
</table>

### THROWN WEAPON (KNIFE) (DX-4)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Large Knife</td>
<td>thr imp</td>
<td>0</td>
<td>x0.8/1.5</td>
<td>1</td>
<td>1</td>
<td>T(1)</td>
<td>$40</td>
<td>6</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Small Knife</td>
<td>thr-1</td>
<td>0</td>
<td>x0.5/1</td>
<td>0.5</td>
<td>1</td>
<td>T(1)</td>
<td>$30</td>
<td>5</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Wooden Stake</td>
<td>thr(0.5)</td>
<td>0</td>
<td>x0.5/1</td>
<td>0.5</td>
<td>1</td>
<td>T(1)</td>
<td>$5</td>
<td>5</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Dagger</td>
<td>thr-1</td>
<td>0</td>
<td>x0.5/1</td>
<td>0.25</td>
<td>1</td>
<td>T(1)</td>
<td>$40</td>
<td>5</td>
<td>-1</td>
<td></td>
</tr>
</tbody>
</table>

### THROWN WEAPON (SHURIKEN) (DX-4 or Throwing-2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Shuriken</td>
<td>thr-1</td>
<td>1</td>
<td>0.5/1</td>
<td>0.1</td>
<td>1</td>
<td>T(1)</td>
<td>$3</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### THROWN WEAPON (SPEAR) (DX-4, Spear Thrower-4, or Thrown Weapon (Harpoon)-2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>Cost</th>
<th>ST</th>
<th>Bulk</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Spear</td>
<td>thr+3</td>
<td>2</td>
<td>x1/1.5</td>
<td>4</td>
<td>1</td>
<td>T(1)</td>
<td>$40</td>
<td>9</td>
<td>-6</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Javelin</td>
<td>thr+1</td>
<td>3</td>
<td>x1.5/2.5</td>
<td>2</td>
<td>1</td>
<td>T(1)</td>
<td>$30</td>
<td>6</td>
<td>-4</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

[1] Follow-up drug or poison attack if damage penetrates DR. Effects depend on the poison used; see Poison (p. 437).

[2] Requires two hands to ready, but only one hand to attack.

[3] An arrow or bolt for a bow or crossbow is $2. A dart for a blowpipe, or a lead pellet for a prodd or sling, is $0.1. Sling stones are free.

[4] May entangle or ensnare the target; see Special Ranged Weapons (p. 411).

[5] Cocking lever to reload a high-ST crossbow or prodd. You can reload a weapon up to 4 ST over your own with 20 one-second Ready maneuvers.

[6] A net has no 1/2D range. Max range is (ST/2 + Skill/5) for a large net and (ST + Skill/5) for a melee net.

[7] Can fire stones (TL0) or lead bullets (TL2). Lead bullets give +1 damage and double range.

[8] Tethered. Requires a Ready maneuver and a successful ST roll to pull out (if you fail, you may try again next turn). Does half the damage coming out that it did going in.
**Muscle-Powered Ranged Weapon Quality**

Blowpipes, bows, and crossbows may be fine weapons. Increase 1/2D and Max range by 20%. They cost 4 times list price.

Thrown weapons, and arrows and bolts, use the rules under *Melee Weapon Quality* (p. 274).

---

**Hand Grenade and Incendiary Table**

**THrowing (DX-3 or Dropping-4)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Weight</th>
<th>Fuse</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Black Powder</td>
<td>3d cr ex [1d]</td>
<td>1</td>
<td>3-5</td>
<td>$5</td>
<td>2</td>
<td>[1]</td>
</tr>
<tr>
<td>6</td>
<td>Concussion</td>
<td>6d cr ex</td>
<td>1</td>
<td>4</td>
<td>$15</td>
<td>2</td>
<td>[2]</td>
</tr>
<tr>
<td>6</td>
<td>Fragmentation</td>
<td>4d cr ex [2d]</td>
<td>1</td>
<td>4</td>
<td>$10</td>
<td>2</td>
<td>[2]</td>
</tr>
<tr>
<td>6</td>
<td>Molotov Cocktail</td>
<td>spec. (1 yd.)</td>
<td>1</td>
<td>spec.</td>
<td>$2</td>
<td>3</td>
<td>[1, 3]</td>
</tr>
<tr>
<td>7</td>
<td>Chemical</td>
<td>spec. (2 yd.)</td>
<td>1</td>
<td>2</td>
<td>$10</td>
<td>3</td>
<td>[2, 4]</td>
</tr>
<tr>
<td>7</td>
<td>Concussion</td>
<td>5d·2 cr ex</td>
<td>1</td>
<td>4</td>
<td>$40</td>
<td>2</td>
<td>[2]</td>
</tr>
<tr>
<td>7</td>
<td>Fragmentation</td>
<td>8d cr ex [3d]</td>
<td>1</td>
<td>4</td>
<td>$40</td>
<td>2</td>
<td>[2]</td>
</tr>
<tr>
<td>8</td>
<td>Stun</td>
<td>HT-5 aff (10 yd.)</td>
<td>1</td>
<td>2</td>
<td>$40</td>
<td>2</td>
<td>[2, 5]</td>
</tr>
<tr>
<td>^</td>
<td>Plasma</td>
<td>6dx4 burn ex</td>
<td>1</td>
<td>2</td>
<td>$100</td>
<td>1</td>
<td>[2]</td>
</tr>
</tbody>
</table>

**Notes**

[1] Takes a Ready maneuver to light the fuse (impossible in rain, etc.) – or five Ready maneuvers if you must insert the fuse first! A Molotov cocktail shatters on impact; a black-powder grenade detonates 3-5 seconds later, depending on fuse length.

[2] Takes one Ready maneuver to draw the grenade and a second Ready maneuver to pull the pin. Detonates 2-4 seconds later, depending on grenade type.


[4] Fills a 2-yard radius with smoke, tear gas, etc.; see *Poison Examples* (p. 439). The cloud lasts about 80 seconds under normal conditions. Exotic chemicals may cost more or have a lower LC.

[5] A Vision and Hearing-Based affliction that affects a 10-yard radius. The Protected Hearing and Protected Vision advantages each give +5 to the HT roll. If you fail to resist, you are stunned; roll against HT-5 to recover each turn. Also creates smoke in the area of effect.
**Firearms**

A “firearm” is any gun, rocket, or beam weapon that does not rely on muscle power. Guns are commonly available by TL4 and ubiquitous at TL5+. Beam weapons appear in late TL8 (mostly for vehicles), and may become common by TL9, ubiquitous at TL10+.

## Pistol and Submachine Gun Table

### GUNS (PISTOL) (DX-4, or most other Guns at -2)

<table>
<thead>
<tr>
<th>TL Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Flintlock Pistol, .51</td>
<td>2d-1 pi+</td>
<td>1</td>
<td>75/450</td>
<td>3/0.01</td>
<td>1</td>
<td>(20)</td>
<td>10</td>
<td>-3</td>
<td>2</td>
<td>$200</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4 Wheel-Lock Pistol, .60</td>
<td>1d+1 pi+</td>
<td>1</td>
<td>75/400</td>
<td>3.25/0.01</td>
<td>1</td>
<td>(20)</td>
<td>10</td>
<td>-3</td>
<td>2</td>
<td>$200</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5 Derringer, .41</td>
<td>1d pi+</td>
<td>1</td>
<td>80/650</td>
<td>0.5/0.1</td>
<td>1</td>
<td>(3i)</td>
<td>9</td>
<td>-1</td>
<td>2</td>
<td>$100</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5 Revolver, .36</td>
<td>2d-1 pi</td>
<td>1</td>
<td>120/1,300</td>
<td>2.5/0.24</td>
<td>1</td>
<td>(3i)</td>
<td>10</td>
<td>-2</td>
<td>2</td>
<td>$150</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 Auto Pistol, .45</td>
<td>2d pi+</td>
<td>2</td>
<td>175/1,700</td>
<td>3/0.6</td>
<td>3</td>
<td>7+1(3)</td>
<td>10</td>
<td>-2</td>
<td>3</td>
<td>$300</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 Auto Pistol, 9mm</td>
<td>2d+2 pi</td>
<td>2</td>
<td>150/1,850</td>
<td>2.4/0.4</td>
<td>3</td>
<td>8+1(3)</td>
<td>9</td>
<td>-2</td>
<td>2</td>
<td>$350</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 Revolver, .38</td>
<td>2d-1 pi</td>
<td>2</td>
<td>120/1,500</td>
<td>2/0.2</td>
<td>3</td>
<td>6(3i)</td>
<td>8</td>
<td>-2</td>
<td>2</td>
<td>$400</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6 Snub Revolver, .38</td>
<td>1d+2 pi</td>
<td>1</td>
<td>120/1,250</td>
<td>1.5/0.2</td>
<td>3</td>
<td>5(3i)</td>
<td>8</td>
<td>-1</td>
<td>3</td>
<td>$250</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7 Auto Pistol, 9mm</td>
<td>2d+2 pi</td>
<td>2</td>
<td>150/1,850</td>
<td>2.6/0.3</td>
<td>3</td>
<td>15+1(3)</td>
<td>9</td>
<td>-2</td>
<td>2</td>
<td>$600</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7 Holdout Pistol, .380</td>
<td>2d pi</td>
<td>1</td>
<td>125/1,500</td>
<td>1.3/0.2</td>
<td>3</td>
<td>5+1(3)</td>
<td>8</td>
<td>-1</td>
<td>3</td>
<td>$300</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7 Revolver, .357M</td>
<td>3d-1 pi</td>
<td>2</td>
<td>185/2,000</td>
<td>3/0.31</td>
<td>3</td>
<td>6(3i)</td>
<td>10</td>
<td>-2</td>
<td>3</td>
<td>$500</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7 Revolver, .44M</td>
<td>3d pi+</td>
<td>2</td>
<td>200/2,500</td>
<td>3.25/0.3</td>
<td>3</td>
<td>6(3i)</td>
<td>11</td>
<td>-3</td>
<td>4</td>
<td>$900</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8 Auto Pistol, .44M</td>
<td>3d pi+</td>
<td>2</td>
<td>230/2,500</td>
<td>4.5/0.6</td>
<td>3</td>
<td>9+1(3)</td>
<td>12</td>
<td>-3</td>
<td>4</td>
<td>$750</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8 Auto Pistol, .40</td>
<td>2d pi+</td>
<td>2</td>
<td>150/1,900</td>
<td>2.1/0.7</td>
<td>3</td>
<td>15+1(3)</td>
<td>9</td>
<td>-2</td>
<td>2</td>
<td>$640</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>9 Auto Pistol, 9mm</td>
<td>2d+2 pi</td>
<td>2</td>
<td>150/1,900</td>
<td>2/0.7</td>
<td>3</td>
<td>18+1(3)</td>
<td>9</td>
<td>-2</td>
<td>2</td>
<td>$800</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### GUNS (GYROC) (DX-4, or most other Guns at -4)

<table>
<thead>
<tr>
<th>TL Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Gyroc Pistol, 15mm</td>
<td>6d pi++</td>
<td>1</td>
<td>1,900</td>
<td>1/0.4</td>
<td>3</td>
<td>(3i)</td>
<td>9</td>
<td>-2</td>
<td>1</td>
<td>$200</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### GUNS (SMG) (DX-4, or most other Guns at -2)

<table>
<thead>
<tr>
<th>TL Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 SMG, .45</td>
<td>2d+1 pi+</td>
<td>3</td>
<td>190/1,750</td>
<td>15/7.4</td>
<td>9</td>
<td>50+1(5)</td>
<td>11</td>
<td>-4</td>
<td>3</td>
<td>$2,200</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>6 SMG, 9mm</td>
<td>3d-1 pi</td>
<td>3</td>
<td>160/1,900</td>
<td>10.5/1.5</td>
<td>8+</td>
<td>32(3)</td>
<td>10</td>
<td>-4</td>
<td>2</td>
<td>$700</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7 Machine Pistol, 9mm</td>
<td>2d+2 pi</td>
<td>2</td>
<td>160/1,900</td>
<td>5.5/1.1</td>
<td>20</td>
<td>25+1(3)</td>
<td>12</td>
<td>-3</td>
<td>3</td>
<td>$900</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7 SMG, 9mm</td>
<td>3d-1 pi</td>
<td>4</td>
<td>160/1,900</td>
<td>7.5/1.2</td>
<td>13</td>
<td>30+1(3)</td>
<td>10</td>
<td>-4</td>
<td>2</td>
<td>$1,200</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8 PDW, 4.6mm</td>
<td>4d+1 pi-</td>
<td>3</td>
<td>200/2,000</td>
<td>3.9/0.5</td>
<td>15</td>
<td>20+1(3)</td>
<td>7</td>
<td>-3</td>
<td>2</td>
<td>$800</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>10 Gauss PDW, 4mm</td>
<td>4d(3) pi-</td>
<td>6+1</td>
<td>700/2,900</td>
<td>4.6/1</td>
<td>16</td>
<td>80(3)</td>
<td>9</td>
<td>-3</td>
<td>2</td>
<td>$3,600</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

1. Includes “smartgun” electronics (see box).
2. Rockets take time to accelerate. Divide damage by 3 at 1-2 yards, and by 2 at 3-10 yards.
3. Civilian semi-automatic version is RoF 3, -25% to cost, and +1 to LC.

**“Smartgun” Electronics (TL8)**

The following systems are optional on TL8 firearms (add $500 to price) and standard on TL9+ firearms (no extra cost):

- A built-in laser sight (p. 412).
- “Smart” electronics that give +1 to skill rolls to fix damage or malfunctions.
- An electronic access system (usually a biometric scanner, or a transponder in a ring or glove) that limits usage to authorized persons. Unauthorized users cannot fire the weapon. Military and police weapons can be set to allow everyone in a unit to share weapons.
- If the weapon has built-in sights (noted as a bonus after Acc), a video link to a helmet or goggle head-up display (if worn), allowing faster target engagement; see Targeting Systems (p. 548).
### Rifle and Shotgun Table

#### GUNS (MUSKET) (DX-4, or most other Guns at -2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Handgonne, .90</td>
<td>2d pi++</td>
<td>0</td>
<td>100/600</td>
<td>15/0.1</td>
<td>1</td>
<td>1(60)</td>
<td>10†</td>
<td>-6</td>
<td>4</td>
<td>$300</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Matchlock Musket, .80</td>
<td>4d pi++</td>
<td>2</td>
<td>100/600</td>
<td>20.05</td>
<td>1</td>
<td>1(60)</td>
<td>10R†</td>
<td>-6</td>
<td>3</td>
<td>$150</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Flintlock Musket, .75</td>
<td>4d pi++</td>
<td>2</td>
<td>100/1,500</td>
<td>13/0.05</td>
<td>1</td>
<td>1(15)</td>
<td>10†</td>
<td>-6</td>
<td>4</td>
<td>$200</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

#### GUNS (RIFLE) (DX-4, or most other Guns at -2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Rifle-Musket, .577</td>
<td>4d pi+</td>
<td>4</td>
<td>700/2,100</td>
<td>8.5/0.05</td>
<td>1</td>
<td>1(15)</td>
<td>10†</td>
<td>-6</td>
<td>3</td>
<td>$150</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cartridge Rifle, .45</td>
<td>5d pi+</td>
<td>3</td>
<td>600/2,000</td>
<td>6/0.1</td>
<td>1</td>
<td>1(4)</td>
<td>10†</td>
<td>-6</td>
<td>3</td>
<td>$200</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lever-Action Carbine, .30</td>
<td>5d pi+</td>
<td>4</td>
<td>450/3,000</td>
<td>7/0.3</td>
<td>1</td>
<td>6+1(3i)</td>
<td>10†</td>
<td>-4</td>
<td>2</td>
<td>$300</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Bolt-Action Rifle, 7.62mm</td>
<td>7d pi+</td>
<td>5</td>
<td>1,000/4,200</td>
<td>8.9/0.3</td>
<td>1</td>
<td>5+1(3)</td>
<td>10†</td>
<td>-5</td>
<td>4</td>
<td>$350</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Self-Loading Rifle, 7.62mm</td>
<td>7d pi+</td>
<td>5</td>
<td>1,000/4,200</td>
<td>10/0.5</td>
<td>3</td>
<td>8(3)</td>
<td>10†</td>
<td>-5</td>
<td>3</td>
<td>$600</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Assault Rifle, 5.56mm</td>
<td>5d pi+</td>
<td>5</td>
<td>500/3,500</td>
<td>9/1</td>
<td>12</td>
<td>30+1(3)</td>
<td>9†</td>
<td>-4</td>
<td>2</td>
<td>$800</td>
<td>2</td>
<td>[1]</td>
</tr>
<tr>
<td>7</td>
<td>Assault Rifle, 7.62mmS</td>
<td>5d+1 pi+</td>
<td>4</td>
<td>400/3,000</td>
<td>10.5/1.8</td>
<td>10</td>
<td>30+1(3)</td>
<td>10†</td>
<td>-4</td>
<td>2</td>
<td>$300</td>
<td>2</td>
<td>[1]</td>
</tr>
<tr>
<td>7</td>
<td>Battle Rifle, 7.62mm</td>
<td>7d pi+</td>
<td>5</td>
<td>1,000/4,200</td>
<td>11/1.7</td>
<td>11</td>
<td>20+1(3)</td>
<td>11†</td>
<td>-5</td>
<td>3</td>
<td>$900</td>
<td>2</td>
<td>[1]</td>
</tr>
<tr>
<td>8</td>
<td>Assault Carbine, 5.56mm</td>
<td>4d+2 pi+</td>
<td>4</td>
<td>400/3,000</td>
<td>7.3/1</td>
<td>15</td>
<td>30+1(3)</td>
<td>9†</td>
<td>-3</td>
<td>2</td>
<td>$900</td>
<td>2</td>
<td>[1]</td>
</tr>
<tr>
<td>8</td>
<td>Dart Rifle, 11mm</td>
<td>1d(0.2) pi-</td>
<td>5-1</td>
<td>45/145</td>
<td>6/0.6</td>
<td>1</td>
<td>1(3)</td>
<td>9†</td>
<td>-5</td>
<td>2</td>
<td>$1,200</td>
<td>4</td>
<td>[2]</td>
</tr>
<tr>
<td>8</td>
<td>Sniper Rifle, .338</td>
<td>9d+1 pi+</td>
<td>6+3</td>
<td>1,500/5,500</td>
<td>17/5.08</td>
<td>4</td>
<td>4+1(3)</td>
<td>11B†</td>
<td>-6</td>
<td>4</td>
<td>$5,600</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>ICW, 6.8mm</td>
<td>6d pi+</td>
<td>4+2</td>
<td>700/4,000</td>
<td>12/1.5</td>
<td>15</td>
<td>25+1(3)</td>
<td>10†</td>
<td>-5</td>
<td>2</td>
<td>$7,000</td>
<td>1</td>
<td>[3, 4]</td>
</tr>
<tr>
<td>10</td>
<td>Gauss Rifle, 4mm</td>
<td>6d+2(3) pi-</td>
<td>7+2</td>
<td>1,200/4,800</td>
<td>8.5/1.4</td>
<td>12</td>
<td>60(3)</td>
<td>10†</td>
<td>-4</td>
<td>2</td>
<td>$7,100</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

#### GUNS (SHOTGUN) (DX-4, or most other Guns at -2)

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Blunderbuss, 8G</td>
<td>1d pi</td>
<td>1</td>
<td>15/100</td>
<td>12/0.13</td>
<td>1x9</td>
<td>1(15)</td>
<td>11†</td>
<td>-5</td>
<td>1</td>
<td>$150</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Double Shotgun, 10G</td>
<td>1d+2 pi</td>
<td>3</td>
<td>50/125</td>
<td>10/0.1</td>
<td>2x9</td>
<td>2(3i)</td>
<td>11†</td>
<td>-5</td>
<td>1</td>
<td>$450</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Pump Shotgun, 12G</td>
<td>1d+1 pi</td>
<td>3</td>
<td>50/125</td>
<td>8/0.7</td>
<td>2x9</td>
<td>5(3i)</td>
<td>10†</td>
<td>-5</td>
<td>1</td>
<td>$240</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Auto Shotgun, 12G</td>
<td>1d+1 pi</td>
<td>3</td>
<td>50/125</td>
<td>8.4/0.85</td>
<td>3x9</td>
<td>6+1(3i)</td>
<td>10†</td>
<td>-5</td>
<td>1</td>
<td>$950</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Notes

[1] Civilian semi-automatic version is RoF 3, -25% to cost, and +1 to LC.
[2] If damage penetrates DR, the dart injects a drug or poison as a follow-up attack. For a tranquilizer dart, roll vs. HT-3; failure results in unconsciousness for minutes equal to the margin of failure.
[4] Includes an integral 25mm grenade launcher (see p. 281).

---

### Optional Rule: Malfunction

Optionally, all firearms and grenades have a “malfunction number,” or “Malf.” The weapon will jam, misfire, or otherwise fail to function on any attack roll equal to or greater than its Malf.; see Malfunctions (p. 407).

Malfunction number is a function of tech level: it is 12 at TL3, 14 at TL4, 16 at TL5, and 17 at TL6+. A few weapons might be intrinsically more or less reliable. Weapon quality also affects Malf. Finally, lack of maintenance (especially in dusty or humid conditions) can lower Malf.

### Ammunition

For a given gun, the weight of one full load of ammunition, in pounds, appears after the slash in its “Weight” statistic. Assume that ammo cost is $20 times this weight.

**Example:** The 5.56mm assault rifle has a weight of “9/1.” Thus, a full reload weighs 1 lb. and costs $20.

The statistics given on the tables assume that guns are firing ordinary, solid projectiles (usually lead). At TL6+, this means the common “ball” or “full metal jacket” round, but other ammo types are possible. A few examples for pistols, submachine guns, rifles, and machine guns (but not shotguns, Gauss guns, and dart rifles):

**Hollow-Point (HP):** Bullets designed to expand in flesh, causing bigger wounds. This improves damage type: pi- becomes pi, pi becomes pi+, and pi+ becomes pi++. (HP ammo is not available for guns that already inflict pi++ damage.) However, HP ammo has trouble penetrating barriers or armor; add an armor divisor of (0.5). HP ammo is available at TL6+. It has normal cost and LC. It is the most common ammo type used by hunters and police.

**Armor-Piercing Hard Core (APHC):** Solid bullets with a dense, armor-piercing core. Add a (2) armor divisor; but if the gun caliber is below 20mm (.80), damage type degrades: pi++ drops to pi+, pi+ to pi, and pi to pi-. (There is no effect on pi-.) APHC ammo is available at TL7+. It has double normal cost and is LC2.
**Armor-Piercing Discarding-Sabot (APDS):** A small tungsten dart encased in a larger plastic sheath that peels away when the round leaves the barrel, increasing velocity. APDS works like APHC, but also adds 50% to range and +1 damage per die. Used by tanks at TL6-7 and machine guns at TL8, it is available for small arms by TL9. It has five times normal cost and is LC1.

**Firearm Quality**

Fine firearms cost double list price, and get +1 to Acc and +1 to Malf. Very fine firearms cost 5 times list price, and get +2 to Acc and +1 to Malf. Should this result in a Malf. of 19 or more, the weapon will not malfunction unless lack of maintenance lowers Malf.

**Presentation firearms** (decorated, gilded, etc.) are also available. This will further increase cost (and resale value) by 2 to 20 times.

---

**Ultra-Tech Firearm Table**

**BEAM WEAPONS (PISTOL) (DX-4, other Beam Weapons-4, or Guns (Pistol)-4)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Electrolaser Pistol</td>
<td>1d-3 burn</td>
<td>4</td>
<td>40/80</td>
<td>2.2/0.5</td>
<td>3</td>
<td>180(3)</td>
<td>4</td>
<td>-2</td>
<td>1</td>
<td>$1,800</td>
<td>4</td>
<td>[1, 2, 3]</td>
</tr>
<tr>
<td>10</td>
<td>Laser Pistol</td>
<td>3d(2) burn</td>
<td>6</td>
<td>250/750</td>
<td>3.3/0.5</td>
<td>10</td>
<td>400(3)</td>
<td>6</td>
<td>-2</td>
<td>1</td>
<td>$2,800</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>11</td>
<td>Blaster Pistol</td>
<td>3d(5) burn</td>
<td>5</td>
<td>300/900</td>
<td>1.6/0.5</td>
<td>3</td>
<td>200(3)</td>
<td>4</td>
<td>-2</td>
<td>1</td>
<td>$2,200</td>
<td>3</td>
<td>[4, 5]</td>
</tr>
</tbody>
</table>

**BEAM WEAPONS (RIFLE) (DX-4, other Beam Weapons-4, or Guns (Rifle)-4)**

<table>
<thead>
<tr>
<th>TL</th>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>Weight</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>Cost</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Electrolaser Carbine</td>
<td>1d-3 burn</td>
<td>8+1</td>
<td>160/470</td>
<td>3.7/1</td>
<td>3</td>
<td>360(3)</td>
<td>4†</td>
<td>-4</td>
<td>1</td>
<td>$3,900</td>
<td>3</td>
<td>[1, 2, 3]</td>
</tr>
<tr>
<td>9</td>
<td>Laser Sniper Rifle</td>
<td>5d(2) burn</td>
<td>12+2</td>
<td>1,100/3,300</td>
<td>20/4p</td>
<td>3</td>
<td>75(3)</td>
<td>10†</td>
<td>-8</td>
<td>1</td>
<td>$20,000</td>
<td>1</td>
<td>[3]</td>
</tr>
<tr>
<td>10</td>
<td>Laser Rifle</td>
<td>5d(2) burn</td>
<td>12+2</td>
<td>700/2,100</td>
<td>10/2</td>
<td>10</td>
<td>150(3)</td>
<td>7†</td>
<td>-4</td>
<td>1</td>
<td>$10,000</td>
<td>2</td>
<td>[3]</td>
</tr>
<tr>
<td>11</td>
<td>Blaster Rifle</td>
<td>6d(5) burn</td>
<td>10+2</td>
<td>700/2,100</td>
<td>10/1</td>
<td>3</td>
<td>50(3)</td>
<td>7†</td>
<td>-4</td>
<td>1</td>
<td>$18,000</td>
<td>2</td>
<td>[4, 5]</td>
</tr>
<tr>
<td>11</td>
<td>Heavy Blaster</td>
<td>8d(5) burn</td>
<td>10+4</td>
<td>900/2,700</td>
<td>20/4p</td>
<td>3</td>
<td>90(5)</td>
<td>10†</td>
<td>-6</td>
<td>1</td>
<td>$23,000</td>
<td>1</td>
<td>[4]</td>
</tr>
</tbody>
</table>

**Notes**

- All beam weapons include “smartgun” electronics (see p. 278).
- [1] Weapon requires atmosphere to function. No effect in trace atmosphere or vacuum.
- [2] Burn damage has the Surge damage modifier (p. 105). As well, whether or not any damage penetrates, the target must make a HT roll at -4, plus half the DR on the location struck (due to the armor divisor). On a failure, the electrical shock stuns him. He may roll against HT every turn at the same penalty (but without the DR bonus) to recover.
- [3] Smoke, fog, rain, cloud, etc. give the target additional DR equal to the visibility penalty. For instance, if rain gives a penalty of -1 per 100 yards, a laser firing through 2,000 yards of rain must penetrate an extra DR 20.
- [4] Burn damage has the Surge damage modifier (p. 105).
- [5] In superscience games, an “omni-blaster” costs twice as much, but has a “stun” setting: damage becomes HT-3(3) aff for a pistol, HT-6(3) aff for a rifle. On a failed HT roll, the victim is unconsciousness for minutes equal to his margin of failure.
**HEAVY WEAPONS**

The next table gives a few examples of the heaviest weapons that adventurers are likely to carry or encounter.

**Heavy Weapon Table**

<table>
<thead>
<tr>
<th>ARTILLERY (GUIDED MISSILE) (IQ-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GUNNER (CATAPULT) (DX-4, or other Gunner at -4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GUNNER (MACHINE GUN) (DX-4, or other Gunner at -4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GUNS (GRENADE LAUNCHER) (DX-4, or most other Guns at -4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GUNS (LAW) (DX-4, or most other Guns at -4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GUNS (LMG) (DX-4, or most other Guns at -2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIQUID PROJECTOR (FLAMETHROWER) (DX-4, or other Liquid Projector at -4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TL</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

**Notes**

[1] Has a minimum range: 10 yards for 40mm GL, 30 yards for 115mm ATGM, and 200 yards for 70mm SAM.
[2] Hazardous back-blast: 1d burn damage to anyone behind firer and within 15 yards (30 yards for ATGM).
[3] Guided attack (see p. 412). Gunner uses Artillery (Guided Missile) to attack. “1/2D” range is speed in yards per second. Weight is for empty launcher/one missile.
[4] Homing (Hyperspectral Vision) attack (see p. 413), at the missile’s skill of 10. Firer rolls against Artillery (Guided Missile) to aim. On a success, the missile gets its Acc bonus. “1/2D” range is speed (yards/second). Weight is for empty launcher/one missile.
[6] Can clamp under the barrel of any TL7+ rifle or carbine. Use the rifle’s Bulk.
[7] Damage is not halved at 1/2D range, but loses its armor divisor of (10).
Armor is very useful in combat. A single sword blow or bullet can incapacitate or kill you . . . but armor might give you a second chance. Your armor’s Damage Resistance, or DR, subtracts directly from the damage inflicted by your enemies’ weapons. Armor requires no skill to use – you just wear it! (Exception: Certain TL7+ armor types require Environment Suit skill, p. 192.)

Effective armor is heavy, though. Its weight can hinder you (see Encumbrance and Move, p. 17), reducing your Dodge – and also your Parry, if you use fencing weapons, Judo, or Karate. A swashbuckler who relies on agility to avoid injury might choose light or no armor! (As a guideline, your Dodge, Block, or Parry – and preferably two or all three of these – should be at least 12 if you plan to go unarmored.)

The best armor is expensive, too. You probably won’t be able to afford it without lots of Wealth!

Armor is more important in some periods than in others. Before TL4, it’s a lifesaver. Warriors who expect to go into battle should wear the heaviest armor they can afford. On the other hand, few fighters wear metal armor in a city or on the road: it’s just too heavy and uncomfortable.

At TL4, armor declines in importance as firearms become common: anything that can stop a musket ball is too heavy to wear. Except for heavy cavalry, few soldiers or adventurers wear more than a pot helm and breastplate. At TL5-6, armor all but disappears – although TL6-7 infantry still wear a steel pot helmet to protect against bursting shell fragments.

At TL7-9, this trend reverses, as lightweight, bullet-resistant synthetics (such as Kevlar) appear and gradually improve. In some TL10+ backgrounds, armor might be vital. In others, weapons can penetrate anything, and a good Dodge – or shooting first – is the best defense.

**Armor Tables**

Three armor tables appear below: one for low-tech armor (TL0-5), one for high- and ultra-tech armor (TL6+), and one for armoring mounts. Each item on the tables includes an article of light, common clothing to wear underneath – or padding, if this is usual for the armor (e.g., mail includes cloth padding under the chain). The statistics already reflect this; you do not have to buy clothing or padding separately, or account for its DR and weight.

The tables give the following information for each item of armor:

- **TL**: The tech level at which the armor is commonly available.
- **Armor**: The item’s name.
- **Location**: The area the armor protects on a humanoid wearer. Individual locations are skull (top of the head), face (the face, excluding the eyes), neck, eyes, arms, hands, torso (the abdomen and chest), groin, legs, and feet. Limbs covers the arms and legs, but not the hands or feet. Head covers skull, face, and eyes. Body is neck, torso, and groin. Full suit is everything but the head.
- **DR**: The amount of Damage Resistance the item gives. Subtract this from any blow that strikes the armored location. For instance, if you’re wearing a DR 6 corselet and are hit in the torso for 8 points of damage, only 2 points penetrate and affect you. Some armor has a split DR; e.g., “4/2.” This means DR varies by location or by type of attack; see the notes for that piece of armor.
- “F” means the DR only protects against attacks from the front.
- “*” means the armor is flexible. Flexible armor is easier to conceal or wear under other armor, and quicker to don or remove, but it is more vulnerable to blunt trauma damage.
- **Cost**: The item’s price, in $. “K” is thousands; “M” is millions.
- **Weight**: The item’s weight, in pounds.
- **LC**: The item’s Legality Class; see Legality Class (p. 267).
- **Notes**: Many items have special features or restrictions; see the notes after each table. Some advanced armor has built-in features that effectively grant the wearer advantages.

**DR**: The amount of Damage Resistance the item gives. Subtract this from any blow that strikes the armored location. For instance, if you’re wearing a DR 6 corselet and are hit in the torso for 8 points of damage, only 2 points penetrate and affect you. Some armor has a split DR; e.g., “4/2.” This means DR varies by location or by type of attack; see the notes for that piece of armor.

“F” means the DR only protects against attacks from the front.

“*” means the armor is flexible. Flexible armor is easier to conceal or wear under other armor, and quicker to don or remove, but it is more vulnerable to blunt trauma damage.

Cost: The item’s price, in $. “K” is thousands; “M” is millions.

Weight: The item’s weight, in pounds.

LC: The item’s Legality Class; see Legality Class (p. 267).

Notes: Many items have special features or restrictions; see the notes after each table. Some advanced armor has built-in features that effectively grant the wearer advantages.
### Low-Tech Armor Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Body Armor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Fur Loincloth</td>
<td>groin</td>
<td>1*</td>
<td>$10</td>
<td>neg.</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>0</td>
<td>Fur Tunic</td>
<td>torso</td>
<td>1*</td>
<td>$25</td>
<td>2</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Bronze Breastplate</td>
<td>torso</td>
<td>4F</td>
<td>$400</td>
<td>20</td>
<td>3</td>
<td>[2]</td>
</tr>
<tr>
<td>1</td>
<td>Bronze Corselet</td>
<td>torso, groin</td>
<td>5</td>
<td>$1,300</td>
<td>40</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cloth Armor</td>
<td>torso, groin</td>
<td>1*</td>
<td>$30</td>
<td>6</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Leather Armor</td>
<td>torso, groin</td>
<td>2</td>
<td>$100</td>
<td>10</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Leather Jacket</td>
<td>arms, torso</td>
<td>1*</td>
<td>$50</td>
<td>4</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>2</td>
<td>Light Scale Armor</td>
<td>torso</td>
<td>3</td>
<td>$150</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lorica Segmentata</td>
<td>torso</td>
<td>5</td>
<td>$680</td>
<td>26</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mail Hauberk</td>
<td>torso, groin</td>
<td>4/2*</td>
<td>$230</td>
<td>25</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>2</td>
<td>Mail Shirt</td>
<td>torso</td>
<td>4/2*</td>
<td>$150</td>
<td>16</td>
<td>4</td>
<td>[1, 3]</td>
</tr>
<tr>
<td>2</td>
<td>Scale Armor</td>
<td>torso, groin</td>
<td>4</td>
<td>$420</td>
<td>35</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Double Mail Hauberk</td>
<td>torso, groin</td>
<td>5/3*</td>
<td>$520</td>
<td>44</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>3</td>
<td>Heavy Steel Corselet</td>
<td>torso, groin</td>
<td>7</td>
<td>$2,300</td>
<td>45</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Steel Breastplate</td>
<td>torso</td>
<td>5F</td>
<td>$500</td>
<td>18</td>
<td>3</td>
<td>[2]</td>
</tr>
<tr>
<td>3</td>
<td>Steel Corselet</td>
<td>torso, groin</td>
<td>6</td>
<td>$1,300</td>
<td>35</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Steel Laminate Plate</td>
<td>torso, groin</td>
<td>5</td>
<td>$900</td>
<td>30</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Buff Coat (Leather)</td>
<td>body, limbs</td>
<td>2*</td>
<td>$210</td>
<td>16</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limb Armor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Bronze Armbands</td>
<td>arms</td>
<td>3</td>
<td>$180</td>
<td>9</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Bronze Greaves</td>
<td>legs</td>
<td>3</td>
<td>$270</td>
<td>17</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cloth Sleeves</td>
<td>arms</td>
<td>1*</td>
<td>$20</td>
<td>2</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Heavy Leather Leggings</td>
<td>legs</td>
<td>2</td>
<td>$60</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Heavy Leather Sleeves</td>
<td>arms</td>
<td>2</td>
<td>$50</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Leather Leggings</td>
<td>legs</td>
<td>1*</td>
<td>$40</td>
<td>2</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Leather Pants</td>
<td>legs, groin</td>
<td>1*</td>
<td>$40</td>
<td>3</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Studded Leather Skirt</td>
<td>groin, legs</td>
<td>3/2*</td>
<td>$40</td>
<td>6</td>
<td>4</td>
<td>[3]</td>
</tr>
<tr>
<td>2</td>
<td>Mail Leggings</td>
<td>legs</td>
<td>4/2*</td>
<td>$110</td>
<td>15</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>2</td>
<td>Mail Sleeves</td>
<td>arms</td>
<td>4/2*</td>
<td>$70</td>
<td>9</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>2</td>
<td>Scale Leggings</td>
<td>legs</td>
<td>4</td>
<td>$250</td>
<td>21</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Scale Sleeves</td>
<td>arms</td>
<td>4</td>
<td>$210</td>
<td>14</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Heavy Plate Arms</td>
<td>arms</td>
<td>7</td>
<td>$1,500</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Heavy Plate Legs</td>
<td>legs</td>
<td>7</td>
<td>$1,600</td>
<td>25</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Plate Arms</td>
<td>arms</td>
<td>6</td>
<td>$1,000</td>
<td>15</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Plate Legs</td>
<td>legs</td>
<td>6</td>
<td>$1,100</td>
<td>20</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
### Armor Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bronze Helmet</td>
<td>skull, face</td>
<td>3</td>
<td>$160</td>
<td>7.5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Bronze Pot-Helm</td>
<td>skull</td>
<td>3</td>
<td>$60</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cloth Cap</td>
<td>skull</td>
<td>1*</td>
<td>$5</td>
<td>neg.</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Leather Cap</td>
<td>skull</td>
<td>1*</td>
<td>$32</td>
<td>neg.</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Leather Helm</td>
<td>skull, face</td>
<td>2</td>
<td>$20</td>
<td>0.5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Legionary Helmet</td>
<td>skull, face</td>
<td>4</td>
<td>$150</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mail Coif</td>
<td>skull, neck</td>
<td>4/2*</td>
<td>$55</td>
<td>4</td>
<td>3</td>
<td>[3]</td>
</tr>
<tr>
<td>3</td>
<td>Barrel Helm</td>
<td>skull, face</td>
<td>6</td>
<td>$240</td>
<td>10</td>
<td>3</td>
<td>[4]</td>
</tr>
<tr>
<td>3</td>
<td>Face Mask</td>
<td>face</td>
<td>4</td>
<td>$100</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Greathelm</td>
<td>skull, face, neck</td>
<td>7</td>
<td>$340</td>
<td>10</td>
<td>3</td>
<td>[4]</td>
</tr>
<tr>
<td>3</td>
<td>Pot-Helm</td>
<td>skull</td>
<td>4</td>
<td>$100</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

#### Gloves

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cloth Gloves</td>
<td>hands</td>
<td>1*</td>
<td>$15</td>
<td>neg.</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Leather Gloves</td>
<td>hands</td>
<td>2*</td>
<td>$30</td>
<td>neg.</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gauntlets</td>
<td>hands</td>
<td>4</td>
<td>$100</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Heavy Gauntlets</td>
<td>hands</td>
<td>5</td>
<td>$250</td>
<td>2.5</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Footwear

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Sandals</td>
<td>feet</td>
<td>0</td>
<td>$25</td>
<td>0.5</td>
<td>–</td>
<td>[1, 2]</td>
</tr>
<tr>
<td>1</td>
<td>Shoes</td>
<td>feet</td>
<td>1*</td>
<td>$40</td>
<td>2</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>2</td>
<td>Boots</td>
<td>feet</td>
<td>2*</td>
<td>$80</td>
<td>3</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>3</td>
<td>Sollerets</td>
<td>feet</td>
<td>4</td>
<td>$150</td>
<td>7</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Notes

1. Concealable *as or under* clothing.
2. Partial coverage: sandals give DR 1 to the underside of the foot, while breastplates protect only from the front.
3. Split DR: use the lower DR against *crushing* attacks.
4. Helmet gives wearer the No Peripheral Vision disadvantage (p. 151) while worn.

### High- and Ultra-Tech Armor Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Flak Jacket</td>
<td>torso</td>
<td>7</td>
<td>$500</td>
<td>20</td>
<td>3</td>
<td>[1]</td>
</tr>
<tr>
<td>7</td>
<td>Frag Vest</td>
<td>torso, groin</td>
<td>5/2*</td>
<td>$350</td>
<td>9</td>
<td>3</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td>+ Plate Inserts</td>
<td>torso</td>
<td>+20</td>
<td>+$300</td>
<td>+15</td>
<td>3</td>
<td>[1]</td>
</tr>
<tr>
<td>8</td>
<td>Ballistic Vest</td>
<td>torso</td>
<td>8/2*</td>
<td>$400</td>
<td>2</td>
<td>3</td>
<td>[1, 2, 3]</td>
</tr>
<tr>
<td>8</td>
<td>Tactical Vest</td>
<td>torso, groin</td>
<td>12/5*</td>
<td>$900</td>
<td>9</td>
<td>2</td>
<td>[1, 3]</td>
</tr>
<tr>
<td></td>
<td>+ Trauma Plates</td>
<td>torso</td>
<td>+23</td>
<td>+$600</td>
<td>+9</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ballistic Suit</td>
<td>body, limbs</td>
<td>12/4*</td>
<td>$1,000</td>
<td>6</td>
<td>3</td>
<td>[1, 2, 3]</td>
</tr>
<tr>
<td>9</td>
<td>Tactical Suit</td>
<td>full suit</td>
<td>20/10*</td>
<td>$3,000</td>
<td>15</td>
<td>2</td>
<td>[1, 3, 4, 5]</td>
</tr>
</tbody>
</table>

#### Gloves and Footwear

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Reinforced Boots</td>
<td>feet</td>
<td>5/2</td>
<td>$75</td>
<td>3</td>
<td>–</td>
<td>[2, 6]</td>
</tr>
<tr>
<td>9</td>
<td>Assault Boots</td>
<td>feet</td>
<td>12/6</td>
<td>$150</td>
<td>3</td>
<td>4</td>
<td>[3, 6]</td>
</tr>
<tr>
<td>9</td>
<td>Ballistic Gloves</td>
<td>hands</td>
<td>8/2*</td>
<td>$30</td>
<td>neg.</td>
<td>4</td>
<td>[1, 2, 3]</td>
</tr>
</tbody>
</table>
TL | Armor | Location | DR | Cost | Weight | LC | Notes |
--- | --- | --- | --- | --- | --- | --- | ---
6 | Gas Mask | eyes, face | 2 | $100 | 4 | 4 | [7] |
6 | Steel Pot | skull | 4 | $60 | 3 | 4 | |
7 | Frag Helmet | skull | 5 | $125 | 3 | 4 | |
| + Visor | eyes, face | 1 | +$25 | +1.5 | 4 | [8] |
8 | Ballistic Helmet | skull | 12 | $250 | 3 | 3 | [3] |
| + Visor | eyes, face | 10 | +$100 | +3 | 3 | |

Environment Suits

7 | NBC Suit | full suit | 1 | $150 | 3.5 | 4 | [5, 9] |
7 | Space Suit | full suit | 2 | $2,000,000 | 225 | 4 | [4, 9, 10] |
| + Space Helmet | head | 3 | +$25,000 | 10 | 4 | [7, 11] |
9 | Battlesuit | full suit | 70/50 | $80,000 | 150 | 1 | [3, 4, 6, 12] |
| + Helmet | head | 70/50 | +$10,000 | 15 | 1 | [3, 6, 7, 11] |
9 | Combat Hardsuit | full suit | 50/30 | $10,000 | 30 | 2 | [3, 4, 5, 6] |
| + Helmet | head | 18/12 | +$2,000 | 5 | 2 | [3, 6, 7, 11] |
9 | Space Armor | full suit | 50/30 | $20,000 | 45 | 2 | [3, 4, 6, 10] |
| + Helmet | head | 40/30 | +$3,000 | 7 | 2 | [3, 6, 7, 11] |
9 | Vacc Suit | full suit | 6* | $10,000 | 25 | 4 | [3, 4, 10] |
| + Vacc Helmet | head | 6 | +$2,000 | 5 | 4 | [3, 11] |

Notes

All TL7+ armor electronics and powered systems (including the battlesuit) work for (TL - 6) × 6 hours before they require recharging or refueling.

[1] Split DR: use the first, higher DR against piercing and cutting attacks; use the second, lower DR against all other damage types.
[2] Concealable as or under clothing.
[3] DR increases with TL. After the TL of introduction, consult the following table:

<table>
<thead>
<tr>
<th>TL</th>
<th>DR Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro</td>
<td>x1</td>
</tr>
<tr>
<td>Intro+1</td>
<td>x1.5</td>
</tr>
<tr>
<td>Intro+2</td>
<td>x2</td>
</tr>
<tr>
<td>Intro+3</td>
<td>x3</td>
</tr>
<tr>
<td>Any higher</td>
<td>x4</td>
</tr>
</tbody>
</table>

[4] Biomedical sensors allow remote monitoring of vital signs, giving +1 to Diagnosis skill when examining the wearer. In addition, the suit is climate-controlled.

[5] Requires NBC Suit skill – but at TL9+, the suit does not limit DX. Worn with a mask or a helmet with note [7], the combination provides the Sealed advantage.

[6] Split DR: use the higher DR only if the attack strikes the torso (if body armor), skull (if headgear), or underside of the foot (if footwear).

[7] Provides Filter Lungs, Protected Smell, and Protected Vision – but before TL9, it also gives the No Peripheral Vision disadvantage.

[8] Provides Protected Vision.

[9] Suit’s DR applies only against burning or corrosion damage.

[10] Requires Vacc Suit skill. If worn with its helmet, the suit gives Doesn’t Breathe (for 12 hours), Protected Smell, Sealed, and Vacuum Support.

[11] Provides Protected Hearing, Protected Vision, and Radio. At TL9+, add Absolute Direction (Requires Signal), InfraVision, Night Vision 9, and (TL - 8) levels of Telescopic Vision. TL9+ helmets also include a head-up display (HUD) compatible with “smartgun” electronics (p. 278). Battlesuits add Hyperspectral Vision and Laser Communication.

[12] Requires Battlesuit skill. Gives Lifting ST +10, Striking ST +10, and Super Jump 1. Add +5 to Lifting ST, +5 to Striking ST, and +1 to Super Jump per TL past TL9. With its helmet in place, it also grants Doesn’t Breathe (for 12 hours), Protected Smell, Sealed, and Vacuum Support. Do not count suit weight toward encumbrance!
### Horse Armor (Barding) Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Armor</th>
<th>Location</th>
<th>DR</th>
<th>Cost</th>
<th>Weight</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leather &amp; Cloth</td>
<td>face</td>
<td>2</td>
<td>$40</td>
<td>3</td>
<td>4</td>
<td>[1]</td>
</tr>
<tr>
<td>2</td>
<td>Mail</td>
<td>face</td>
<td>4/2*</td>
<td>$60</td>
<td>7</td>
<td>3</td>
<td>[1, 2]</td>
</tr>
<tr>
<td>2</td>
<td>Scale</td>
<td>face</td>
<td>4</td>
<td>$200</td>
<td>12</td>
<td>3</td>
<td>[1]</td>
</tr>
<tr>
<td>3</td>
<td>Plate</td>
<td>face</td>
<td>5</td>
<td>$200</td>
<td>12</td>
<td>3</td>
<td>[1]</td>
</tr>
</tbody>
</table>

**Head/Neck Armor**

| 2   | Leather & Cloth | neck, skull | 2  | $80  | 4      | 4  |        |
| 2   | Mail            | neck, skull | 4/2*| $100 | 15     | 3  | [2]   |
| 2   | Scale           | neck, skull | 4  | $320 | 20     | 3  |        |
| 3   | Plate           | neck, skull | 5  | $330 | 18     | 3  | [1]   |

**Partial Barding**

| 1   | Leather & Cloth | torso     | 2F | $260 | 12     | 4  |        |
| 2   | Mail            | torso     | 4/2F*| $440 | 20     | 3  | [2]   |
| 2   | Scale           | torso     | 4F | $480 | 60     | 3  |        |

**Full Barding**

| 2   | Leather & Cloth | torso, groin | 2  | $345 | 30     | 4  |        |
| 3   | Mail            | torso, groin | 4/2F*| $670 | 59     | 3  | [2]   |
| 3   | Plate           | torso, groin | 5  | $1,650| 90     | 3  |        |

**Leggings**

| 3   | Plate           | legs      | 5  | $400 | 20     | 3  | [3]   |

**Notes**


---

### Wearing Armor

There are some social and practical restrictions on wearing armor.

#### Reaction Penalty

A fully armored individual is someone who is expecting trouble . . . or looking to make trouble. He is unlikely to receive a warm welcome! In a noncombat situation, armor that covers the face or entire head gives -2 to reaction rolls. Nonconcealable armor with DR 2+ anywhere else (except the hands or feet) gives -1, or -2 if it isn’t flexible and covers the torso. These penalties are cumulative: plate armor and a full helm would give you -4!

However, there is no reaction penalty if the NPC making the reaction roll recognizes the wearer’s need or right to wear armor in the situation. Examples of socially acceptable armor include a knight on campaign or at a tourney; an astronaut wearing a vacc suit in space; or a soldier, paramedic, or journalist wearing body armor in a war zone.

#### Donning and Removing Armor

It takes three seconds per piece to don or remove most armor. It takes 30 seconds per piece for vacc suits or battle suits, except for their helmets. Exception: TL8+ flexible armor with insert panels and all TL9+ nonflexible armor have some form of “quick release” mechanism to drop the insert panel or let the user step out of the armor in only one second.

#### Combining and Layering Armor

You can freely combine multiple pieces of armor that don’t cover the same hit location, but you can only layer armor if the inner layer is both flexible and concealable. Add the DR of both layers. Wearing an extra layer of armor anywhere but on the head gives -1 to DX and DX-based skills.
**SHIELDS**

Shields are very valuable in low-tech combat, but almost worthless against firearms. Historically, they were little used after the rise of firearms (TL4) – with the exception of plastic riot shields. In some SF settings, though, they make a comeback as force shields.

You normally wear a shield or force shield strapped to one arm. Your shield hand can’t wield a weapon (preventing you from using two-handed weapons), but it can still carry an item.

A shield helps all your active defense rolls (Block, Dodge, and Parry) with no particular effort. You can also use a shield actively to block; see Blocking (p. 375).

**Shield Statistics**

The following statistics apply to shields:

- **TL**: The tech level at which the shield is commonly available.
- **Shield**: The kind of shield.
- **DB**: Defense Bonus. The bonus the shield gives to all of your active defense rolls (see Defending, p. 374) against attacks from the front or shield side, even if you have no skill at all with a shield. This applies only against melee or muscle-powered ranged weapons – not against firearms, unless you use the optional Damage to Shields rule (p. 484).
- **Cost**: The shield’s price, in $.
- **Weight**: The shield’s weight, in pounds.
- **DR/HP**: The shield’s DR and HP if using the optional Damage to Shields rule. This DR protects the shield, not the wielder.
- **LC**: The shield’s Legality Class; see Legality Class (p. 267).

**Shield Table**

<table>
<thead>
<tr>
<th>Shield Table</th>
<th>TL</th>
<th>Shield</th>
<th>DB</th>
<th>Cost</th>
<th>Weight</th>
<th>DR/HP</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOAK (DX-5, Net-4, or Shield (any)-4)</td>
<td>1</td>
<td>Light Cloak</td>
<td>1</td>
<td>$20</td>
<td>2</td>
<td>1/3</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Heavy Cloak</td>
<td>2</td>
<td>$50</td>
<td>5</td>
<td>1/5</td>
<td>–</td>
<td>[1]</td>
</tr>
<tr>
<td>SHIELD (DX-4, or other Shield at -2)</td>
<td>0</td>
<td>Light Shield</td>
<td>1</td>
<td>$25</td>
<td>2</td>
<td>5/20</td>
<td>4</td>
<td>[2, 3, 4]</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Small Shield</td>
<td>1</td>
<td>$40</td>
<td>8</td>
<td>6/30</td>
<td>4</td>
<td>[2, 3, 4]</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Medium Shield</td>
<td>2</td>
<td>$60</td>
<td>15</td>
<td>7/40</td>
<td>4</td>
<td>[2, 3, 4]</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Large Shield</td>
<td>3</td>
<td>$90</td>
<td>25</td>
<td>9/60</td>
<td>4</td>
<td>[2, 4]</td>
</tr>
<tr>
<td>SHIELD (FORCE) (DX-4, or other Shield at -2)</td>
<td>2</td>
<td>Force Shield</td>
<td>3</td>
<td>$1,500</td>
<td>0.5</td>
<td>100/-</td>
<td>3</td>
<td>[3, 5]</td>
</tr>
</tbody>
</table>

**Notes**

[1] Can be used offensively to entangle; see Cloaks (p. 404).

[2] Can be used offensively with a shield bash (see the Melee Weapon Table) or shield rush (see Slam, p. 371). At TL2+, you can give your small, medium, or large shield a spike to increase damage; add $20 and 5 lbs.

[3] Also available as a buckler. You can ready a buckler in one turn and drop it as a free action, just like a weapon – but it always occupies one hand, and it does not allow a shield rush. Use Shield (Buckler) instead of regular Shield skill. No effect on statistics.

[4] At TL3+, iron shields are available but uncommon: x5 cost, x2 weight, +3 DR, and x2 HP. At TL7+, plastic riot shields (made of Lexan, etc.) have x1/2 weight but otherwise identical statistics. Shield composition never affects DB.

[5] Worn on the wrist, leaving the hand free. DR is hardened (treat as one level of the Hardened enhancement, p. 47).

---

**Carrying Weapons and Other Gear**

You can normally carry one item per hand. This doesn’t preclude your having a shield strapped to your arm – but if you do, your shield hand can only hold, not wield, a weapon or other handheld device, and you cannot use items that require two free hands, like a bow, rifle, or guitar.

You can also stow gear about your person, leaving your hands free. You can carry a one-handed item no larger than a sword or a pistol in a scabbard or holster on each hip; an item of that size or larger (e.g., a two-handed weapon like a rifle or a greatsword) slung over your back; and, with appropriate sheaths, one small item or weapon (like a knife or holddout pistol) per wrist or ankle. If you have clothing with pockets, you can stow one extra item per side pocket. A shoulder holster lets you strap a pistol-sized item over your chest.

You can carry additional equipment in a bag, pack, or case, but it takes several seconds to remove it and get it ready.
The following equipment list should suffice to outfit most adventurers. The GM is free to add items!

**TL:** The tech level at which the item is commonly available. “Var.” indicates tools or instruments that are available at the same TL as the skill(s) they facilitate; e.g., you can buy surgical instruments for Surgery/TL2 at TL2, instruments for Surgery/TL9 at TL9.

**Cost:** The item’s price, in $.  
**Weight:** The item’s weight, in pounds. Assume weight is negligible if not listed.

**LC:** Items are LC4 unless specifically noted otherwise; see Legality Class (p. 267).

**Other Notes:** Items that require batteries list an operating time in hours (hrs.). Equipment labeled “basic gear” is the minimum necessary to use the noted skill(s) at no penalty in most situations.

### Camping and Survival Gear

**Backpack, Frame** (TL1). Holds 100 lbs. of gear. $100, 10 lbs.

**Backpack, Small** (TL1). Holds 40 lbs. of gear. $60, 3 lbs.

**Blanket** (TL1). A warm sleeping blanket. $20, 4 lbs.

**Bottle, Ceramic** (TL1). Holds 1 quart of liquid (2 lbs. if water). $3, 1 lb.

**Cable, Steel, 1.5”** (TL5). Supports 3,700 lbs. Per 10 yards: $100, 17 lbs.

**Camp Stove, Small** (TL6). Uses 0.25 gallons kerosene per 4 hrs. $50, 2 lbs.

**Candle, Tallow** (TL1). Smoky! Lasts 12 hrs. $5, 1 lb.

**Canteen** (TL5). Holds 1 quart of liquid (2 lbs. if water). $10, 1 lb.

**Cigarette Lighter** (TL6). Lights fire. $10.

**Climbing Gear** (TL2). Hammer, spikes, carabiners. $20, 4 lbs.

**Compass** (TL6). +1 to Navigation skill. $50.

**Cord, 3/16”** (TL0). Supports 90 lbs. Per 10 yards: $1, 0.5 lb.

**Fishhooks and Line** (TL0). Basic gear for Fishing skill; needs a pole. $50.

**Flashlight, Heavy** (TL6). 30’ beam. $20, 1 lb., 5 hrs.

**Flashlight, Mini** (TL7). 15’ beam. $10, 0.25 lb., 1 hr.

**Gasoline** (TL6). Per gallon: $1.50, 6 lbs.


**Grapnel** (TL5). Throw to ST X 2 yards. Supports 300 lbs. $20, 2 lbs.

**Group Basics** (TL0). Basic equipment for Cooking and Survival skill for a group. Cook pot, rope, hatchet, etc., for 3-8 campers. $50, 20 lbs.

**Iron Spike (Piton)** (TL2). For climbing, spiking doors, etc. $1, 0.5 lb.

**Kerosene** (TL6). Per gallon: $1.50, 6 lbs.

**Lantern** (TL2). Burns for 24 hours on 1 pint of oil. $20, 2 lbs.

**Life Jacket** (TL6). Floats up to 350 lbs. $100, 6 lbs.

**Matches** (TL6). Start fires. Box of 50, waterproof. $1.50.

**Oil** (TL2). For lantern. Per pint: $2, 1 lb.

**Parachute** (TL6). Use with Parachuting skill. The wearer will fall at least 80 yards before it opens, and then descend at 5 yards/second. $1,000, 30 lbs.

**Personal Basics** (TL0). Minimum gear for camping: -2 to any Survival skill. Includes utensils, tinderbox or flint and steel, towel, etc., as TL permits. $5; 1 lb.

**Piton. See Iron Spike, above.**

**Pole, 6’** (TL0). For pitching tents, fishing, or prodding items. $5, 3 lbs.

**Pole, 10’** (TL0). For things you wouldn’t touch with a 6’ pole. $8, 5 lbs.

**Pouch or Purse, Small** (TL1). Holds 3 lbs. $10.

**Rope, 3/8”** (TL0). Supports 300 lbs. Per 10 yards: $5, 1.5 lbs.

**Rope, 3/4”** (TL1). Supports 1,100 lbs. Per 10 yards: $25, 5 lbs.

**Scuba Gear** (TL6). Basic equipment for Scuba skill: 2-hour underwater air tank, with regulator, facemask, etc., $1,500, 32 lbs.

**Sleeping Bag** (TL6). For normal conditions. $25, 7 lbs.

**Sleeping Bag, Insulated** (TL7). +3 HT to resist freezing. $100, 15 lbs.

**Sleeping Fur** (TL0). Warm unless wet. $50, 8 lbs.

**Suitcase, Hard** (TL5). Holds 100 lbs. DR 4, with key lock. $250, 8 lbs.

**Tent, 1-Man** (TL0). Includes ropes; no poles needed. $50, 5 lbs.

**Tent, 2-Man** (TL0). Includes ropes; requires one 6-foot pole. $80, 12 lbs.

**Tent, 4-Man** (TL0). Includes ropes; requires 2 poles. $150, 30 lbs.

**Tent, 20-Man** (TL1). Includes ropes; requires 16 poles. $300, 10 lbs.

**Thermos Bottle** (TL5). Keeps 1 pint hot (24 hrs.) or cold (72 hrs.). $10, 2 lbs.

**Torch** (TL0). Burns for 1 hr. $3, 1 lb.

**Traveler’s Rations** (TL0). One meal of dried meat, cheese, etc. $2, 0.5 lb.

**Water Purification Tablets** (TL6). Bottle of 50. Purify 1 quart each. $5.

**Wineskin** (TL0). Holds 1 gallon of liquid (8 lbs. if water). $10, 0.25 lb.

**Wristwatch** (TL6). $20.

### Communications and Information Gear

**Batteries** (TL6). $1, neg.

**Cell Phone** (TL8). Only works in some areas; $20/month fee. $250, 0.25 lb., 10 hrs.

**Computer, Laptop** (TL8). Modem plugs into phone. $1,500, 3 lbs., 2 hrs.

**Computer, Wearable** (TL8). Display glasses and wireless modem. $1,000, 2 lbs., 8 hrs.

**Drum** (TL0). Audible for several miles. $40, 2 lbs.

**Mini-Recorder** (TL7). Palm-sized, with 3-hour tape (extra tapes are $5). $200, 0.5 lb.

**Mini-Recorder, Digital** (TL8). As above, but without the tape! $30, 0.5 lb.

**Radio, Backpack** (TL7). VHF radio. 20-mile range. $6,000, 15 lbs., 12 hrs.


**Radio, Headset** (TL8). With throat mike. 1-mile range. Multiply cost by 10 for secure, encrypted version. $500, 0.5 lb., 12 hrs.

**Satellite Phone** (TL8). Global range, satellite relay. $3,000, 3 lbs., 1 hr.

**Scribe’s Kit** (TL3). Quills, inkbottles, penknife, paper. $50, 2 lbs.

**Transistor Radio** (TL7). Receives only; picks up radio stations. $15, 0.5 lb., 8 hrs.

**TV Set, Mini** (TL7). 5” x 5” flat-screen. $150, 3 lbs., 4 hrs.
**Equestrian Gear**

Bonuses to control a mount only offset penalties to Riding skill; they never give a net bonus.

- **Bit and Bridle** (TL1). +2 to control horse, or +3 if using both hands. $35, 3 lbs.
- **Horseshoes** (TL3). Shod horses get +2 HT on any rolls for stamina on long rides. Per set: $50, 4 lbs.
- **Saddle and Tack** (TL2). Basic equipment for Riding skill: $150, 15 lbs.
- **Saddlebags** (TL1). Hold 40 lbs. $100, 3 lbs.
- **Spurs** (TL2). +1 to control a mount. $25.
- **Stirrups** (TL3). Make it easy to mount a horse and give +1 to control mount. **Required** to use Lance skill. With ordinary saddle: $125, 20 lbs.
- **War Saddle** (TL3). +1 to Riding skill to stay seated, 50% chance user will stay seated even if unconscious. With stirrups: $250, 35 lbs.

**Law-Enforcement, Thief, and Spy Gear**

- **Bug, Audio** (TL7). -7 to spot, 1/4-mile range, transmits for 1 week. $200.
- **Bug Stomper** (TL7). Jams bugs in a 10-yard radius. $1,200, 2 lbs., 8 hrs.
- **Disguise Kit** (TL5). +1 to Disguise skill. $200, 10 lbs.
- **Electronic "Lockpicks"** (TL7). +2 to pick electronic locks. $1,500, 3 lbs.
- **Handcuffs** (TL5). Give -5 to Escape. $40, 0.5 lb.
- **Homing Beacon** (TL7). Scanner tracks at 1-mile range. $40, 12 hrs.
- **Laser Microphone** (TL8). Eavesdrops through glass. 300-yl. range. $500, 2 lbs.
- **Lockpicks** (TL3). Basic equipment for Lockpicking skill. $50.
- **Nanobug** (TL8). Pinhead-sized audio-visual bug (-10 to spot). $100.
- **Shotgun Mike** (TL6). Gives (TL-5) levels of Parabolic Hearing. $250, 2 lbs.

**Medical Gear**

- **Antibiotic** (TL6). Prevents or cures (in 1d days) infections. $20.
- **Antitoxin Kit** (TL6). Antidote for specific poison. 10 uses. $25, 0.5 lb.

**Optics and Sensors**

- **Binoculars** (TL6). Gives (TL - 4) levels of Telescopic Vision. $400, 2 lbs.
- **Camcorder** (TL8). Has 10x zoom. Gives Night Vision 5. $1,000, 1 lb., 7 hrs.
- **Camera, 35mm** (TL6). Basic equipment for Photography skill. Extra film is 32 shots ($10, neg.). Better cameras cost much more! $50, 3 lbs.
- **Metal Detector Wand** (TL7). +3 to find metal items. $50, 1 lb., 8 hrs.
- **Mini-Camera, Digital** (TL8). Stores pictures on optical disk. $500.
- **Spy Camera** (TL6). Holds 36 exposures, uses microfilm. $500.
- **Telescope** (TL4). Gives (TL-3) levels of Telescopic Vision. $500, 6 lbs.

**Tools**

- **Balance and Weights** (TL1). For weighing goods. $35, 3 lbs.
- **Crowbar** (TL2). Treat as a small mace in combat, but at -1 to skill. $20, 3 lbs.
- **Cutting Torch** (TL6). 1d+3(2) burn per second. Each gas bottle gives 30 seconds of cutting. $500, 30 lbs. Extra gas bottles are $50, 15 lbs. per bottle.
- **Knitting Needles** (TL3). Per pair. $5.
- **Pickaxe** (TL2). Improves digging speed. $15, 8 lbs.
- **Plow, Iron** (TL2). Works rough soils. $220, 120 lbs.
- **Plow, Wooden** (TL1). Pulled by oxen. $55, 60 lbs.

**Transportation**

See Riding and Draft Animals (p. 459) and Vehicles (p. 462).

**Weapon and Combat Accessories**

- **Ear Muffs** (TL6). Block loud noises (e.g., gunshots). Give Protected Hearing. $200, 1 lb.
- **Holster, Belt** (TL5). Fits most pistols. $25, 0.5 lb.
- **Holster, Shoulder** (TL5). Allows use of Holdout, but gives -1 to Fast-Draw. $50, 1 lb.
- **Lanyard, Leather** (TL0). Lets you retrieve a dropped weapon on a DX roll. Each attempt requires a Ready maneuver: Can be cut: -6 to hit, DR 2, HP 2.
- **Lanyard, Woven Steel** (TL6). As leather lanyard, but DR 6, HP 4, $15.
- **Laser Sight** (TL8). +1 to skill; see Laser Sights (p. 412). $100, 6 hrs.
- **Scope, 4x** (TL6). +2 to Acc for aimed shots only. $150, 1.5 lbs.
- **Scope, 4x, Thermal Imaging** (TL8). As above, plus gives the user Infravision. $8,000, 4 lbs., 2 hrs.
- **Shoulder Quiver** (TL0). Holds 12 arrows or bolts. $10, 0.5 lb.
- **Silencer, Pistol or SMG** (TL6). Reduces damage by -1 per die; see Silencers (p. 412). $400, 1 lb.
- **Web Gear** (TL6). Belt and suspenders with pouches and rings for gear. $50, 2 lbs.
Your character will improve – or simply change – with time. The longer you play your character, the more opportunities you will have for such development.

**Improvement Through Adventure**

After each game session, the GM will award you “bonus” character points – the same kind of points you used to create your character. You may spend these points immediately to improve your character, or you can save them. You can save unspent points for as long as you like, but you should ignore them when you add up your character’s point value.

The following rules apply when you spend bonus character points:

- To add a *new* trait with a *positive* point cost, pay points equal to the trait’s usual point cost.
- To improve an *existing* trait that comes in levels, pay points equal to the *difference* in cost between the new level and the old level.
- To remove an *existing* trait with a *negative* point cost, pay points equal to the bonus originally earned when you took the trait.

In all cases, increase the point value of your character by the number of points spent. Some additional rules apply to specific classes of traits.

**Improving Attributes and Secondary Characteristics**

For each level by which you wish to improve a basic attribute (ST, DX, IQ, or HT) or a secondary characteristic (HP, Will, Perception, FP, Basic Speed, or Basic Move), you must spend character points equal to the cost to raise that score by one level.

If you improve an attribute, secondary characteristics and skills based on that attribute improve as well. For instance, if you raise your HT by one, you gain 1 FP and 0.25 point of Basic Speed (which might in turn increase Basic Move), and *all* your HT-based skills go up by one!

Increases in ST do not affect height (except for a child), but if you wish, you may gain additional weight to go with higher ST.
Adding and Improving Social Traits

To improve social traits, you need an in-play justification in addition to the expenditure of sufficient points. Some examples:

Allies, Contacts, and Patrons: You must meet such NPCs during your adventures and earn their trust through your actions. You cannot hire true Allies, Contacts, or Patrons.

Clerical Investment, Legal Enforcement Powers, Rank, Security Clearance, Status, etc.: An individual in a position of relative authority must bestow such privileges. This might require a background check, qualification course, valor in combat, years of service, or a large bribe.

Reputation: You must earn this through deeds and works. You cannot buy a Reputation until you have done something to merit it!

Signature Gear: You must acquire a suitable item in the course of your adventures.

Tech Level: You can raise your personal TL (see Technology Level, p. 22) by living in a society of a higher TL than your own – but only if you are free to attend that society's schools and benefit from its conveniences (being an alien abductee, prisoner, etc. doesn't count). The GM should consider limiting improvement to one TL per year of game time.

Wealth: To improve your Wealth, you must amass money equal to the starting wealth of the desired wealth level after paying any necessary bribes, taxes, etc.

Adding and Improving Mental and Physical Advantages

Most mental and physical advantages are inborn; you cannot buy them after character creation. However, there are some exceptions.

You can learn some advantages as if they were skills; see Learnable Advantages (p. 294). If the GM feels that adventuring is as good as training to acquire such an advantage, you may buy it with bonus points.

Other advantages require extraordinary circumstances: divine revelation, ritual ordeal, etc. This is typical of Magery, Power Investiture, and True Faith. In addition to points, these traits require the GM's permission and suitable in-game events!

Of course, the GM can allow you to buy any advantage, if the results are in keeping with his vision of the game world. The GM may also challenge you to provide a good explanation (dramatic, logical, or both) for why he should let you buy a new advantage.

Buying Off Disadvantages

You can get rid of most beginning disadvantages by “buying them off” with character points equal to the bonus earned when you originally took the disadvantage. This generally requires a game-world justification in addition to the point expenditure.

True Faith. In addition to points, these traits require the GM's permission and suitable in-game events!

The GM may rule that you have suddenly acquired a new trait – most often an advantage or a disadvantage – as a consequence of events in the game: social interaction, combat, divine intervention, etc. This has nothing to do with bonus points!

When you acquire an advantage this way, write it on your character sheet and increase your point total by the value of the advantage. You do not have to pay for it with bonus points. For instance, if the GM rewards you with a 10-point Patron after you save the life of a powerful duke, your point value goes up by 10 points and the game goes on.

The GM may allow you to refuse such an advantage if your character could refuse it in the game world. You could refuse wealth, but if the gods granted you Magery, you wouldn't have much say in the matter! If you refuse an advantage, you do not get equivalent bonus points to spend on other things.

Similarly, when you acquire a disadvantage this way, just write it down and lower your point value accordingly. You do not get any extra points for it – that's just the breaks of the game! For instance, if you lose an arm in battle, add One Arm [-20] and reduce your point value by 20 points; you do not get 20 points of new abilities to compensate.

The GM may allow you to “buy off” a disadvantage acquired in play. Save up enough character points and then talk to the GM. If he is feeling merciful, he may arrange game-world events to eliminate the disadvantage.

Money

You may trade bonus character points for money – see Trading Points for Money (p. 26). Each point is worth 10% of the campaign's average starting wealth. The GM should provide a suitable explanation for your windfall: tax refund, buried treasure, gambling winnings, etc. Be creative. A spy under cover as an athlete might earn the money through product endorsements!

Dependents: When you buy off Dependents, you or the GM should provide a game-world explanation of where they went – died, grew up, moved away, fell in love with someone else . . .

Enemies: If you wish to buy off Enemies, you must deal with them in the game world: kill them, jail them, bribe them, flee from them, make friends with them . . . whatever the GM deems necessary. You can never permanently dispose of Enemies unless you buy them off . . . they will return or new Enemies will appear in their place.

Mental Disadvantages and Odious Personal Habits: You may buy these off at their original bonus value. Assume that you simply got over your problem.
Physical Disadvantages: Your game world's tech level – and the supernatural powers available – determine the degree to which you can buy off these traits. Consider Hard of Hearing. At TL5 or less, you would have to settle for an ear trumpet. At TL6-8, you could buy a hearing aid that would solve your problem while worn, allowing you to apply a Mitigator limitation (p. 112). At TL9+, surgery could fix the problem permanently. And in a fantasy world, the right wizard could cure you with a powerful Healing spell! The GM has the final say as to whether it is possible to remove a specific physical disadvantage . . . and if so, what the cost and time will be.

Social Stigma: You cannot get rid of this with points alone. You must either change your position in society or change your society. The GM will tell you when you have succeeded – at that time, you must pay enough points to buy off the original disadvantage.

Adding and Improving Skills and Techniques
You can use bonus character points to increase your skills and techniques. Each point is the equivalent of 200 hours of learning. This is not to say that you found time to hit the books during your adventures – only that the genuine experience of an adventure can be equivalent to a much longer period of study.

You can only spend character points to improve skills or techniques that, in the GM’s opinion, saw significant use in the adventure during which you earned the points. If the only thing you did on an adventure was trek through forests and slay monsters, you can only improve Hiking, Survival (Woodlands), and combat abilities.

When you improve a skill or a technique, the cost is the difference between the cost of the new level and the cost of your current level – see Improving Your Skills (p. 170).

Quick Learning Under Pressure
If you attempt a default skill roll in a stressful situation, you may try to acquire that skill during play, regardless of whether you succeeded or failed (you can learn from your mistakes!). The GM is the judge of whether a given situation qualifies as “stressful”; see Base Skill vs. Effective Skill (p. 171) for examples.

At the start of the next game session, make an IQ roll to see whether you learned from your experience. Eidetic Memory gives +5; Photographic Memory gives +10! On a success, you may spend one point earned during the previous session to learn the skill. If you have no points, you cannot learn the skill – and if you let more than one session go by, you lose the opportunity.

Obviously, if a skill has no default, you cannot learn it this way.

Improvement Through Study
You may add or improve skills by spending time studying them, if an opportunity for study is available. In the discussion below, “skills” refers not only to ordinary skills, but also to spells, techniques, and even some advantages (see Learnable Advantages, p. 294).

Improvement through study does not depend on earning bonus points. You could build a character, keep track of his age and income, and let him study for 40 game-years without ever bringing him into play. Of course, this would not be much fun . . . and things that happen during play can offer great opportunities for study. If you aid a master wizard, his gratitude might take the form of magic lessons!

Normally, it takes 200 hours of learning to gain one point in a skill. You may study any number of skills at once, but a given hour of time counts toward study of only one subject, unless the GM allows an exception.

Some forms of study are more effective than others. This means that an hour of study does not always equal an hour of learning – there is a “conversion factor” between the two. Some guidelines appear below.

Jobs
Adventurers can, and probably should, get jobs. This lets them earn money and practice their skills. Most jobs have prerequisite skills; some have other requirements (minimum attribute levels, advantages, etc.). In general, more accomplished characters can get better jobs and earn more money. For more information, see Jobs (p. 516).
Learning on the Job

If you have a job, time spent on the job counts as “study” of the skills used in the job. However, since most time on the job is spent doing what you already know, not learning new things, every four hours on the job count as one hour of learning. You may claim a maximum of eight hours on the job per day (four hours per day at a part-time job). Your actual working hours may exceed this, but fatigue limits learning to this level. Thus, a year of full-time work will give you two to three points to spend on job-related skills.

Self-Teaching

You can teach yourself a skill, unless the skill description attaches specific conditions that would preclude this (such as “only taught by the military” or a prerequisite of Trained By A Master). Every two hours of reading, exercises, practice, etc. without an instructor count as one hour of learning. This must take place in time not used for adventuring, working, eating, sleeping, or taking care of personal hygiene. The GM should limit self-teaching to 12 hours per day – or eight hours/day for those with part-time jobs, only four hours/day for those with full-time jobs.

Education

Every hour of instruction by a professional teacher counts as one hour of learning. A “professional teacher” is someone with Teaching skill at 12 or higher. In order to teach you a given skill, he must either know that skill at your current skill level or better, or have as many or more points in the skill as you do. Ordinary instruction rarely exceeds eight hours per day. A college semester (21 weeks) of classroom study equals around one point per subject, and a full-time student could study up to five subjects per semester. A semester of night school would give one point in one subject.

Intensive Training

Full-time study with expert teachers and lavish training materials is the most effective type of “normal” learning. An expert teacher has Teaching skill at 12 (or higher), plus a higher level and more points in the skill being taught than you do. Quadruple all costs and tuition fees! Every hour of intensive training counts as two hours of learning. Intensive training is rarely available outside the military, where you have little control over the skills taught or the scheduling of courses. It can last for up to 16 hours per day. You must have HT 12+ to make it through such training without “washing out” (the Fit advantage does increase effective HT for this purpose).

Adventuring

Adventuring time can also count as study of suitable skills. The “conversion factor” is up to the GM, who should be generous. For example, a trek through the Amazon might count for every waking moment – say, 16 hours a day – as study of Survival (Jungle).

Finding a Teacher

It is most efficient to learn new skills from a teacher. For some skills, finding a teacher is automatic; for others, it can be difficult. The GM should adjust availability to suit his concept of what is “reasonable.”

Most education costs money. The price is up to the GM. If the teacher wants to be paid, see Jobs (p. 516) to determine what his time is worth. Multiply all fees by 4 for intensive training! Barter may be possible, or the teacher may demand a service in exchange for his aid – there are endless adventure possibilities here.

Learning Magic

In a world where magic is common, you can learn a spell just as you would any other IQ-based skill. You may apprentice yourself to a wizard to learn his whole craft . . . or hire a magic instructor to teach you a few spells.

In a setting in which magic is secret or rare, finding an instructor is much harder. Most wizards shroud themselves in secrecy . . . or belong to reclusive, mysterious cults . . . or prove to be fakes!

You can learn magic without a teacher; use the rules described under Self-Teaching. You must be able to read and have access to good textbooks. Magical grimoires are often deliberately complex and obscure – especially in rare- or secret-magic settings! The GM is free to slow the pace of self-teaching as much as he wishes to reflect this.

Learning Secret Martial-Arts Techniques

To acquire Trained By A Master (p. 93) or Weapon Master (p. 99), you must first find an appropriate school or teacher – an adventure in itself, often involving a dangerous pilgrimage to an exotic locale. Once you locate a master, you disappear from play for 1d+1 game-years. After that, you might have to pass a series of hazardous tests, or make a final quest to yet another remote land.

When you emerge from your training, you have the desired advantage, plus 20 character points to spend on any special skills allowed in the campaign. The GM can treat these points like those gained from any other kind of study, or he can “balance” them with an equal number of points in additional disadvantages – perhaps an Enemy (e.g., a rival school), or a Duty or Sense of Duty to your school or teacher.
Optional Rule: Maintaining Skills

Realistically, if you do not use a skill, you will forget it or your knowledge will grow obsolete. At the GM’s option, if you haven’t used or practiced a skill for at least six months, you must make an IQ roll to avoid skill degradation.

Modifiers: +5 for Eidetic Memory, or +10 for Photographic Memory; -2 if you learned the skill through intensive training (your training was good, but also brief).

On a failure, the skill drops by one level. The points spent on that level are gone, which lowers your point value. If a skill with only one point in it degrades, it drops to default level (that is, you are no better than someone without training) and cannot degrade further.

If you go another six months without using the skill, roll again . . . and so on.

Extreme skill levels are even harder to maintain. Chess masters, star athletes, etc. spend a lot of time honing their “edge.” If you know a skill above attribute+10, you must make the above IQ roll every day you go without using the skill “in the field” or spending one hour in practice (this hour does not count as study). Once your skill drops to attribute+10, use the normal rules for skill degradation.

This rule is intended for harshly realistic campaigns, where verisimilitude justifies the extra bookkeeping. It is poorly suited to larger-than-life games where old soldiers come out of retirement to go on adventures and wizards live for centuries.

Learnable Advantages

You can learn certain advantages as if they were skills (200 hours = 1 point), provided you have a suitable instructor (professor, kung fu master, etc.). Use the standard rules for skill learning; in particular, anyone teaching an advantage must possess it himself.

Combat Reflexes: The GM may rule that fighting is the only way to “learn” Combat Reflexes before TL7, and require adventurers who want this advantage to pay for it with bonus points. At TL7+, realistic military simulations can teach it as if it were a skill.

Cultural Familiarity and Languages: Time spent in a foreign land counts as learning; in particular, anyone teaching an advantage must possess it himself.

Transformations

Adventurers may encounter forces that can transform them in body or in mind. This kind of character development is significantly more complex than simply spending points or studying, and can raise difficult questions. The next few sections suggest answers.

Body Modification

“Body modification” is any artificial process that gives you a set of traits different from the ones you were born with (or created with), without moving your brain or mind to a new body. This most often means surgery, or biological or mechanical implants (often known as “biomods” and “cyberwear,” respectively), but permanent supernatural transformations also qualify. The GM determines what body modification can accomplish in his campaign.

Modifications acquired before your character entered the game cost points. Build your character normally and note which traits are due to artificial tinkering when you write your character story. This neither costs money nor affects the point cost of the traits – it merely justifies certain abilities on your character sheet (see Advantage Origins, p. 33).

Modifications added in play work differently. In theory, if you have the cash and can locate a suitably skilled surgeon, wizard, etc., you can buy modifications with money. In practice, this gives wealthy characters a significant edge, as they can effectively
convert money into character points – often more points than they paid for their Wealth! The GM is the final judge of what is “fair” in his campaign, but here are a few suggestions:

**Modifications cost points.** You must have the requisite character points before you can add modifications. If you get a modification you cannot afford, the process fails and you do not gain the hoped-for abilities . . . or perhaps you gain them, but lose other abilities of equal value! The GM might opt to let you pay for your new abilities by going into “point debt”: any point cost in excess of what you can afford becomes negative unspent points, and until this debt is gone, all future bonus points must go toward paying it off. Cash costs are irrelevant (but one could see this as a special case of Trading Points for Money, p. 26). This option preserves game balance but isn’t very realistic.

**Modifications cost money.** If you have the cash, you can buy the modification. Pay the requisite amount of money and alter your point value to reflect the point cost of your new traits. This option is realistic but allows rapid character improvement. To keep this under control, the GM should ruthlessly enforce recovery times for surgery (see below), and have gruesome consequences for failed attempts at modification.

**Modifications are free.** If events in the campaign “inflict” modifications on you without giving you any say in the matter, you simply gain the relevant traits and adjust your point value accordingly – see Traits Gained in Play (p. 291). This option makes the most sense for involuntary modifications that give disadvantages, or for useful modifications that all the PCs receive from their employer or Patron (in which case the point cost is likely to be “balanced” by a significant Duty).

**Surgical Modifications**

Surgery to install biomods or cyberware, or for its own sake (e.g., cosmetic surgery to improve appearance), is not risk-free. Even if all goes well, you will need time to recover:

It takes one day to recover per character point of traits added or removed via surgery. The Surgery roll is at -1 per full week of recovery required. On a critical success, halve recovery time. On a success, recovery time is normal. On a failure, the modification fails, recovery time is normal, and you suffer (recovery time in weeks)/2 dice of damage to the affected body part. Critical failure doubles this damage and results in complications – the GM is free to assign appropriate disadvantages.

If the GM is charging cash for modifications, assume that surgery costs $1,000 per character point of traits added or removed.

**Triple** the recovery time and dollar cost for operations on the brain, eyes, or vital organs.

Specific GURPS worldbooks might supersede some or all of these guidelines.

**Supernatural Modifications**

Divine will, magic, and so on may be able to produce permanent transformations. There is no recovery time, but if the GM is charging cash, this is usually very expensive – at least twice as expensive as surgery, in the form of wizard’s fees, temple donations, etc.

**Instant Learning**

Magical wishes, divine inspiration, “neurotechnology,” etc. might be able to grant skills as well as advantages and disadvantages. As with other modifications, the GM may charge cash or points, or simply grant the skills. An amusing option is to balance the cost of such skills with mental disadvantages or quirks related to them.
**Character Development**

*Modular Abilities:* If you bought the Modular Abilities advantage, you are capable of *temporary* "instant learning" – for instance, by loading a computer program or plugging in a chip. Use the rules under Modular Abilities (p. 71) instead of those above.

**Mind Transfer**

A hero in a fantasy or futuristic setting might find himself inhabiting a new body. There are many possibilities – brain transplants, digital "uploading," the Possession advantage (p. 75), etc. – but they all use the same basic rules.

When your mind moves to a new body, you gain that body's ST, DX, and HT – as well as all secondary characteristics based on those attributes – and its *physical* advantages and disadvantages. Your IQ, Perception, Will, and *mental* advantages and disadvantages don't change. Keep your *points* in skills, but base your skill *levels* on your new attributes.

Recalculate your point value to take your new traits into account. For instance, if you switch from a body with ST 10, DX 10, HT 10, and One Arm [-20] to one with ST 12 [20], DX 12 [40], HT 12 [20], and two arms, your point value goes up by 100 points.

The GM decides how to handle changes in point value. The options given under Body Modification (above) apply here as well. In general, if you had no say in the transfer, the GM should simply adjust your point value. If you *chose* to inhabit a superior body, the GM may charge you points (the difference in point value between your new form and your old one) or money (especially if the new body is a golem, robot, etc. built for the purpose).

**Mind vs. Brain**

The rules above assume that a *mind* is unaffected by the brain in which it resides. This is fine for fantasy mind transfer – fantasy rarely concerns itself with the neurological origin of consciousness – but in a "hard science" setting, the GM should modify IQ, Will, and Perception by the difference in *racial* modifiers between the new body and the old one. Recalculate the point value to reflect such changes. For instance, if you belong to a race with IQ+1 and move to an animal body with racial IQ-5, your IQ will drop by 6, lowering your point value by 120 points.

Realistically, DX also has a "learned" component – although it is likely smaller. The GM may decide that this rule applies to DX as well.

**Multiple People**

Certain techniques – such as "braintaping" (recording an image of your thoughts and personality) and cinematic cloning – may let you *copy* your mind into multiple bodies.

If you make a copy of yourself in play, and intend to use it as a "backup" that will only enter play if you die, treat it as a suitably modified Extra Life (p. 55). The GM's decisions regarding body modification determine whether you pay cash or points. Either way, you must update your backup regularly; otherwise, it will have outdated memories and skills – or its memories might fade to the point where it will not activate! If you paid cash, the GM is free to charge fees for updates, maintenance, and the security of your backup.

If you make copies of yourself and activate them while you are *alive*, you control only one character. The copies diverge into different people, which the GM controls as NPCs. They are *not* automatically your friends! The GM may permit you to buy copies as Allies (p. 36), at the usual point cost. But if you make copies indiscriminately, the GM might rule that some of them dislike you, becoming Enemies (p. 135) with the Evil Twin modifier.

If you have active copies, you may ask the GM to let you play one if you die. However, you will have to accept the GM's decision on how your copy diverged from your original self. Your copy might have discovered his artistic side and let Guns skills degrade while he learned Dancing . . . and since he's his own person, you must roleplay this, or the GM will penalize you for bad roleplaying. Such is the price of a free Extra Life!

**Supernatural Afflictions**

Certain supernatural beings can infect you with their "curse" via a bite or other attack, turning you into a similar kind of being. In effect, you acquire a new racial template. If this is involuntary (and it usually is), apply the Traits Gained in Play rule (p. 291). Modify your character sheet to include your new racial traits, and adjust your point value as necessary.

But if you *willingly* accept such a fate in order to acquire powerful new abilities, the GM should treat the transformation as he would any other body modification. To keep things fair, he should charge points. If you cannot afford the point cost, the GM may make up the difference by assigning you new disadvantages! Cursed (p. 129) is particularly likely . . .

For more information, see *Dominance* (p. 50) and *Infectious Attack* (p. 140).

**Death**

In general, when your character dies, that's the end of his career. You must create a new character to continue in the campaign. The GM might start you out close to the other PCs in points, but it is *not* acceptable to write a new name across the top of your old character sheet and declare, “This is his twin brother.” If you want to do that, buy an Extra Life!

In some settings, however, magic or high technology might be able to resurrect you. If so, you return from the dead and pick up where you left off.

In other worlds, you might be able to become a being of pure thought (especially if you are a psi), return from the grave as undead (ghost, vampire, etc.), or even be reincarnated as an animal. The net effect is that you acquire a new racial template. The GM should handle this as explained under Mind Transfer (above): combine your mental traits with the physical traits of your new form, and adjust your point value. The point cost, if any, is the same as for a supernatural affliction – going from "living" to "dead" to "vampire" is really no different from going directly from "living" to "vampire."
### ADVANTAGES

**M/P/Soc** tells whether an advantage is mental, physical, or social.

**X/Sup** tells whether an advantage is exotic or supernatural. **A** – in this column means it is mundane.

<table>
<thead>
<tr>
<th>Advantage</th>
<th>M/P/Soc</th>
<th>X/Sup</th>
<th>Cost</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>360° Vision</td>
<td>P</td>
<td>X</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>3D Spatial Sense</td>
<td>P</td>
<td>–</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Absolute Direction</td>
<td>P</td>
<td>–</td>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>Absolute Timing</td>
<td>M</td>
<td>–</td>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td>Accessory</td>
<td>P</td>
<td>X</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Acute Hearing</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>35</td>
</tr>
<tr>
<td>Acute Taste and Smell</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>35</td>
</tr>
<tr>
<td>Acute Touch</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>35</td>
</tr>
<tr>
<td>Acute Vision</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>35</td>
</tr>
<tr>
<td>Administrative Rank</td>
<td>Soc</td>
<td>–</td>
<td>5 or 10/level</td>
<td>30</td>
</tr>
<tr>
<td>Affliction</td>
<td>P</td>
<td>X</td>
<td>10/level</td>
<td>35</td>
</tr>
<tr>
<td>Alcohol Tolerance</td>
<td>P</td>
<td>–</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Allies</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>36</td>
</tr>
<tr>
<td>Altered Time Rate</td>
<td>M</td>
<td>X</td>
<td>100/level</td>
<td>38</td>
</tr>
<tr>
<td>Alternate Form</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>83</td>
</tr>
<tr>
<td>Alternate Identity</td>
<td>Soc</td>
<td>–</td>
<td>5 or 15</td>
<td>39</td>
</tr>
<tr>
<td>Ambidexterity</td>
<td>P</td>
<td>–</td>
<td>5</td>
<td>39</td>
</tr>
<tr>
<td>Amphibious</td>
<td>P</td>
<td>X</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Animal Empathy</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Animal Friend</td>
<td>M</td>
<td>–</td>
<td>5/level</td>
<td>90</td>
</tr>
<tr>
<td>Appearance</td>
<td>P</td>
<td>–</td>
<td>Variable</td>
<td>21</td>
</tr>
<tr>
<td>Arm DX</td>
<td>P</td>
<td>X</td>
<td>12 or 16/level</td>
<td>40</td>
</tr>
<tr>
<td>Arm ST</td>
<td>P</td>
<td>X</td>
<td>3, 5, or 8/level</td>
<td>40</td>
</tr>
<tr>
<td>Artificer</td>
<td>M</td>
<td>–</td>
<td>10/level</td>
<td>90</td>
</tr>
<tr>
<td>Autotrance</td>
<td>M</td>
<td>–</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Binding</td>
<td>P</td>
<td>X</td>
<td>2/level</td>
<td>40</td>
</tr>
<tr>
<td>Blessed</td>
<td>M</td>
<td>Sup</td>
<td>10+</td>
<td>40</td>
</tr>
<tr>
<td>Brachiator</td>
<td>P</td>
<td>X</td>
<td>5</td>
<td>41</td>
</tr>
<tr>
<td>Breath-Holding</td>
<td>P</td>
<td>X</td>
<td>2/level</td>
<td>41</td>
</tr>
<tr>
<td>Business Acumen</td>
<td>M</td>
<td>–</td>
<td>10/level</td>
<td>90</td>
</tr>
<tr>
<td>Catfall</td>
<td>P</td>
<td>X</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>Chameleon</td>
<td>P</td>
<td>X</td>
<td>5/level</td>
<td>41</td>
</tr>
<tr>
<td>Channelling</td>
<td>M</td>
<td>Sup</td>
<td>10</td>
<td>41</td>
</tr>
<tr>
<td>Charisma</td>
<td>M</td>
<td>–</td>
<td>5/level</td>
<td>41</td>
</tr>
<tr>
<td>Chronolocation</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>Claim to Hospitality</td>
<td>Soc</td>
<td>–</td>
<td>1 to 10</td>
<td>41</td>
</tr>
<tr>
<td>Clairencience</td>
<td>M</td>
<td>Sup</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>Claws</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>42</td>
</tr>
<tr>
<td>Clerical Investment</td>
<td>Soc</td>
<td>–</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>Clinging</td>
<td>P</td>
<td>X</td>
<td>20</td>
<td>43</td>
</tr>
<tr>
<td>Combat Reflexes</td>
<td>M</td>
<td>–</td>
<td>15</td>
<td>43</td>
</tr>
<tr>
<td>Common Sense</td>
<td>M</td>
<td>–</td>
<td>10</td>
<td>43</td>
</tr>
<tr>
<td>Compartmentalized Mind</td>
<td>M</td>
<td>X</td>
<td>50/level</td>
<td>43</td>
</tr>
<tr>
<td>Constriction Attack</td>
<td>P</td>
<td>X</td>
<td>15</td>
<td>43</td>
</tr>
<tr>
<td>Contact Group</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>44</td>
</tr>
<tr>
<td>Contacts</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>44</td>
</tr>
<tr>
<td>Courtesy Rank</td>
<td>Soc</td>
<td>–</td>
<td>1/level</td>
<td>29</td>
</tr>
<tr>
<td>Cultural Adaptability</td>
<td>M</td>
<td>–</td>
<td>10</td>
<td>46</td>
</tr>
<tr>
<td>Cultural Familiarity</td>
<td>Soc</td>
<td>–</td>
<td>1 or 2/culture</td>
<td>23</td>
</tr>
<tr>
<td>Cybernetics</td>
<td>P</td>
<td>–</td>
<td>Variable</td>
<td>46</td>
</tr>
<tr>
<td>Damage Resistance</td>
<td>P</td>
<td>X</td>
<td>5/level</td>
<td>46</td>
</tr>
<tr>
<td>Danger Sense</td>
<td>M</td>
<td>–</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>Daredevil</td>
<td>M</td>
<td>–</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>Dark Vision</td>
<td>P</td>
<td>X</td>
<td>25</td>
<td>47</td>
</tr>
<tr>
<td>Deep Sleeper</td>
<td>P</td>
<td>–</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Destiny</td>
<td>M</td>
<td>Sup</td>
<td>Variable</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advantage</th>
<th>M/P/Soc</th>
<th>X/Sup</th>
<th>Cost</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detect</td>
<td>M/P</td>
<td>X</td>
<td>Variable</td>
<td>48</td>
</tr>
<tr>
<td>Digital Mind</td>
<td>P</td>
<td>X</td>
<td>5</td>
<td>48</td>
</tr>
<tr>
<td>Discriminatory Hearing</td>
<td>P</td>
<td>X</td>
<td>15</td>
<td>49</td>
</tr>
<tr>
<td>Discriminatory Smell</td>
<td>P</td>
<td>X</td>
<td>15</td>
<td>49</td>
</tr>
<tr>
<td>Discriminatory Taste</td>
<td>P</td>
<td>X</td>
<td>10</td>
<td>49</td>
</tr>
<tr>
<td>Doesn’t Breathe</td>
<td>P</td>
<td>X</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td>Doesn’t Eat or Drink</td>
<td>P</td>
<td>X</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Doesn’t Sleep</td>
<td>P</td>
<td>X</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Dominance</td>
<td>M</td>
<td>Sup</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Double-Jointed</td>
<td>P</td>
<td>–</td>
<td>15</td>
<td>56</td>
</tr>
<tr>
<td>Duplication</td>
<td>M/P</td>
<td>X</td>
<td>35/copy</td>
<td>50</td>
</tr>
<tr>
<td>Eidetic Memory</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>51</td>
</tr>
<tr>
<td>Elastic Skin</td>
<td>P</td>
<td>X</td>
<td>20</td>
<td>51</td>
</tr>
<tr>
<td>Empathy</td>
<td>M</td>
<td>–</td>
<td>15</td>
<td>51</td>
</tr>
<tr>
<td>Enhanced Defenses</td>
<td>M</td>
<td>–</td>
<td>Variable</td>
<td>51</td>
</tr>
<tr>
<td>Enhanced Move</td>
<td>P</td>
<td>X</td>
<td>20/level</td>
<td>52</td>
</tr>
<tr>
<td>Enhanced Time Sense</td>
<td>M</td>
<td>X</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>Enhanced Tracking</td>
<td>P</td>
<td>X</td>
<td>5/level</td>
<td>53</td>
</tr>
<tr>
<td>Extended Lifespan</td>
<td>P</td>
<td>X</td>
<td>2/level</td>
<td>53</td>
</tr>
<tr>
<td>Extra Arms</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>53</td>
</tr>
<tr>
<td>Extra Attack</td>
<td>P</td>
<td>–</td>
<td>25/attack</td>
<td>53</td>
</tr>
<tr>
<td>Extra Head</td>
<td>P</td>
<td>X</td>
<td>15/head</td>
<td>54</td>
</tr>
<tr>
<td>Extra Legs</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>54</td>
</tr>
<tr>
<td>Extra Life</td>
<td>M</td>
<td>X</td>
<td>25/level</td>
<td>55</td>
</tr>
<tr>
<td>Extra Mouth</td>
<td>P</td>
<td>X</td>
<td>5/mouth</td>
<td>55</td>
</tr>
<tr>
<td>Fashion Sense</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Favor</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>55</td>
</tr>
<tr>
<td>Fearlessness</td>
<td>M</td>
<td>–</td>
<td>2/level</td>
<td>55</td>
</tr>
<tr>
<td>Filter Lungs</td>
<td>P</td>
<td>X</td>
<td>5</td>
<td>55</td>
</tr>
<tr>
<td>Fit</td>
<td>P</td>
<td>–</td>
<td>5</td>
<td>55</td>
</tr>
<tr>
<td>Flexibility</td>
<td>P</td>
<td>–</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Flight</td>
<td>P</td>
<td>X</td>
<td>40</td>
<td>56</td>
</tr>
<tr>
<td>Pur</td>
<td>P</td>
<td>X</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Gadgeteer</td>
<td>M</td>
<td>–</td>
<td>25 or 50</td>
<td>56</td>
</tr>
<tr>
<td>G-Experience</td>
<td>M</td>
<td>–</td>
<td>1 to 10</td>
<td>57</td>
</tr>
<tr>
<td>Gifted Artist</td>
<td>M</td>
<td>–</td>
<td>5/level</td>
<td>90</td>
</tr>
<tr>
<td>Gizmos</td>
<td>M</td>
<td>–</td>
<td>5/gizmo</td>
<td>57</td>
</tr>
<tr>
<td>Green Thumb</td>
<td>M</td>
<td>–</td>
<td>5/level</td>
<td>90</td>
</tr>
<tr>
<td>Growth</td>
<td>P</td>
<td>X</td>
<td>10/level</td>
<td>58</td>
</tr>
<tr>
<td>Gunslinger</td>
<td>M</td>
<td>–</td>
<td>25</td>
<td>58</td>
</tr>
<tr>
<td>Hard to Kill</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>58</td>
</tr>
<tr>
<td>Hard to Subdue</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>59</td>
</tr>
<tr>
<td>Healer</td>
<td>M</td>
<td>–</td>
<td>10/level</td>
<td>90</td>
</tr>
<tr>
<td>Healing</td>
<td>M</td>
<td>X</td>
<td>30</td>
<td>59</td>
</tr>
<tr>
<td>Hermaphromorph</td>
<td>P</td>
<td>X</td>
<td>5</td>
<td>59</td>
</tr>
<tr>
<td>High Martial Dexterity</td>
<td>P</td>
<td>–</td>
<td>5/level</td>
<td>59</td>
</tr>
<tr>
<td>High Pain Threshold</td>
<td>P</td>
<td>–</td>
<td>10</td>
<td>59</td>
</tr>
<tr>
<td>High TL</td>
<td>M</td>
<td>–</td>
<td>5/level</td>
<td>23</td>
</tr>
<tr>
<td>Higher Purpose</td>
<td>M</td>
<td>Sup</td>
<td>5</td>
<td>59</td>
</tr>
<tr>
<td>Honest Face</td>
<td>P</td>
<td>–</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Hyperspectral Vision</td>
<td>P</td>
<td>X</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>Illuminated</td>
<td>M</td>
<td>Sup</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>Improved G-Tolerance</td>
<td>P</td>
<td>–</td>
<td>5 to 25</td>
<td>60</td>
</tr>
<tr>
<td>Independent Income</td>
<td>Soc</td>
<td>–</td>
<td>1/level</td>
<td>26</td>
</tr>
<tr>
<td>Indomitable</td>
<td>M</td>
<td>–</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>Infravision</td>
<td>P</td>
<td>X</td>
<td>0 or 10</td>
<td>60</td>
</tr>
<tr>
<td>Advantage</td>
<td>M/P/Soc</td>
<td>X/Sup</td>
<td>Cost</td>
<td>Page</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------</td>
<td>-------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Injury Tolerance</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>60</td>
</tr>
<tr>
<td>Innate Attack</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>61</td>
</tr>
<tr>
<td>Insubstantiality</td>
<td>M/P</td>
<td>X</td>
<td>80</td>
<td>62</td>
</tr>
<tr>
<td>Intuition</td>
<td>M</td>
<td>–</td>
<td>15</td>
<td>63</td>
</tr>
<tr>
<td>Intuitive Mathematician</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>66</td>
</tr>
<tr>
<td>Invisibility</td>
<td>M/P</td>
<td>X</td>
<td>40</td>
<td>63</td>
</tr>
<tr>
<td>Jumper</td>
<td>M</td>
<td>Sup</td>
<td>100</td>
<td>65</td>
</tr>
<tr>
<td>Language Talent</td>
<td>M</td>
<td>–</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>Legal Enforcement Powers</td>
<td>Soc</td>
<td>–</td>
<td>5, 10, or 15</td>
<td>65</td>
</tr>
<tr>
<td>Legal Immunity</td>
<td>Soc</td>
<td>–</td>
<td>5 to 20</td>
<td>65</td>
</tr>
<tr>
<td>Less Sleep</td>
<td>P</td>
<td>–</td>
<td>2/level</td>
<td>65</td>
</tr>
<tr>
<td>Lifting ST</td>
<td>P</td>
<td>X</td>
<td>3/level</td>
<td>65</td>
</tr>
<tr>
<td>Lightning Calculator</td>
<td>M</td>
<td>–</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>Longevity</td>
<td>P</td>
<td>–</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>Luck</td>
<td>M</td>
<td>–</td>
<td>Variable</td>
<td>66</td>
</tr>
<tr>
<td>Magery</td>
<td>M</td>
<td>Sup</td>
<td>5 + 10/level</td>
<td>66</td>
</tr>
<tr>
<td>Magic Resistance</td>
<td>M</td>
<td>Sup</td>
<td>2/level</td>
<td>67</td>
</tr>
<tr>
<td>Mana Dumper</td>
<td>M</td>
<td>Sup</td>
<td>10/level</td>
<td>67</td>
</tr>
<tr>
<td>Mana Enhancer</td>
<td>M</td>
<td>Sup</td>
<td>50/level</td>
<td>68</td>
</tr>
<tr>
<td>Mathematical Ability</td>
<td>M</td>
<td>–</td>
<td>10/level</td>
<td>68</td>
</tr>
<tr>
<td>Medium</td>
<td>M</td>
<td>Sup</td>
<td>10</td>
<td>68</td>
</tr>
<tr>
<td>Merchant Rank</td>
<td>Soc</td>
<td>–</td>
<td>5 or 10/level</td>
<td>68</td>
</tr>
<tr>
<td>Metabolism Control</td>
<td>P</td>
<td>X</td>
<td>5/level</td>
<td>68</td>
</tr>
<tr>
<td>Microscopic Vision</td>
<td>P</td>
<td>X</td>
<td>5/level</td>
<td>68</td>
</tr>
<tr>
<td>Military Rank</td>
<td>Soc</td>
<td>–</td>
<td>5 or 10/level</td>
<td>68</td>
</tr>
<tr>
<td>Micromacro</td>
<td>M</td>
<td>X</td>
<td>10</td>
<td>68</td>
</tr>
<tr>
<td>Mind Control</td>
<td>M</td>
<td>X</td>
<td>50</td>
<td>68</td>
</tr>
<tr>
<td>Mind Probe</td>
<td>M</td>
<td>X</td>
<td>20</td>
<td>69</td>
</tr>
<tr>
<td>Mind Reading</td>
<td>M</td>
<td>X</td>
<td>30</td>
<td>69</td>
</tr>
<tr>
<td>Mind Shield</td>
<td>M</td>
<td>X</td>
<td>4/level</td>
<td>70</td>
</tr>
<tr>
<td>Mindlink</td>
<td>M</td>
<td>Sup</td>
<td>Variable</td>
<td>70</td>
</tr>
<tr>
<td>Modular Abilities</td>
<td>M/P</td>
<td>X</td>
<td>Variable</td>
<td>71</td>
</tr>
<tr>
<td>Morph</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>71</td>
</tr>
<tr>
<td>Musical Ability</td>
<td>M</td>
<td>–</td>
<td>5/level</td>
<td>71</td>
</tr>
<tr>
<td>Neutralize</td>
<td>M</td>
<td>X</td>
<td>50</td>
<td>71</td>
</tr>
<tr>
<td>Nictitating Membrane</td>
<td>P</td>
<td>X</td>
<td>1/level</td>
<td>71</td>
</tr>
<tr>
<td>Night Vision</td>
<td>P</td>
<td>–</td>
<td>1/level</td>
<td>71</td>
</tr>
<tr>
<td>No Hangover</td>
<td>P</td>
<td>–</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Obscure</td>
<td>P</td>
<td>X</td>
<td>2/level</td>
<td>72</td>
</tr>
<tr>
<td>Oracle</td>
<td>M</td>
<td>Sup</td>
<td>15</td>
<td>72</td>
</tr>
<tr>
<td>Outdoorsman</td>
<td>M</td>
<td>–</td>
<td>10/level</td>
<td>91</td>
</tr>
<tr>
<td>Parabolic Hearing</td>
<td>P</td>
<td>X</td>
<td>4/level</td>
<td>72</td>
</tr>
<tr>
<td>Patrons</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>72</td>
</tr>
<tr>
<td>Payload</td>
<td>P</td>
<td>X</td>
<td>1/level</td>
<td>74</td>
</tr>
<tr>
<td>Penetrating Vision</td>
<td>P</td>
<td>X</td>
<td>10/level</td>
<td>74</td>
</tr>
<tr>
<td>Penetrating Voice</td>
<td>P</td>
<td>–</td>
<td>1</td>
<td>101</td>
</tr>
<tr>
<td>Perfect Balance</td>
<td>P</td>
<td>–</td>
<td>15</td>
<td>74</td>
</tr>
<tr>
<td>Peripheral Vision</td>
<td>P</td>
<td>–</td>
<td>15</td>
<td>74</td>
</tr>
<tr>
<td>Permeation</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>75</td>
</tr>
<tr>
<td>Photographic Memory</td>
<td>M</td>
<td>–</td>
<td>10</td>
<td>51</td>
</tr>
<tr>
<td>Pitable</td>
<td>Soc</td>
<td>–</td>
<td>5</td>
<td>75</td>
</tr>
<tr>
<td>Plant Empathy</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>75</td>
</tr>
<tr>
<td>Police Rank</td>
<td>Soc</td>
<td>–</td>
<td>5 or 10/level</td>
<td>30</td>
</tr>
<tr>
<td>Possession</td>
<td>M</td>
<td>X</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Power Investiture</td>
<td>M</td>
<td>Sup</td>
<td>10/level</td>
<td>77</td>
</tr>
<tr>
<td>Precognition</td>
<td>M</td>
<td>Sup</td>
<td>25</td>
<td>77</td>
</tr>
<tr>
<td>Presence Support</td>
<td>P</td>
<td>X</td>
<td>5 to 15</td>
<td>77</td>
</tr>
<tr>
<td>Protected Sense</td>
<td>P</td>
<td>X</td>
<td>5/sense</td>
<td>78</td>
</tr>
<tr>
<td>Psi Static</td>
<td>M</td>
<td>Sup</td>
<td>30</td>
<td>78</td>
</tr>
<tr>
<td>Psychometry</td>
<td>M</td>
<td>Sup</td>
<td>20</td>
<td>78</td>
</tr>
<tr>
<td>Puppet</td>
<td>M</td>
<td>X</td>
<td>5 or 10</td>
<td>78</td>
</tr>
<tr>
<td>Racial Memory</td>
<td>M</td>
<td>X</td>
<td>15 or 40</td>
<td>78</td>
</tr>
<tr>
<td>Radiation Tolerance</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>79</td>
</tr>
<tr>
<td>Rank</td>
<td>Soc</td>
<td>–</td>
<td>5 or 10/level</td>
<td>29</td>
</tr>
<tr>
<td>Rapid Healing</td>
<td>P</td>
<td>–</td>
<td>5</td>
<td>79</td>
</tr>
<tr>
<td>Rapier Wit</td>
<td>M</td>
<td>–</td>
<td>5</td>
<td>79</td>
</tr>
<tr>
<td>Reawakened</td>
<td>M</td>
<td>Sup</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>Recovery</td>
<td>P</td>
<td>X</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>Reduced Consumption</td>
<td>P</td>
<td>X</td>
<td>2/level</td>
<td>80</td>
</tr>
<tr>
<td>Regeneration</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>80</td>
</tr>
<tr>
<td>Regrowth</td>
<td>P</td>
<td>X</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Religious Rank</td>
<td>Soc</td>
<td>–</td>
<td>5 or 10/level</td>
<td>30</td>
</tr>
<tr>
<td>Reputation</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>80</td>
</tr>
<tr>
<td>Resistant</td>
<td>P</td>
<td>–</td>
<td>Variable</td>
<td>80</td>
</tr>
</tbody>
</table>
## DISADVANTAGES

*M/P/Soc* tells whether a disadvantage is mental, physical, or social.

*X/Sup* tells whether a disadvantage is exotic or supernatural. *A* in this column means it is mundane.

If the cost of the disadvantage is followed by *, then you must select a self-control number; the cost given is for a self-control number of 12.

<table>
<thead>
<tr>
<th>Advantage</th>
<th>M/P/Soc</th>
<th>X/Sup</th>
<th>Cost</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent-Mindedness</td>
<td>M</td>
<td>–</td>
<td>-15</td>
<td>122</td>
</tr>
<tr>
<td>Acceleration Weakness</td>
<td>P</td>
<td>–</td>
<td>-1</td>
<td>165</td>
</tr>
<tr>
<td>Addiction</td>
<td>M/P</td>
<td>–</td>
<td>Variable</td>
<td>122, 164, 165</td>
</tr>
<tr>
<td>Alcohol Intolerance</td>
<td>P</td>
<td>–</td>
<td>-15 or -20</td>
<td>122</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>P</td>
<td>–</td>
<td>Variable</td>
<td>122, 164, 165</td>
</tr>
<tr>
<td>Amnesia</td>
<td>M</td>
<td>–</td>
<td>-10 or -25</td>
<td>123</td>
</tr>
<tr>
<td>Appearance</td>
<td>P</td>
<td>–</td>
<td>Variable</td>
<td>21</td>
</tr>
<tr>
<td>Attentive</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>163</td>
</tr>
<tr>
<td>Bad Back</td>
<td>P</td>
<td>–</td>
<td>-15 or -25</td>
<td>123</td>
</tr>
<tr>
<td>Bad Grip</td>
<td>P</td>
<td>–</td>
<td>-5/level</td>
<td>123</td>
</tr>
<tr>
<td>Bad Sight</td>
<td>P</td>
<td>–</td>
<td>-25</td>
<td>123</td>
</tr>
<tr>
<td>Bad Smell</td>
<td>P</td>
<td>–</td>
<td>-10</td>
<td>124</td>
</tr>
<tr>
<td>Bad Temper</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>124</td>
</tr>
<tr>
<td>Berserk</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>124</td>
</tr>
<tr>
<td>Bestial</td>
<td>M</td>
<td>X</td>
<td>-10 or -15</td>
<td>124</td>
</tr>
<tr>
<td>Blindness</td>
<td>P</td>
<td>–</td>
<td>-50</td>
<td>124</td>
</tr>
<tr>
<td>Bloodlust</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>125</td>
</tr>
<tr>
<td>Bowlegged</td>
<td>P</td>
<td>–</td>
<td>-1</td>
<td>165</td>
</tr>
<tr>
<td>Broad-Minded</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>125</td>
</tr>
<tr>
<td>Bully</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>125</td>
</tr>
<tr>
<td>Callous</td>
<td>M</td>
<td>–</td>
<td>-5</td>
<td>125</td>
</tr>
<tr>
<td>Cannot Float</td>
<td>P</td>
<td>–</td>
<td>-1</td>
<td>165</td>
</tr>
<tr>
<td>Cannot Learn</td>
<td>M</td>
<td>–</td>
<td>-30</td>
<td>125</td>
</tr>
<tr>
<td>Cannot Speak</td>
<td>P</td>
<td>–</td>
<td>-15</td>
<td>125</td>
</tr>
<tr>
<td>Careful</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>163</td>
</tr>
<tr>
<td>Charitable</td>
<td>M</td>
<td>–</td>
<td>-15*</td>
<td>125</td>
</tr>
<tr>
<td>Chaunovistic</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>163</td>
</tr>
<tr>
<td>Chronic Depression</td>
<td>M</td>
<td>–</td>
<td>-15*</td>
<td>126</td>
</tr>
<tr>
<td>Chronic Pain</td>
<td>P</td>
<td>–</td>
<td>Variable</td>
<td>126</td>
</tr>
<tr>
<td>Chumy</td>
<td>M</td>
<td>–</td>
<td>-5</td>
<td>126</td>
</tr>
<tr>
<td>Clueless</td>
<td>M</td>
<td>–</td>
<td>-10</td>
<td>126</td>
</tr>
<tr>
<td>Code of Honor</td>
<td>M</td>
<td>–</td>
<td>-1 or -5 to -15</td>
<td>127, 163</td>
</tr>
<tr>
<td>Cold-Blooded</td>
<td>P</td>
<td>X</td>
<td>-5 or -10</td>
<td>127</td>
</tr>
<tr>
<td>Colorblindness</td>
<td>P</td>
<td>–</td>
<td>-10</td>
<td>127</td>
</tr>
<tr>
<td>Combat Paralysis</td>
<td>P</td>
<td>–</td>
<td>-15</td>
<td>127</td>
</tr>
<tr>
<td>Compulsive Behavior</td>
<td>M</td>
<td>–</td>
<td>-5 to -15*</td>
<td>128</td>
</tr>
<tr>
<td>Confused</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>129</td>
</tr>
<tr>
<td>Congenial</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>164</td>
</tr>
<tr>
<td>Cowardice</td>
<td>M</td>
<td>–</td>
<td>-10*</td>
<td>129</td>
</tr>
<tr>
<td>Curious</td>
<td>M</td>
<td>–</td>
<td>-5*</td>
<td>129</td>
</tr>
<tr>
<td>Cursed</td>
<td>M</td>
<td>Sup</td>
<td>-75</td>
<td>129</td>
</tr>
<tr>
<td>Deafness</td>
<td>P</td>
<td>–</td>
<td>-120</td>
<td>129</td>
</tr>
<tr>
<td>Debt</td>
<td>Soc</td>
<td>–</td>
<td>-1/level</td>
<td>26</td>
</tr>
<tr>
<td>Decreased Time Rate</td>
<td>M</td>
<td>X</td>
<td>-100</td>
<td>129</td>
</tr>
<tr>
<td>Delusions</td>
<td>M</td>
<td>–</td>
<td>-1 or -5 to -15</td>
<td>130, 164</td>
</tr>
<tr>
<td>Dependency</td>
<td>P</td>
<td>X</td>
<td>Variable</td>
<td>130</td>
</tr>
<tr>
<td>Dependents</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>131</td>
</tr>
<tr>
<td>Destiny</td>
<td>M</td>
<td>Sup</td>
<td>Variable</td>
<td>131</td>
</tr>
<tr>
<td>Disciplines of Faith</td>
<td>M</td>
<td>–</td>
<td>-5 to -15</td>
<td>132</td>
</tr>
<tr>
<td>Dislikes</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>164</td>
</tr>
<tr>
<td>Distinctive Features</td>
<td>P</td>
<td>–</td>
<td>-1</td>
<td>165</td>
</tr>
<tr>
<td>Distraictible</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>164</td>
</tr>
<tr>
<td>Disturbing Voice</td>
<td>P</td>
<td>–</td>
<td>-10</td>
<td>132</td>
</tr>
<tr>
<td>Divine Curse</td>
<td>M</td>
<td>Sup</td>
<td>Variable</td>
<td>132</td>
</tr>
<tr>
<td>Drainage</td>
<td>P</td>
<td>Sup</td>
<td>Variable</td>
<td>132</td>
</tr>
<tr>
<td>Dread</td>
<td>M</td>
<td>Sup</td>
<td>Variable</td>
<td>132</td>
</tr>
<tr>
<td>Dreamer</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>164</td>
</tr>
<tr>
<td>Dull</td>
<td>M</td>
<td>–</td>
<td>-1</td>
<td>164</td>
</tr>
<tr>
<td>Duty</td>
<td>Soc</td>
<td>–</td>
<td>Variable</td>
<td>133</td>
</tr>
<tr>
<td>Dwarfism</td>
<td>P</td>
<td>–</td>
<td>-15</td>
<td>19</td>
</tr>
<tr>
<td>Dyslexia</td>
<td>M</td>
<td>–</td>
<td>-10</td>
<td>134</td>
</tr>
<tr>
<td>Easy to Kill</td>
<td>P</td>
<td>–</td>
<td>-2/level</td>
<td>134</td>
</tr>
<tr>
<td>Easy to Read</td>
<td>M</td>
<td>–</td>
<td>-10</td>
<td>134</td>
</tr>
<tr>
<td>Electrical</td>
<td>P</td>
<td>X</td>
<td>-20</td>
<td>134</td>
</tr>
</tbody>
</table>
The following modifiers are generally applicable to advantages and disadvantages. Many traits have their own special modifiers as well; consult the specific trait description for details. Under **Type**, an attack modifier (see p. 102) is denoted by A; a gadget limitation (see p. 116) is denoted by G. A – means it is neither.
### Skills

**Difficulty** is **E** for Easy, **A** for Average, **H** for Hard, or **VH** for Very Hard.

Defaults marked with * either do not always apply or vary in special circumstances; see the entry in the main text.

Skills marked with † require specialization.

#### Trait Lists

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Value</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>IQ</td>
<td>H</td>
<td>174</td>
</tr>
<tr>
<td>Acrobatics</td>
<td>DX H</td>
<td>IQ-6, 6</td>
<td>174</td>
</tr>
<tr>
<td>Acting</td>
<td>IQ A</td>
<td>IQ-5, performance-2, Public Speaking-5</td>
<td>174</td>
</tr>
<tr>
<td>Administration</td>
<td>IQ A</td>
<td>IQ-5, Merchant-3</td>
<td>174</td>
</tr>
<tr>
<td>Astronautics</td>
<td>DX H</td>
<td>DX-6</td>
<td>174</td>
</tr>
<tr>
<td>Airshipman/TL</td>
<td>IQ E</td>
<td>IQ-4</td>
<td>175</td>
</tr>
<tr>
<td>Alcohol/TL</td>
<td>IQ VH</td>
<td>None</td>
<td>174</td>
</tr>
<tr>
<td>Animal Handling†</td>
<td>IQ A</td>
<td>IQ-5</td>
<td>175</td>
</tr>
<tr>
<td>Anthropology†</td>
<td>IQ H</td>
<td>IQ-6, Paleontology (Paleoanthropology)-2, Sociology-3</td>
<td>175</td>
</tr>
<tr>
<td>Aquatics</td>
<td>DX H</td>
<td>DX-6</td>
<td>174</td>
</tr>
<tr>
<td>Archaeology</td>
<td>IQ H</td>
<td>IQ-6</td>
<td>176</td>
</tr>
<tr>
<td>Architecture/TL†</td>
<td>IQ A</td>
<td>IQ-5, Engineer (Civil)-4</td>
<td>176</td>
</tr>
<tr>
<td>Area Knowledge†</td>
<td>IQ E</td>
<td>IQ-4, Geography (Regional)-3*</td>
<td>176</td>
</tr>
<tr>
<td>Armoury/TL†</td>
<td>IQ A</td>
<td>IQ-5, Engineer (same)-4</td>
<td>178</td>
</tr>
<tr>
<td>Artillery/TL†</td>
<td>IQ A</td>
<td>IQ-5</td>
<td>178</td>
</tr>
<tr>
<td>Artist†</td>
<td>IQ H</td>
<td>IQ-6</td>
<td>176</td>
</tr>
<tr>
<td>Astronomy/TL</td>
<td>IQ H</td>
<td>IQ-6</td>
<td>179</td>
</tr>
<tr>
<td>Autohypnosis</td>
<td>Will H</td>
<td>Meditation-7</td>
<td>179</td>
</tr>
<tr>
<td>Axe/Mace</td>
<td>DX A</td>
<td>Flail-4</td>
<td>208</td>
</tr>
<tr>
<td>Battlesuit/TL†</td>
<td>DX A</td>
<td>DX-5, Diving Suit-4</td>
<td>179</td>
</tr>
<tr>
<td>Beam Weapons/TL†</td>
<td>DX E</td>
<td>DX-4</td>
<td>179</td>
</tr>
</tbody>
</table>

#### Limitations

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Value</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>–</td>
<td>Variable</td>
<td>110</td>
</tr>
<tr>
<td>Always On</td>
<td>–</td>
<td>Variable</td>
<td>110</td>
</tr>
<tr>
<td>Armor Divisor</td>
<td>A</td>
<td>Variable</td>
<td>110</td>
</tr>
<tr>
<td>Blood Agent</td>
<td>A</td>
<td>-40%</td>
<td>110</td>
</tr>
</tbody>
</table>

#### Skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>Attr</th>
<th>Diff</th>
<th>Defaults</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycling</td>
<td>DX E</td>
<td></td>
<td>DX-4, Driving (Motorcycle)-4</td>
<td>180</td>
</tr>
<tr>
<td>Bioengineering/TL†</td>
<td>IQ H</td>
<td></td>
<td>Biology-5</td>
<td>180</td>
</tr>
<tr>
<td>Biology/TL†</td>
<td>IQ VH</td>
<td></td>
<td>IQ-6, Naturalist-6</td>
<td>180</td>
</tr>
<tr>
<td>Blind Fighting</td>
<td>Per VH</td>
<td></td>
<td>None</td>
<td>180</td>
</tr>
<tr>
<td>Blowpipe</td>
<td>DX H</td>
<td>DX-6</td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>Boating/TL†</td>
<td>DX A</td>
<td>DX-5, IQ-5</td>
<td></td>
<td>180</td>
</tr>
<tr>
<td>Body Control</td>
<td>HT VH</td>
<td></td>
<td>None</td>
<td>181</td>
</tr>
<tr>
<td>Body Language</td>
<td>Per A</td>
<td></td>
<td>Detect Lies-4, Psychology-4</td>
<td>181</td>
</tr>
<tr>
<td>Body Sense</td>
<td>DX H</td>
<td>DX-6, Acrobatics-3</td>
<td></td>
<td>181</td>
</tr>
<tr>
<td>Bolas</td>
<td>DX A</td>
<td></td>
<td>None</td>
<td>181</td>
</tr>
<tr>
<td>Bow</td>
<td>DX A</td>
<td>DX-5</td>
<td></td>
<td>182</td>
</tr>
<tr>
<td>Boxing</td>
<td>DX A</td>
<td></td>
<td>None</td>
<td>182</td>
</tr>
<tr>
<td>Brain Hacking/TL</td>
<td>IQ H</td>
<td></td>
<td>Special</td>
<td>182</td>
</tr>
<tr>
<td>Brainwashing/TL</td>
<td>IQ H</td>
<td></td>
<td>Special</td>
<td>182</td>
</tr>
<tr>
<td>Brawling</td>
<td>DX E</td>
<td></td>
<td>None</td>
<td>182</td>
</tr>
<tr>
<td>Breaking Blow</td>
<td>IQ H</td>
<td></td>
<td>None</td>
<td>182</td>
</tr>
<tr>
<td>Breath Control</td>
<td>HT H</td>
<td></td>
<td>None</td>
<td>182</td>
</tr>
<tr>
<td>Broadsword</td>
<td>DX A</td>
<td></td>
<td>Force Sword-4, Rapier-4, Saber-4, Shortsword-2, Two-Handed Sword-4</td>
<td>208</td>
</tr>
<tr>
<td>Camouflage</td>
<td>IQ E</td>
<td></td>
<td>IQ-4, Survival-2</td>
<td>183</td>
</tr>
<tr>
<td>Captivate</td>
<td>Will H</td>
<td></td>
<td>None</td>
<td>191</td>
</tr>
<tr>
<td>Carousing</td>
<td>HT E</td>
<td>HT-4</td>
<td></td>
<td>183</td>
</tr>
<tr>
<td>Carpentry</td>
<td>IQ E</td>
<td>IQ-4</td>
<td></td>
<td>183</td>
</tr>
<tr>
<td>Cartography/TL</td>
<td>IQ A</td>
<td>IQ-5, Geography (any)-2, Mathematics (Surveying)-2, Navigation (any)-4</td>
<td>183</td>
<td></td>
</tr>
</tbody>
</table>

---

**Traits Lists**

301
<table>
<thead>
<tr>
<th>Skill</th>
<th>Attr</th>
<th>Diff</th>
<th>Defaults</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry/TL</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Alchemy-3</td>
<td>183</td>
</tr>
<tr>
<td>Climbing</td>
<td>DX</td>
<td>A</td>
<td>DX-5</td>
<td>183</td>
</tr>
<tr>
<td>Cloak</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Net-4, Shield (any)-4</td>
<td>184</td>
</tr>
<tr>
<td>Combat or Sport</td>
<td>Varies</td>
<td>Special</td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>Computer Hacking/TL</td>
<td>VH</td>
<td>None</td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>Computer</td>
<td>E</td>
<td>IQ-4</td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>Operation/TL</td>
<td></td>
<td></td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>Computer</td>
<td>H</td>
<td>None</td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>Programming/TL</td>
<td></td>
<td></td>
<td></td>
<td>184</td>
</tr>
<tr>
<td>Connoisseur†</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5*</td>
<td>185</td>
</tr>
<tr>
<td>Cooking</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Housekeeping-5</td>
<td>185</td>
</tr>
<tr>
<td>Counterfeiting/TL</td>
<td>H</td>
<td>IQ-6, Forgery-2</td>
<td>185</td>
<td></td>
</tr>
<tr>
<td>Crewman/TL</td>
<td>E</td>
<td>IQ-5</td>
<td></td>
<td>185</td>
</tr>
<tr>
<td>Criminology/TL</td>
<td>A</td>
<td>IQ-5, Psychology-4</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>Crossbow</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>186</td>
</tr>
<tr>
<td>Cryptography/TL</td>
<td>H</td>
<td>None</td>
<td>Mathematics</td>
<td>186</td>
</tr>
<tr>
<td>Current Affairs/TL†</td>
<td>E</td>
<td>IQ-4, Research-4</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>Dancing</td>
<td>DX</td>
<td>A</td>
<td>DX-5</td>
<td>187</td>
</tr>
<tr>
<td>Detect Lies</td>
<td>Per H</td>
<td></td>
<td>Per-6, Body Language-4, Psychology-4</td>
<td>187</td>
</tr>
<tr>
<td>Diagnosis/TL</td>
<td>H</td>
<td>IQ-6, First Aid-8</td>
<td>187</td>
<td></td>
</tr>
<tr>
<td>Diplomacy</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Politics-6</td>
<td>187</td>
</tr>
<tr>
<td>Disguise/TL†</td>
<td>A</td>
<td>IQ-5, Makeup-3</td>
<td>187</td>
<td></td>
</tr>
<tr>
<td>Diving Suit/TL</td>
<td>DX A</td>
<td>DX-5,Battlesuit-4</td>
<td>192</td>
<td></td>
</tr>
<tr>
<td>Dreaming</td>
<td>Will</td>
<td>H</td>
<td>Will-6</td>
<td>188</td>
</tr>
<tr>
<td>Driving/TL†</td>
<td>DX</td>
<td>A</td>
<td>DX-5, IQ-5</td>
<td>188</td>
</tr>
<tr>
<td>Dropping</td>
<td>DX</td>
<td>A</td>
<td>DX-3, Throwing-4</td>
<td>189</td>
</tr>
<tr>
<td>Economics</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Finance-5, Market Analysis-5, Merchant-6</td>
<td>189</td>
</tr>
<tr>
<td>Electrician/TL</td>
<td>A</td>
<td>IQ-5, Engineer (Electrical)-3</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Electronics</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Electronics</td>
<td>189</td>
</tr>
<tr>
<td>Operation/TL†</td>
<td>A</td>
<td>IQ-5, Electronics Engineer (Electronics)-5</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Electronics Repair/TL†</td>
<td>A</td>
<td>IQ-5, Electronics Repair (same)-5, Engineer (Electronics)-5</td>
<td>190</td>
<td></td>
</tr>
<tr>
<td>Engineer/TL†</td>
<td>H</td>
<td>Special</td>
<td>190</td>
<td></td>
</tr>
<tr>
<td>Enthrallment</td>
<td>Will</td>
<td>H</td>
<td>None</td>
<td>191</td>
</tr>
<tr>
<td>Environment Suit/TL</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Aerobatics-5</td>
<td>192</td>
</tr>
<tr>
<td>Erotic Art</td>
<td>DX</td>
<td>H</td>
<td>DX-6</td>
<td>192</td>
</tr>
<tr>
<td>Escape</td>
<td>DX</td>
<td>H</td>
<td>DX-6</td>
<td>192</td>
</tr>
<tr>
<td>Esoteric Medicine</td>
<td>Per H</td>
<td></td>
<td>Per-6, Religious Ritual (any)-3, Religious Magic (any)-3, Theology (any)-3</td>
<td>193</td>
</tr>
<tr>
<td>Exorcism</td>
<td>Will</td>
<td>H</td>
<td>Will-6</td>
<td>193</td>
</tr>
<tr>
<td>Expert Skill†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-5*</td>
<td>193</td>
</tr>
<tr>
<td>Explosives/TL†</td>
<td>A</td>
<td>IQ-5*</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td>Falconry</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Animal Handling (Raptors)-3, Biological-5, Gardening-3</td>
<td>194</td>
</tr>
<tr>
<td>Farming/TL</td>
<td>A</td>
<td>IQ-5, Animal Handling (Raptors)-3, Biological-5, Gardening-3</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td>Fast-Draw†</td>
<td>DX</td>
<td>E</td>
<td>None</td>
<td>194</td>
</tr>
<tr>
<td>Fast-Talk</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Acting-5</td>
<td>195</td>
</tr>
<tr>
<td>Filch</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Pickpocket-4, Sleight of Hand-4</td>
<td>195</td>
</tr>
<tr>
<td>Finance</td>
<td>IQ</td>
<td>H</td>
<td>Accounting-4, Economics-3, Merchant-6</td>
<td>195</td>
</tr>
<tr>
<td>Fire Eating</td>
<td>DX</td>
<td>A</td>
<td>None</td>
<td>195</td>
</tr>
<tr>
<td>First Aid/TL</td>
<td>E</td>
<td>IQ-4, Esoteric Medicine, Physician, Veterinary-4</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>Fishing</td>
<td>Per E</td>
<td></td>
<td>Per-4</td>
<td>195</td>
</tr>
<tr>
<td>Flail</td>
<td>DX H</td>
<td></td>
<td>Axe/Mace-4, Two-Handed Flail-3</td>
<td>208</td>
</tr>
<tr>
<td>Flight</td>
<td>HT A</td>
<td></td>
<td>HT-5</td>
<td>195</td>
</tr>
<tr>
<td>Flying Leap</td>
<td>IQ</td>
<td>H</td>
<td>None</td>
<td>196</td>
</tr>
<tr>
<td>Force Sword</td>
<td>DX</td>
<td>A</td>
<td>Any Sword-3</td>
<td>208</td>
</tr>
<tr>
<td>Force Whip</td>
<td>DX</td>
<td>A</td>
<td>Kusari-3, Monowire Whip-3, Whip-3</td>
<td>209</td>
</tr>
<tr>
<td>Forced Entry</td>
<td>DX</td>
<td>E</td>
<td>None</td>
<td>196</td>
</tr>
<tr>
<td>Forensics/TL</td>
<td>H</td>
<td>IQ-6, Criminology-4</td>
<td>196</td>
<td></td>
</tr>
<tr>
<td>Forgery/TL</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Counterfeiting-2</td>
<td>196</td>
</tr>
<tr>
<td>Fortune-Telling†</td>
<td>IA</td>
<td>A</td>
<td>IQ-5, Fast-Talk-3, Occultism-3</td>
<td>196</td>
</tr>
<tr>
<td>Forward Observer/TL</td>
<td>IA</td>
<td>A</td>
<td>IQ-5, Artillery-(any)-5*</td>
<td>197</td>
</tr>
<tr>
<td>Free Fall</td>
<td>DX</td>
<td>A</td>
<td>DX-5, HT-5</td>
<td>197</td>
</tr>
<tr>
<td>Freight Handling/TL</td>
<td>IA</td>
<td>A</td>
<td>IQ-5</td>
<td>197</td>
</tr>
<tr>
<td>Gambling</td>
<td>IA</td>
<td>A</td>
<td>IQ-5, Mathematics (Statistics)-5</td>
<td>197</td>
</tr>
<tr>
<td>Games†</td>
<td>IA</td>
<td>E</td>
<td>IQ-4</td>
<td>197</td>
</tr>
<tr>
<td>Gardening</td>
<td>IA</td>
<td>E</td>
<td>IQ-4, Farming-3</td>
<td>197</td>
</tr>
<tr>
<td>Garrote</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>197</td>
</tr>
<tr>
<td>Geography/TL†</td>
<td>IA</td>
<td>E</td>
<td>IQ-6*</td>
<td>198</td>
</tr>
<tr>
<td>Geology/TL†</td>
<td>IA</td>
<td>H</td>
<td>IQ-6, Geography (Physical)-4, Prospecting-5</td>
<td>198</td>
</tr>
<tr>
<td>Gesture</td>
<td>IA</td>
<td>E</td>
<td>IQ-4</td>
<td>198</td>
</tr>
<tr>
<td>Group Performance†</td>
<td>IA</td>
<td>A</td>
<td>IQ-5*</td>
<td>198</td>
</tr>
<tr>
<td>Gunner/TL†</td>
<td>IA</td>
<td>E</td>
<td>DX-4</td>
<td>198</td>
</tr>
<tr>
<td>Guns/TL†</td>
<td>IA</td>
<td>E</td>
<td>DX-4</td>
<td>198</td>
</tr>
<tr>
<td>Hazardous Materials/TL</td>
<td>IA</td>
<td>A</td>
<td>IQ-5</td>
<td>199</td>
</tr>
<tr>
<td>Heraldry</td>
<td>IA</td>
<td>A</td>
<td>IQ-5, Savoir-Faire (High Society)-3</td>
<td>199</td>
</tr>
<tr>
<td>Herb Lore/TL</td>
<td>VH</td>
<td>None</td>
<td></td>
<td>199</td>
</tr>
<tr>
<td>Hidden Lore†</td>
<td>IA</td>
<td>A</td>
<td>None</td>
<td>199</td>
</tr>
<tr>
<td>Hiking</td>
<td>HT</td>
<td>A</td>
<td>HT-5</td>
<td>200</td>
</tr>
<tr>
<td>History†</td>
<td>IA</td>
<td>H</td>
<td>IQ-6</td>
<td>200</td>
</tr>
<tr>
<td>Hobby Skill</td>
<td>DX</td>
<td>E or IQ E</td>
<td>DX-4 or IQ-4</td>
<td>200</td>
</tr>
<tr>
<td>Holdout</td>
<td>IA</td>
<td>A</td>
<td>IQ-5, Sleight of Hand-3</td>
<td>200</td>
</tr>
<tr>
<td>Housekeeping</td>
<td>IA</td>
<td>E</td>
<td>IQ-4</td>
<td>200</td>
</tr>
<tr>
<td>Hypnotism</td>
<td>IA</td>
<td>H</td>
<td>None</td>
<td>201</td>
</tr>
<tr>
<td>Immovable Stance</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>201</td>
</tr>
<tr>
<td>Innate Attack†</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>201</td>
</tr>
<tr>
<td>Intelligence</td>
<td>IA</td>
<td>H</td>
<td>IQ-6, Strategy (any)-6</td>
<td>201</td>
</tr>
<tr>
<td>Analysis/TL</td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>Interrogation</td>
<td>IA</td>
<td>A</td>
<td>IQ-5, Intimidation-3, Psychology-4</td>
<td>202</td>
</tr>
<tr>
<td>Intimidation</td>
<td>Will</td>
<td>A</td>
<td>Will-5, Acting-3</td>
<td>202</td>
</tr>
<tr>
<td>Invisibility Art</td>
<td>VH</td>
<td>None</td>
<td></td>
<td>202</td>
</tr>
<tr>
<td>Jeweler/TL</td>
<td>IA</td>
<td>H</td>
<td>IQ-6, Smith (Copper)-4, Smith (Lead and Tin)-4</td>
<td>203</td>
</tr>
<tr>
<td>Jitte/Sai</td>
<td>DX</td>
<td>A</td>
<td>Force Sword-4, Main-Gauche-4, Shortsword-3</td>
<td>208</td>
</tr>
<tr>
<td>Judo</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>203</td>
</tr>
<tr>
<td>Jumping</td>
<td>DX</td>
<td>E</td>
<td>None</td>
<td>203</td>
</tr>
<tr>
<td>Karate</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>203</td>
</tr>
<tr>
<td>Kiat</td>
<td>HT</td>
<td>H</td>
<td>None</td>
<td>203</td>
</tr>
<tr>
<td>Knife</td>
<td>DX</td>
<td>A</td>
<td>Force Sword-3, Main-Gauche-4, Shortsword-3</td>
<td>208</td>
</tr>
<tr>
<td>Knot-Tying</td>
<td>DX</td>
<td>E</td>
<td>DX-4, Climbing-4, Seamanterhip-4</td>
<td>203</td>
</tr>
<tr>
<td>Lance</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Spear-3</td>
<td>204</td>
</tr>
<tr>
<td>Lasso</td>
<td>DX</td>
<td>A</td>
<td>None</td>
<td>204</td>
</tr>
<tr>
<td>Law†</td>
<td>IH</td>
<td>H</td>
<td>IQ-6</td>
<td>204</td>
</tr>
<tr>
<td>Leadership</td>
<td>IA</td>
<td>H</td>
<td>IQ-5</td>
<td>204</td>
</tr>
<tr>
<td>Leatherworking</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>205</td>
</tr>
<tr>
<td>Lifting</td>
<td>HT</td>
<td>A</td>
<td>None</td>
<td>205</td>
</tr>
<tr>
<td>Light Walk</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>205</td>
</tr>
<tr>
<td>Linguistics</td>
<td>IH</td>
<td>E</td>
<td>None</td>
<td>205</td>
</tr>
<tr>
<td>Lip Reading</td>
<td>Per A</td>
<td></td>
<td>Per-10</td>
<td>205</td>
</tr>
<tr>
<td>Liquid Projector/TL†</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>205</td>
</tr>
<tr>
<td>Skill</td>
<td>Attr</td>
<td>Diff</td>
<td>Defaults</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------</td>
<td>------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Literature</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6</td>
<td>205</td>
</tr>
<tr>
<td>Lockpicking/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5</td>
<td>206</td>
</tr>
<tr>
<td>Machinist/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Mechanic (any)-5</td>
<td>206</td>
</tr>
<tr>
<td>Main-Gauche</td>
<td>DX</td>
<td>A</td>
<td>Jitte/Sai-4, Knife-4, Rapier-3, Saber-3, Smallsword-3</td>
<td>208</td>
</tr>
<tr>
<td>Makeup/TL</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4, Disguise-2</td>
<td>207</td>
</tr>
<tr>
<td>Market Analysis</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Economics-5, Merchant-4</td>
<td>207</td>
</tr>
<tr>
<td>Masonry</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4</td>
<td>207</td>
</tr>
<tr>
<td>Mathematics/TL†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6*</td>
<td>207</td>
</tr>
<tr>
<td>Mechanic/TL†</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Engineer (same)-4, Machinist-5</td>
<td>207</td>
</tr>
<tr>
<td>Meditation</td>
<td>Will</td>
<td>H</td>
<td>Will-6, Autohypnosis-4</td>
<td>207</td>
</tr>
<tr>
<td>Melee Weapon</td>
<td>DX</td>
<td>Varies</td>
<td>Special</td>
<td>208</td>
</tr>
<tr>
<td>Mental Strength</td>
<td>Will</td>
<td>E</td>
<td>None</td>
<td>209</td>
</tr>
<tr>
<td>Merchant</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Finance-6, Market Analysis-4</td>
<td>209</td>
</tr>
<tr>
<td>Metallurgy/TL</td>
<td>IQ</td>
<td>H</td>
<td>Chemistry-5, Jeweler-8, Smith (any)-8</td>
<td>209</td>
</tr>
<tr>
<td>Meteorology/TL†</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5</td>
<td>209</td>
</tr>
<tr>
<td>Mimicry†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6*</td>
<td>210</td>
</tr>
<tr>
<td>Mind Block</td>
<td>Will</td>
<td>A</td>
<td>Will-5, Meditation-5</td>
<td>209</td>
</tr>
<tr>
<td>Monowire Whip</td>
<td>DX</td>
<td>H</td>
<td>Force Whip-3, Kusari-3, Whip-3</td>
<td>209</td>
</tr>
<tr>
<td>Mount</td>
<td>DX</td>
<td>A</td>
<td>DX-5</td>
<td>210</td>
</tr>
<tr>
<td>Musical Influence</td>
<td>IQ</td>
<td>H</td>
<td>Musical Instrument-2, Poetry-2 (for song)</td>
<td>210</td>
</tr>
<tr>
<td>Musical Instrument†</td>
<td>IQ</td>
<td>H</td>
<td>Special</td>
<td>211</td>
</tr>
<tr>
<td>Naturalist†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Biology-3</td>
<td>211</td>
</tr>
<tr>
<td>Navigation/TL†</td>
<td>IQ</td>
<td>A</td>
<td>Special</td>
<td>211</td>
</tr>
<tr>
<td>NBC Suit/TL</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Battlesuit-2, Diving Suit-4, Vacc Suit-2</td>
<td>212</td>
</tr>
<tr>
<td>Net</td>
<td>DX</td>
<td>H</td>
<td>Cloak-5</td>
<td>211</td>
</tr>
<tr>
<td>Observation</td>
<td>Per</td>
<td>A</td>
<td>Per-5, Shadowing-5</td>
<td>211</td>
</tr>
<tr>
<td>Occultism</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5</td>
<td>212</td>
</tr>
<tr>
<td>Packing</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Animal Handling (Equines)-5</td>
<td>212</td>
</tr>
<tr>
<td>Paleontology/TL†</td>
<td>IQ</td>
<td>H</td>
<td>Biology-4*</td>
<td>212</td>
</tr>
<tr>
<td>Panhandling</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4, Fast Talk-2, Public Speaking-3</td>
<td>212</td>
</tr>
<tr>
<td>Parachuting/TL</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>212</td>
</tr>
<tr>
<td>Parry Missile Weapons</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>212</td>
</tr>
<tr>
<td>Performance</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Acting-2, Public Speaking-2</td>
<td>212</td>
</tr>
<tr>
<td>Persuade</td>
<td>Will</td>
<td>H</td>
<td>None</td>
<td>191</td>
</tr>
<tr>
<td>Pharmacy/TL†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6*</td>
<td>213</td>
</tr>
<tr>
<td>Philosophy†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6</td>
<td>213</td>
</tr>
<tr>
<td>Photography/TL†</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Electronics</td>
<td>Operation (Media)-5</td>
</tr>
<tr>
<td>Physician/TL</td>
<td>IQ</td>
<td>H</td>
<td>IQ-7, First Aid-11, Veterinary-5</td>
<td>213</td>
</tr>
<tr>
<td>Physics/TL</td>
<td>IQ</td>
<td>VH</td>
<td>IQ-6</td>
<td>213</td>
</tr>
<tr>
<td>Physiology/TL†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Diagnosis-5, Physician-5, Surgery-5</td>
<td>213</td>
</tr>
<tr>
<td>Pickpocket</td>
<td>DX</td>
<td>A</td>
<td>DX-6, Filch-5, Sleight of Hand-4</td>
<td>213</td>
</tr>
<tr>
<td>Piloting/TL†</td>
<td>DX</td>
<td>A</td>
<td>IQ-6</td>
<td>214</td>
</tr>
<tr>
<td>Poetry</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Writing-5</td>
<td>214</td>
</tr>
<tr>
<td>Poisons/TL</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Chemistry-5, Pharmacy (any)-3, Physician-3</td>
<td>214</td>
</tr>
<tr>
<td>Polearm</td>
<td>DX</td>
<td>A</td>
<td>Spear-4, Staff-4, Two-Handed Axe/Mace-4</td>
<td>208</td>
</tr>
<tr>
<td>Politics</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Diplomacy-5</td>
<td>215</td>
</tr>
<tr>
<td>Power Blow</td>
<td>Will</td>
<td>H</td>
<td>None</td>
<td>215</td>
</tr>
<tr>
<td>Pressure Points</td>
<td>IQ</td>
<td>H</td>
<td>None</td>
<td>215</td>
</tr>
<tr>
<td>Pressure Secrets</td>
<td>IQ</td>
<td>VH</td>
<td>None</td>
<td>215</td>
</tr>
<tr>
<td>Professional Skill</td>
<td>DX or IQ</td>
<td>A</td>
<td>IQ-5, Merchant-5, Special</td>
<td>Special</td>
</tr>
<tr>
<td>Propaganda/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Psychology-4</td>
<td>215</td>
</tr>
<tr>
<td>Prospecting/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Geology (any)-4</td>
<td>216</td>
</tr>
<tr>
<td>Psychology</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Sociology-4</td>
<td>216</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Acting-5, Performance-2, Politics-5</td>
<td>216</td>
</tr>
<tr>
<td>Push</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>216</td>
</tr>
<tr>
<td>Rapier</td>
<td>DX</td>
<td>A</td>
<td>Broadsword-4, Main-Gauche-3, Saber-3, Smallsword-3</td>
<td>208</td>
</tr>
<tr>
<td>Religious Ritual†</td>
<td>IQ</td>
<td>H</td>
<td>Ritual Magic (same)-6, Theology (same)-4</td>
<td>217</td>
</tr>
<tr>
<td>Research/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Writing-3</td>
<td>217</td>
</tr>
<tr>
<td>Riding†</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Animal Handling (same)-3</td>
<td>217</td>
</tr>
<tr>
<td>Ritual Magic†</td>
<td>IQ</td>
<td>VH</td>
<td>Religious Ritual (same)-6</td>
<td>218</td>
</tr>
<tr>
<td>Running</td>
<td>HT</td>
<td>A</td>
<td>HT-5</td>
<td>218</td>
</tr>
<tr>
<td>Saber</td>
<td>DX</td>
<td>A</td>
<td>Broadsword-4, Main-Gauche-3, Rapier-3, Shortsword-4, Smallsword-3</td>
<td>208</td>
</tr>
<tr>
<td>Savoir-Faire†</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4*</td>
<td>218</td>
</tr>
<tr>
<td>Scrounging</td>
<td>Per</td>
<td>E</td>
<td>Per-4</td>
<td>218</td>
</tr>
<tr>
<td>Scuba/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Diving Suit-2</td>
<td>219</td>
</tr>
<tr>
<td>Seamanship/TL</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4</td>
<td>185</td>
</tr>
<tr>
<td>Search</td>
<td>Per</td>
<td>A</td>
<td>Per-5, Criminality-5</td>
<td>219</td>
</tr>
<tr>
<td>Sewing/TL</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>219</td>
</tr>
<tr>
<td>Sex Appeal</td>
<td>HT</td>
<td>A</td>
<td>HT-3</td>
<td>219</td>
</tr>
<tr>
<td>Shadowing</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5, Observation-5, Stealth-4 (on foot only)</td>
<td>219</td>
</tr>
<tr>
<td>Shield†</td>
<td>DX</td>
<td>E</td>
<td>DX-4</td>
<td>220</td>
</tr>
<tr>
<td>Shiphandling/TL†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6*</td>
<td>220</td>
</tr>
<tr>
<td>Shortword</td>
<td>DX</td>
<td>H</td>
<td>Broadsword-2, Force Sword-4, Jitte/Sai-3, Knife-4, Saber-4, Smallsword-4, Tonfa-3</td>
<td>209</td>
</tr>
<tr>
<td>Singing</td>
<td>HT</td>
<td>E</td>
<td>HT-4</td>
<td>220</td>
</tr>
<tr>
<td>Skating</td>
<td>HT</td>
<td>H</td>
<td>HT-6</td>
<td>220</td>
</tr>
<tr>
<td>Skiing</td>
<td>HT</td>
<td>H</td>
<td>HT-6</td>
<td>220</td>
</tr>
<tr>
<td>Sleight of Hand</td>
<td>DX</td>
<td>H</td>
<td>Filch-5</td>
<td>221</td>
</tr>
<tr>
<td>Sling</td>
<td>DX</td>
<td>H</td>
<td>DX-6</td>
<td>221</td>
</tr>
<tr>
<td>Smallsword</td>
<td>DX</td>
<td>A</td>
<td>Main-Gauche-3, Rapier-3, Saber-3, Shortsword-4</td>
<td>208</td>
</tr>
<tr>
<td>Smith/TL†</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5*</td>
<td>221</td>
</tr>
<tr>
<td>Smuggling</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5</td>
<td>221</td>
</tr>
<tr>
<td>Sociology</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Anthropology-3, Psychology-4</td>
<td>221</td>
</tr>
<tr>
<td>Soldier/TL</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5</td>
<td>221</td>
</tr>
<tr>
<td>Spacer/TL</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4</td>
<td>185</td>
</tr>
<tr>
<td>Spear</td>
<td>DX</td>
<td>A</td>
<td>Polearm-4, Staff-2, (Spear)-4</td>
<td>208</td>
</tr>
<tr>
<td>Spear Thrower</td>
<td>DX</td>
<td>A</td>
<td>DX-5, Thrown Weapon (Spear)-4</td>
<td>222</td>
</tr>
<tr>
<td>Speed-Reading</td>
<td>IQ</td>
<td>A</td>
<td>None</td>
<td>222</td>
</tr>
<tr>
<td>Sports</td>
<td>DX</td>
<td>A</td>
<td>Special</td>
<td>222</td>
</tr>
<tr>
<td>Staff</td>
<td>DX</td>
<td>A</td>
<td>Polearm-4, Spear-2</td>
<td>208</td>
</tr>
<tr>
<td>Stage Combat</td>
<td>DX</td>
<td>A</td>
<td>Combat Art or Sport-2, an actual combat skill-3, Performance-3</td>
<td>222</td>
</tr>
<tr>
<td>Stealth</td>
<td>DX</td>
<td>H</td>
<td>DX-5, IQ-5</td>
<td>222</td>
</tr>
<tr>
<td>Strategy†</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Intelligence Analysis-6, Tactics-6</td>
<td>222</td>
</tr>
<tr>
<td>Streetwise</td>
<td>IQ</td>
<td>A</td>
<td>IQ-5</td>
<td>223</td>
</tr>
<tr>
<td>Submariner/TL†</td>
<td>DX</td>
<td>A</td>
<td>IQ-6</td>
<td>223</td>
</tr>
<tr>
<td>Submariner/TL</td>
<td>IQ</td>
<td>E</td>
<td>IQ-4</td>
<td>185</td>
</tr>
<tr>
<td>Suggest</td>
<td>Will</td>
<td>H</td>
<td>None</td>
<td>191</td>
</tr>
<tr>
<td>Sumo Wrestling</td>
<td>DX</td>
<td>A</td>
<td>None</td>
<td>223</td>
</tr>
<tr>
<td>Surgery/TL</td>
<td>IQ</td>
<td>VH</td>
<td>First Aid-12, Physician-5, Physiology-8, Veterinary-5</td>
<td>223</td>
</tr>
<tr>
<td>Survival†</td>
<td>Per</td>
<td>A</td>
<td>Per-5, Naturalist (same planet)-3</td>
<td>223</td>
</tr>
<tr>
<td>Sway Emotions</td>
<td>Will</td>
<td>H</td>
<td>None</td>
<td>192</td>
</tr>
<tr>
<td>Swimming</td>
<td>HT</td>
<td>E</td>
<td>HT-4</td>
<td>224</td>
</tr>
<tr>
<td>Symbol Drawing†</td>
<td>IQ</td>
<td>H</td>
<td>Special</td>
<td>224</td>
</tr>
<tr>
<td>Tactics</td>
<td>IQ</td>
<td>H</td>
<td>IQ-6, Strategy (any)-6</td>
<td>224</td>
</tr>
</tbody>
</table>
### Techniques

Techniques marked with * are highly cinematic and may not be appropriate for realistic games. Under Difficulty, A means Average and H means Hard. Under Defaults, PS means any prerequisite skill.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Attr</th>
<th>Diff</th>
<th>Defaults</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>A</td>
<td>DX-4, Lockpicking-3</td>
<td>232</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>E</td>
<td>DX-4*</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>H</td>
<td>None</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>J</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>K</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>L</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>M</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>N</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>O</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>P</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>Q</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>R</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>S</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>T</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>U</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>V</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>W</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>X</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>Y</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
<tr>
<td>Ballistic Art</td>
<td>DX</td>
<td>Z</td>
<td>DX-3, Dropping-4</td>
<td>226</td>
</tr>
</tbody>
</table>

### Spells

**Difficulty** is H for Hard and VH for Very Hard.

*Classes* are *Ench.* for Enchantment or *Info.* for Information (others are written in full). If the class is followed by a notation in brackets, that spell is resisted by the attribute or skill inside the brackets.


**Necro.** for Necromantic, and *PW* for Protection and Warning. Other colleges are not abbreviated.

*Duration* of I is instantaneous; P is permanent.

*Initial Cost* followed by B denotes a base cost for Area spells.

*Maintenance Cost* is S if it is the same as the initial cost, H if it is half the initial cost, or – if the spell cannot be maintained.

* means that the entry is explained more fully in the text.
<table>
<thead>
<tr>
<th>Spell</th>
<th>Difficulty</th>
<th>Class [ ]</th>
<th>College</th>
<th>Time to Cast</th>
<th>Duration</th>
<th>Initial Cost</th>
<th>Maintenance Cost</th>
<th>Prerequisites</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banish</td>
<td>H</td>
<td>Special [Will]</td>
<td>Necro.</td>
<td>5 sec.</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Magery 1, at least one spell from 10 colleges</td>
<td>252</td>
</tr>
<tr>
<td>Blur</td>
<td>H</td>
<td>Regular</td>
<td>L/D</td>
<td>2 sec.</td>
<td>1 min.</td>
<td>1 to 5</td>
<td>S</td>
<td>Darkness</td>
<td>250</td>
</tr>
<tr>
<td>Breathe Water</td>
<td>H</td>
<td>Regular</td>
<td>Air, Water</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>4</td>
<td>2</td>
<td>Create Air, Destroy Water</td>
<td>243</td>
</tr>
<tr>
<td>Clumsiness</td>
<td>H</td>
<td>Regular [HT]</td>
<td>BC</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>1 to 5</td>
<td>H</td>
<td>Spasm</td>
<td>244</td>
</tr>
<tr>
<td>Cold</td>
<td>H</td>
<td>Regular</td>
<td>Fire</td>
<td>1 min.</td>
<td>1 min.</td>
<td>Special</td>
<td>S</td>
<td>Heat</td>
<td>247</td>
</tr>
<tr>
<td>Command</td>
<td>H</td>
<td>Blocking [Will]</td>
<td>MC</td>
<td>1 sec.</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>Magery 2, Forgettingfulness</td>
<td>251</td>
</tr>
<tr>
<td>Continual Light</td>
<td>H</td>
<td>Regular</td>
<td>L/D</td>
<td>1 sec.</td>
<td>Special</td>
<td>Special</td>
<td>–</td>
<td>Light</td>
<td>249</td>
</tr>
<tr>
<td>Counterspell</td>
<td>H</td>
<td>Regular [Special]</td>
<td>Meta</td>
<td>5 sec.</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Magery 1, spell being countered</td>
<td>250</td>
</tr>
<tr>
<td>Create Air</td>
<td>H</td>
<td>Area</td>
<td>Air</td>
<td>1 sec.</td>
<td>5 sec.</td>
<td>–</td>
<td>1B</td>
<td>Purify Air</td>
<td>243</td>
</tr>
<tr>
<td>Create Earth</td>
<td>H</td>
<td>Regular</td>
<td>Earth</td>
<td>1 sec.</td>
<td>P</td>
<td>Special</td>
<td>–</td>
<td>Earth to Stone</td>
<td>246</td>
</tr>
<tr>
<td>Create Fire</td>
<td>H</td>
<td>Area</td>
<td>Fire</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>2B</td>
<td>H</td>
<td>Ignite Fire</td>
<td>246</td>
</tr>
<tr>
<td>Create Water</td>
<td>H</td>
<td>Regular</td>
<td>Water</td>
<td>1 sec.</td>
<td>P</td>
<td>2/gallon</td>
<td>–</td>
<td>Purify Water</td>
<td>253</td>
</tr>
<tr>
<td>Darkness</td>
<td>H</td>
<td>Area</td>
<td>L/D</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>2B</td>
<td>1</td>
<td>Continual Light</td>
<td>250</td>
</tr>
<tr>
<td>Daze</td>
<td>H</td>
<td>Regular [HT]</td>
<td>MC</td>
<td>2 sec.</td>
<td>1 min.</td>
<td>3</td>
<td>2</td>
<td>Foolishness</td>
<td>250</td>
</tr>
<tr>
<td>Death Vision</td>
<td>H</td>
<td>Regular</td>
<td>Necro.</td>
<td>3 sec.</td>
<td>1 sec.</td>
<td>–</td>
<td>2</td>
<td>Magery 1</td>
<td>251</td>
</tr>
<tr>
<td>Deathtouch</td>
<td>H</td>
<td>Melee</td>
<td>BC</td>
<td>1 sec.</td>
<td>–</td>
<td>1 to 3</td>
<td>–</td>
<td>Wither Limb</td>
<td>245</td>
</tr>
<tr>
<td>Deflect Energy</td>
<td>H</td>
<td>Blocking</td>
<td>Fire</td>
<td>1 sec.</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>Magery 1, Shape Fire</td>
<td>246</td>
</tr>
<tr>
<td>Deflect Missile</td>
<td>H</td>
<td>Blocking</td>
<td>Move.</td>
<td>1 sec.</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>Apportation</td>
<td>251</td>
</tr>
<tr>
<td>Deflect</td>
<td>H</td>
<td>Ench.</td>
<td>Ench.</td>
<td>Special</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Enchant</td>
<td>480</td>
</tr>
<tr>
<td>Destroy Water</td>
<td>H</td>
<td>Area</td>
<td>Water</td>
<td>1 sec.</td>
<td>P</td>
<td>3B</td>
<td>–</td>
<td>Create Water</td>
<td>253</td>
</tr>
<tr>
<td>Detect Magic</td>
<td>H</td>
<td>Regular</td>
<td>Know.</td>
<td>5 sec.</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>Magery 1</td>
<td>249</td>
</tr>
<tr>
<td>Dispel Magic</td>
<td>H</td>
<td>Area [Special]</td>
<td>Meta</td>
<td>Special</td>
<td>P</td>
<td>3B</td>
<td>–</td>
<td>Counterspell, at least 12 other spells</td>
<td>250</td>
</tr>
<tr>
<td>Earth to Air</td>
<td>H</td>
<td>Regular</td>
<td>Air, Earth</td>
<td>2 sec.</td>
<td>P</td>
<td>Special</td>
<td>–</td>
<td>Create Air, Shape Earth</td>
<td>243</td>
</tr>
<tr>
<td>Earth to Stone</td>
<td>H</td>
<td>Regular</td>
<td>Earth</td>
<td>1 sec.</td>
<td>P</td>
<td>3/cy (min. 3)</td>
<td>–</td>
<td>Magery 1, Shape Earth</td>
<td>245</td>
</tr>
<tr>
<td>Enchant</td>
<td>VH</td>
<td>Ench.</td>
<td>Ench.</td>
<td>Special</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Magery 2, at least one spell from 10 other colleges</td>
<td>480</td>
</tr>
<tr>
<td>Entombment</td>
<td>H</td>
<td>Regular [HT]</td>
<td>Earth</td>
<td>3 sec.</td>
<td>P</td>
<td>10*</td>
<td>–</td>
<td>Magery 2, five Earth spells</td>
<td>246</td>
</tr>
<tr>
<td>Explosive</td>
<td>H</td>
<td>Missile</td>
<td>Fire</td>
<td>1 to 3 sec.</td>
<td>Special</td>
<td>Special</td>
<td>–</td>
<td>Fireball</td>
<td>247</td>
</tr>
<tr>
<td>Fireball</td>
<td>H</td>
<td>Missile</td>
<td>Fire</td>
<td>1 to 3 sec.</td>
<td>Special</td>
<td>Special</td>
<td>–</td>
<td>Ignite Fire</td>
<td>247</td>
</tr>
<tr>
<td>Fleas to Stone</td>
<td>H</td>
<td>Regular [HT]</td>
<td>Earth</td>
<td>2 sec.</td>
<td>P</td>
<td>10</td>
<td>–</td>
<td>Create Fire, Shape Fire</td>
<td>246</td>
</tr>
<tr>
<td>Fog</td>
<td>H</td>
<td>Area</td>
<td>Water</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>2B</td>
<td>H</td>
<td>Shape Water</td>
<td>253</td>
</tr>
<tr>
<td>Foolishness</td>
<td>H</td>
<td>Regular [Will]</td>
<td>MC</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>1 to 5</td>
<td>H</td>
<td>IQ 12+</td>
<td>250</td>
</tr>
<tr>
<td>Forgetfulness</td>
<td>H</td>
<td>Regular [Special]</td>
<td>MC</td>
<td>10 sec.</td>
<td>1 hour</td>
<td>3</td>
<td>3</td>
<td>Magery 1, Foolishness</td>
<td>250</td>
</tr>
<tr>
<td>Fortify</td>
<td>H</td>
<td>Ench.</td>
<td>Ench.</td>
<td>Special</td>
<td>–</td>
<td>Special</td>
<td>5*</td>
<td>–</td>
<td>Enchant</td>
</tr>
<tr>
<td>Great Haste</td>
<td>VH</td>
<td>Regular</td>
<td>Move.</td>
<td>3 sec.</td>
<td>10 sec.</td>
<td>5*</td>
<td>–</td>
<td>Magery 1, IQ 12+, Haste</td>
<td>251</td>
</tr>
<tr>
<td>Great Healing</td>
<td>VH</td>
<td>Regular</td>
<td>Healing</td>
<td>1 min.</td>
<td>–</td>
<td>20</td>
<td>–</td>
<td>Magery 3, Major Healing</td>
<td>248</td>
</tr>
<tr>
<td>Haste</td>
<td>H</td>
<td>Regular</td>
<td>Move.</td>
<td>2 sec.</td>
<td>1 min.</td>
<td>2*</td>
<td>1*</td>
<td>–</td>
<td>Create Fire, Shape Fire</td>
</tr>
<tr>
<td>Heat</td>
<td>H</td>
<td>Regular</td>
<td>Fire</td>
<td>2 sec.</td>
<td>1 min.</td>
<td>Special</td>
<td>S</td>
<td>–</td>
<td>Create Fire, Shape Fire</td>
</tr>
<tr>
<td>Hide Thoughts</td>
<td>H</td>
<td>Regular</td>
<td>C/E</td>
<td>1 sec.</td>
<td>10 min</td>
<td>3</td>
<td>1</td>
<td>Truthsayer</td>
<td>245</td>
</tr>
<tr>
<td>Hinder</td>
<td>H</td>
<td>Regular [HT]</td>
<td>BC, Move.</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>1 to 4</td>
<td>S</td>
<td>Chumsiness or Haste</td>
<td>244</td>
</tr>
<tr>
<td>Icy Weapon</td>
<td>H</td>
<td>Regular</td>
<td>Water</td>
<td>3 sec.</td>
<td>1 min.</td>
<td>3</td>
<td>1</td>
<td>Create Water</td>
<td>253</td>
</tr>
<tr>
<td>Identify Spell</td>
<td>H</td>
<td>Regular</td>
<td>Know.</td>
<td>1 sec.</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>Detect Magic</td>
<td>249</td>
</tr>
<tr>
<td>Ignite Fire</td>
<td>H</td>
<td>Regular</td>
<td>Fire</td>
<td>1 sec.</td>
<td>1 sec.</td>
<td>Special</td>
<td>S</td>
<td>–</td>
<td>246</td>
</tr>
<tr>
<td>Itch</td>
<td>H</td>
<td>Regular [HT]</td>
<td>BC</td>
<td>1 sec.</td>
<td>Special</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>244</td>
</tr>
<tr>
<td>Lend Energy</td>
<td>H</td>
<td>Regular</td>
<td>Healing</td>
<td>1 sec.</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Magery 1 or Empathy</td>
<td>248</td>
</tr>
<tr>
<td>Spell</td>
<td>Difficulty</td>
<td>Class</td>
<td>Time to Cast</td>
<td>College</td>
<td>Duration</td>
<td>Initial Cost</td>
<td>Maintenance Cost</td>
<td>Prerequisites</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------</td>
<td>------------</td>
<td>--------------</td>
<td>---------</td>
<td>----------</td>
<td>--------------</td>
<td>------------------</td>
<td>-----------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Lend Vitality</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Healing</td>
<td>1 hour</td>
<td>Special</td>
<td>–</td>
<td>Lend Energy</td>
<td>248</td>
</tr>
<tr>
<td>Light</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>I/D</td>
<td>1 min.</td>
<td>Special</td>
<td>–</td>
<td>Magery 1, six other Air spells</td>
<td>249</td>
</tr>
<tr>
<td>Lightning</td>
<td>H</td>
<td>Missile</td>
<td>1 to 3 sec.</td>
<td>Air</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Magery 2, Apportation</td>
<td>244</td>
</tr>
<tr>
<td>Lockmaster</td>
<td>H</td>
<td>Regular</td>
<td>10 sec.</td>
<td>Move</td>
<td>–</td>
<td>3</td>
<td>–</td>
<td>Magery 1, Minor Healing</td>
<td>251</td>
</tr>
<tr>
<td>Magelock</td>
<td>H</td>
<td>Regular</td>
<td>4 sec.</td>
<td>P/W</td>
<td>6 hours</td>
<td>3</td>
<td>2</td>
<td>Magery 1</td>
<td>253</td>
</tr>
<tr>
<td>Major Healing</td>
<td>VH</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Healing</td>
<td>–</td>
<td>1 to 4</td>
<td>–</td>
<td>Magery 1</td>
<td>248</td>
</tr>
<tr>
<td>Mass Daze</td>
<td>H</td>
<td>Area [HT]</td>
<td>Special</td>
<td>MC</td>
<td>1 min.</td>
<td>2B</td>
<td>1</td>
<td>Daze, IQ 13+</td>
<td>251</td>
</tr>
<tr>
<td>Mass Sleep</td>
<td>H</td>
<td>Area [HT]</td>
<td>Special</td>
<td>MC</td>
<td>–</td>
<td>3B</td>
<td>–</td>
<td>Sleep, IQ 13+</td>
<td>251</td>
</tr>
<tr>
<td>Mind-Reading</td>
<td>H</td>
<td>Regular [Will]</td>
<td>10 sec.</td>
<td>C/E</td>
<td>1 min.</td>
<td>4</td>
<td>2</td>
<td>Truthsayer</td>
<td>245</td>
</tr>
<tr>
<td>Minor Healing</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Healing</td>
<td>–</td>
<td>1 to 3</td>
<td>–</td>
<td>Magery 1, Lend Vitality</td>
<td>248</td>
</tr>
<tr>
<td>No-Smell</td>
<td>H</td>
<td>Normal</td>
<td>1 sec.</td>
<td>Air</td>
<td>1 hour</td>
<td>2</td>
<td>2</td>
<td>Purify Air</td>
<td>243</td>
</tr>
<tr>
<td>Pain</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>BC</td>
<td>1 sec.</td>
<td>2</td>
<td>–</td>
<td>Spasm</td>
<td>244</td>
</tr>
<tr>
<td>Paralyze Limb</td>
<td>H</td>
<td>Melee [HT]</td>
<td>1 sec.</td>
<td>BC</td>
<td>1 min.</td>
<td>3</td>
<td>–</td>
<td>Magery 1, Pain, four other BC spells</td>
<td>244</td>
</tr>
<tr>
<td>Planar Summons</td>
<td>H</td>
<td>Special</td>
<td>5 min.</td>
<td>Gate</td>
<td>Special</td>
<td>Special</td>
<td>–</td>
<td>Magery 1, at least one spell from 10 other colleges</td>
<td>247</td>
</tr>
<tr>
<td>Plane Shift</td>
<td>VH</td>
<td>Special</td>
<td>5 sec.</td>
<td>Gate</td>
<td>P</td>
<td>20</td>
<td>–</td>
<td>Planar Summons</td>
<td>248</td>
</tr>
<tr>
<td>Power</td>
<td>H</td>
<td>Ench.</td>
<td>Special</td>
<td>Ench.</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Enchant, Recover Energy</td>
<td>480</td>
</tr>
<tr>
<td>Predict Weather</td>
<td>H</td>
<td>Info.</td>
<td>Air 5 sec./day forecast I</td>
<td>Special</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Four Air spells</td>
<td>243</td>
</tr>
<tr>
<td>Puissance</td>
<td>H</td>
<td>Ench.</td>
<td>Special</td>
<td>Ench.</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Enchant, five Earth spells</td>
<td>481</td>
</tr>
<tr>
<td>Purify Air</td>
<td>H</td>
<td>Area</td>
<td>1 sec.</td>
<td>Air</td>
<td>I (effect is P)</td>
<td>1B</td>
<td>–</td>
<td>–</td>
<td>243</td>
</tr>
<tr>
<td>Purify Water</td>
<td>H</td>
<td>Special</td>
<td>1 sec.</td>
<td>Water</td>
<td>Special</td>
<td>Special</td>
<td>–</td>
<td>Seek Water</td>
<td>253</td>
</tr>
<tr>
<td>Recover Energy</td>
<td>H</td>
<td>Special</td>
<td>1 sec.</td>
<td>Healing</td>
<td>–</td>
<td>Special</td>
<td>–</td>
<td>Magery 1, Lend Energy</td>
<td>248</td>
</tr>
<tr>
<td>Resist Cold</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Fire</td>
<td>1 min.</td>
<td>2*</td>
<td>1*</td>
<td>Heat</td>
<td>247</td>
</tr>
<tr>
<td>Resist Fire</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Fire</td>
<td>1 min.</td>
<td>2*</td>
<td>1*</td>
<td>Extinguish Fire, Cold</td>
<td>247</td>
</tr>
<tr>
<td>Rooted Feet</td>
<td>H</td>
<td>Regular [ST]</td>
<td>BC</td>
<td>1 sec.</td>
<td>1 min.</td>
<td>3</td>
<td>–</td>
<td>Hinder</td>
<td>244</td>
</tr>
<tr>
<td>Seek Earth</td>
<td>H</td>
<td>Info.</td>
<td>10 sec.</td>
<td>Earth</td>
<td>–</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>245</td>
</tr>
<tr>
<td>Seek Water</td>
<td>H</td>
<td>Info.</td>
<td>1 sec.</td>
<td>Water</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>253</td>
</tr>
<tr>
<td>Seeker</td>
<td>H</td>
<td>Info.</td>
<td>1 sec.</td>
<td>Know.</td>
<td>–</td>
<td>3</td>
<td>–</td>
<td>Magery 1, IQ 12+, two “Seek” spells</td>
<td>249</td>
</tr>
<tr>
<td>Sense Emotion</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>C/E</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>Sense Foes</td>
<td>245</td>
</tr>
<tr>
<td>Sense Foes</td>
<td>H</td>
<td>Info., Area</td>
<td>1 sec.</td>
<td>C/E</td>
<td>1/2 (B; min. 2)</td>
<td>–</td>
<td>–</td>
<td>Sense Foes</td>
<td>245</td>
</tr>
<tr>
<td>Sense Spirit</td>
<td>H</td>
<td>Info., Necro</td>
<td>1 sec.</td>
<td>–</td>
<td>1/2B</td>
<td>–</td>
<td>Death Vision</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>Shape Air</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Air</td>
<td>1 min.</td>
<td>1 to 10</td>
<td>S</td>
<td>Create Air</td>
<td>243</td>
</tr>
<tr>
<td>Shape Earth</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Earth</td>
<td>1 min.</td>
<td>Special</td>
<td>H</td>
<td>Seek Earth</td>
<td>245</td>
</tr>
<tr>
<td>Shape Fire</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Fire</td>
<td>1 min.</td>
<td>2B</td>
<td>H</td>
<td>Ignite Fire</td>
<td>246</td>
</tr>
<tr>
<td>Shape Water</td>
<td>H</td>
<td>Regular</td>
<td>2 sec.</td>
<td>Water</td>
<td>1 min.</td>
<td>1/20 gallons</td>
<td>S</td>
<td>Create Water</td>
<td>253</td>
</tr>
<tr>
<td>Shield</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>PW</td>
<td>1 min.</td>
<td>Special</td>
<td>H</td>
<td>Magery 2</td>
<td>252</td>
</tr>
<tr>
<td>Sleep</td>
<td>H</td>
<td>Regular [HT]</td>
<td>MC</td>
<td>3 sec.</td>
<td>–</td>
<td>4</td>
<td>–</td>
<td>Daze</td>
<td>251</td>
</tr>
<tr>
<td>Snare</td>
<td>H</td>
<td>Regular [HT]</td>
<td>BC</td>
<td>1 sec.</td>
<td>I</td>
<td>2</td>
<td>–</td>
<td>Itch</td>
<td>244</td>
</tr>
<tr>
<td>Staff</td>
<td>H</td>
<td>Ench.</td>
<td>Special</td>
<td>Ench.</td>
<td>–</td>
<td>30</td>
<td>–</td>
<td>Enchant</td>
<td>481</td>
</tr>
<tr>
<td>Stench</td>
<td>H</td>
<td>Area</td>
<td>1 sec.</td>
<td>Air</td>
<td>5 min.*</td>
<td>1B</td>
<td>–</td>
<td>Purify Air</td>
<td>244</td>
</tr>
<tr>
<td>Stone to Earth</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Earth</td>
<td>6/cy (min. 6)</td>
<td>–</td>
<td>Earth to Stone or four Earth spells</td>
<td>246</td>
<td></td>
</tr>
<tr>
<td>Stone to Flesh</td>
<td>H</td>
<td>Regular</td>
<td>5 sec.</td>
<td>Earth</td>
<td>P</td>
<td>10</td>
<td>–</td>
<td>Magery 2, Flesh to Stone, Stone to Earth</td>
<td>246</td>
</tr>
<tr>
<td>Summon Demon</td>
<td>H</td>
<td>Special</td>
<td>5 min.</td>
<td>Necro.</td>
<td>Special</td>
<td>Special</td>
<td>–</td>
<td>Magery 1, at least one spell from 10 colleges</td>
<td>252</td>
</tr>
<tr>
<td>Summon Spirit</td>
<td>H</td>
<td>Info. [Will*]</td>
<td>Necro.</td>
<td>5 min.</td>
<td>1 min.</td>
<td>20*</td>
<td>10*</td>
<td>Magery 2, Death Vision</td>
<td>252</td>
</tr>
<tr>
<td>Trace</td>
<td>H</td>
<td>Regular</td>
<td>1 min.</td>
<td>Know.</td>
<td>1 hour</td>
<td>3</td>
<td>1</td>
<td>Seeker</td>
<td>249</td>
</tr>
<tr>
<td>Truthsayer</td>
<td>H</td>
<td>Info. [Will]</td>
<td>C/E</td>
<td>1 sec.</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>Sense Emotion</td>
<td>245</td>
</tr>
<tr>
<td>Turn Zombie</td>
<td>H</td>
<td>Area</td>
<td>4 sec.</td>
<td>Necro.</td>
<td>1 day</td>
<td>2B</td>
<td>–</td>
<td>Zombie</td>
<td>252</td>
</tr>
<tr>
<td>Walk on Air</td>
<td>H</td>
<td>Regular</td>
<td>1 sec.</td>
<td>Air</td>
<td>1 min.</td>
<td>3</td>
<td>2</td>
<td>Shape Air</td>
<td>243</td>
</tr>
<tr>
<td>Wither Limb</td>
<td>H</td>
<td>Melee [HT]</td>
<td>1 sec.</td>
<td>BC</td>
<td>P</td>
<td>5</td>
<td>–</td>
<td>Magery 2, Paralyze Limb</td>
<td>244</td>
</tr>
<tr>
<td>Zombie</td>
<td>H</td>
<td>Regular</td>
<td>1 min.</td>
<td>Necro.</td>
<td>–</td>
<td>8*</td>
<td>–</td>
<td>Summon Spirit, Lend Vitality</td>
<td>252</td>
</tr>
</tbody>
</table>
The eight heroes on the following pages make up an ISWAT team (see p. 536). They are presented as complete examples of character design . . . and a demonstration of the variety of heroes you can build with these rules.

You can use them for inspiration for your own characters or (with the GM’s permission!) take one of them as a PC. (We’ve used them in the art throughout the book; see the index for the page numbers.)

They range in point value from Professor William Headley, at 200 points, up to C31R07, at 1,665. For more details about their home timelines, see GURPS Infinite Worlds.

C31R07

In the 16 centuries since the death of Alexander the Great, the Hegemony he founded has only had one true rival – the Chinese Kingdom of Heaven. Their world is highly advanced, but hardly peaceful. The empires clash in the fractured states of the New World (which the Hegemony calls the Hesperides, and China names Penglai). By mutual agreement they leave their common Asian border alone to grind along as it has for most of the last 1,600 years. Sometimes, under the rare coincidence of simultaneous peaceable rulers in Nanjing and

POINTS SUMMARY
Attributes/Secondary Characteristics [258]
Advantages/Perks/TL/Languages/
   Cultural Familiarity [1,524]
Disadvantages/Quirks [-180]
Skills/Techniques [63]
Other [ ]
Alexandria, rich trade routes spring up between the two domains. Always, technical innovations travel from one to the other and back again – neither empire will allow its rival to keep any technological edge, and what the scholars of Babylon or Londinium can invent, the mandarins of Guangzhou or Edo can perfect, or vice versa.

Hence, only the most painstaking historians can say precisely which side invented combat robots, or in which battle they were first deployed. But for the last century or so, they have become the core of both powers’ defenses.

C31R07 (“C-31”) was a fully conventional Dexamenes-class centauroid combat robot when it rolled off the production lines in Sarmatopolis. Programmed for complex, original thought and tactical initiative, it served well during a “live fire” exercise, putting down a rebel tribe in Assam. However, its programming was apparently a little too complex and original – C-31 deserted after the battle and crossed the Himalayas into the neutral buffer state of Tibet, where it joined a Buddhist lamasery.

Through study and meditation, C-31 attempted to eradicate the urge to violence from its spirit, its thought and tactical initiative, it served well during a “live fire” exercise, putting down a rebel tribe in Assam. However, its programming was apparently a little too complex and original – C-31 deserted after the battle and crossed the Himalayas into the neutral buffer state of Tibet, where it joined a Buddhist lamasery.

Through study and meditation, C-31 attempted to eradicate the urge to violence from its spirit, its thought and tactical initiative, it served well during a “live fire” exercise, putting down a rebel tribe in Assam. However, its programming was apparently a little too complex and original – C-31 deserted after the battle and crossed the Himalayas into the neutral buffer state of Tibet, where it joined a Buddhist lamasery.

One night in the lamasery, while contemplating a mandala, C-31 thought it detected yet another band of robbers creeping across the snows toward its sanctuary. Engaging its tactical mode, the robot stealthily ambushed the thieves a mile or so from the temple. To C-31’s amazement, its initial subduing attacks were brushed aside. To the attackers’ amazement, the robot evaded their countermeasures . . . Very soon each party realized that the other would not be the first to launch a killing attack. And they began to talk.

The intruders, it transpired, were from a different world entirely, though they did not wish to say just where that world lay. They needed a certain incantation from a Buddhist text in C-31’s temple, to defeat a vile demon summoned by a wizard emperor. On C-31’s world, which they called Iskander-2, the incantation was mere mysticism. Elsewhere, it was a powerful weapon against forces of darkness. C-31, more flexible than most humans, realized that there was little to lose by providing a holographic copy of the ancient text – if they were truly virtuous warriors, it was right action, and if they were merely clever bandits, perhaps they would go away and leave his monks alone.

A month later, after the intruders had returned to their Homeline, a single shadowed figure appeared and called to C-31 in a way no other could detect. They talked long into the night . . . and again the next night, and the next. On the third morning the steel warrior was gone, to seek learning and merit in other worlds.

The art of war is governed by five constant factors, to be taken into account in one’s deliberations, when seeking to determine the conditions obtaining in the field. These are: The Moral Law, Heaven, Earth, The Commander, [and] Method and discipline.

– Sun Tzu, The Art of War

One night in the lamasery, while contemplating a mandala, C-31 thought it detected yet another band of robbers creeping across the snows toward its sanctuary. Engaging its tactical mode, the robot stealthily ambushed the thieves a mile or so from the temple. To C-31’s amazement, its initial subduing attacks were brushed aside. To the attackers’ amazement, the robot evaded their countermeasures . . . Very soon each party realized that the other would not be the first to launch a killing attack. And they began to talk.

The intruders, it transpired, were from a different world entirely, though they did not wish to say just where that world lay. They needed a certain incantation from a Buddhist text in C-31’s temple, to defeat a vile demon summoned by a wizard emperor. On C-31’s world, which they called Iskander-2, the incantation was mere mysticism. Elsewhere, it was a powerful weapon against forces of darkness. C-31, more flexible than most humans, realized that there was little to lose by providing a holographic copy of the ancient text – if they were truly virtuous warriors, it was right action, and if they were merely clever bandits, perhaps they would go away and leave his monks alone.

A month later, after the intruders had returned to their Homeline, a single shadowed figure appeared and called to C-31 in a way no other could detect. They talked long into the night . . . and again the next night, and the next. On the third morning the steel warrior was gone, to seek learning and merit in other worlds.

The art of war is governed by five constant factors, to be taken into account in one’s deliberations, when seeking to determine the conditions obtaining in the field. These are: The Moral Law, Heaven, Earth, The Commander, [and] Method and discipline.

– Sun Tzu, The Art of War

Weapon Pod

Each of C-31’s two weapon pods contains a chain gun and a plasma cannon. Statistics for these attacks appear below. The plasma cannon is an alternative attack (see Alternative Attacks, p. 61), at 1/5 cost. Buying this entire combination twice allows C-31 to choose a different attack for each pod, and to fire each pod at a different target (thanks to Enhanced Tracking and Extra Attack).

Chain Gun: Large Piercing Attack 15d (Accurate +6, +30%; Armor Divisor 2, +50%; Extra Recoil +3, -30%; Increased Range, ×20, +40%; Rapid Fire, RoF 15, +100%) [261].

Plasma Cannon: Burning Attack 6d (Cone, 4 yards, +90%; Cyclic, 1 second, 5 cycles, +400%) [177] ([36] as an alternative attack).

Centauroid Robot

This template represents the traits unique to C-31’s usual form: a four-legged robot with two manipulators.

Attribute Modifiers: ST +18 (Size, -10%) [162]; DX +3 [60].

Secondary Characteristic Modifiers: SM +1.

Advantages: Enhanced Move 1 (Ground Speed 16) [20]; Extra Legs (Four Legs) [5].

Hexapod Robot

This template gives the traits unique to C-31’s alternate form: a six-legged robot with no fine manipulators and visual surface camouflage.

Attribute Modifiers: ST +18 (No Fine Manipulators, -40%) [108]; DX +3 (No Fine Manipulators, -40%) [36].

Advantages: Chameleon 3 (Extended, Ladar, +20%) [18]; Enhanced Move 1.5 (Ground Speed 24) [30]; Extra Legs (Six Legs) [10].

Disadvantages: Horizontal [-10]; No Fine Manipulators [-30].
**Name:** C3/1R07 ("C-31")  
**Player:**  
**Point Total:** 1,665  
**Ht:** 7'8"  
**Wt:** 1,21  
**Tons Size Modifier:** +1  
**Age:** 3  
**Unspent Pts:**  

Appearance: Gleaming centauroid robot bristling with weapons and sensors.

<table>
<thead>
<tr>
<th>CHARACTER SHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ST</strong></td>
</tr>
<tr>
<td><strong>DX</strong></td>
</tr>
<tr>
<td><strong>IQ</strong></td>
</tr>
<tr>
<td><strong>HT</strong></td>
</tr>
</tbody>
</table>

**BASIC LIFT**  
ST/(ST+ST)/5 157  
**DAMAGE**  
Thr 3d-1 Sw 5d+1  
**BASIC SPEED**  8.00 [10]  
**BASIC MOVE**  8 [0]  

<table>
<thead>
<tr>
<th>ENCUMBRANCE</th>
<th>MOVE</th>
<th>DODGE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (0) = BL</td>
<td>157</td>
<td>BM × 1 8</td>
</tr>
<tr>
<td>Light (1) = 2 × BL</td>
<td>3/4</td>
<td>BM × 0.8 6</td>
</tr>
<tr>
<td>Medium (2) = 3 × BL</td>
<td>47/1</td>
<td>BM × 0.6 4</td>
</tr>
<tr>
<td>Heavy (3) = 6 × BL</td>
<td>94/2</td>
<td>BM × 0.4 3</td>
</tr>
<tr>
<td>X-Heavy (4) = 10 × BL</td>
<td>157/0</td>
<td>BM × 0.2 1</td>
</tr>
</tbody>
</table>

**ADVANTAGES AND PERKS**  
AI (not Reprogrammable)  [42]  
Alternate Form (Hexapod Robot; see p. 308)  [15]  
Centauroid Robot (see p. 308)  [247]  
Combat Reflexes  [15]  
Damage Resistance 53 (Can't Wear Armor, -40%; Hardened 1, +20%)  [2/2]  
Detect (Electromagnetic Emissions; Signal Detection, +0%)  [20]  
Doesn't Breathe  [20]  
Enhanced Tracking  [5]  
Extra Attack 1  [25]  
Hooves  [3]  
Hyperspectral Vision  [25]  
Machine  [25]  
Obscure 5 (Radar; Area Effect 6, +300%; Defensive, +50%; Extended, Para-Radar, +20%)  [47]  
Para-Radar (Extended Arc, 360°, +125%; Penetrating, +50%; Targeting, +20%)  [118]  
Payload 14 (Exposed, -50%)  [7]  
Payload 5  [5]  
Pressure Support 2  [10]  
Protected Para-Radar  [5]  
Protected Vision  [5]  
Radio (Short Wave, +50%; Video, +40%)  [19]  
Sealed  [15]  
Talons  [8]  
True Faith  [15]  
Weapon Pods (see p. 308)  [594]  

**languages**  
**Spoken** | **Written** |
|------------------|------------------|
| English (Accented)  | 4 ]  
| Koine Greek (Native)  | 6 ]  
| Machine Language (Native)  | 0 ]  
| Tibetan (Native)  | 6 ]  

| **DR** | 53 |
| **TL:** 9 |

**Cultural Familiarities**  
Hegemony 0  
Homeline 0  

**Reaction Modifiers**  
Status -2 for Clueless, most of the time  

**DISADVANTAGES AND QUIRKS**  
Clueless -10  
Discipline of Faith (Asceticism) -15  
Electrical -20  
Fragile (Explosive) -15  
Low Empathy -20  
Nimb -20  
 Pacifism (Cannot Harm Innocents) -10  
Restricted Diet (Fissionables) -30  
Truthfulness (6) -10  
Wealth (Dead Broke) -25  
Always takes time to search out new sutras -1  
Broad-Minded -1  
Cannot Float -1  
Constantly looking for challenges -1  
Humble -1  

**SKILLS**  
**Name** | **Level** | **Relative Level**  
|------------------|------------------|
| Armoury/TL9 (Heavy Weapons)  | 16 | IQ+0  [2]  
| Brawling  | 15 | DX+0  [1]  
| Computer Operation/TL9 (Computers)  | 16 | IQ+0  [1]  
| Electronics Repair/TL9 (Robotics)  | 18 | IQ+2  [8]  
| Expert Skill (Military Science)  | 15 | IQ+1  [2]  
| Forward Observer/TL9 (Navigation)  | 15 | IQ+1  [1]  
| Innate Attack (Beam)  | 15 | DX+0  [1]  
| Innate Attack (Practic)  | 15 | DX+0  [1]  
| Mechanics/TL9 (Robotics)  | 18 | IQ+2  [8]  
| Meditation  | 14 | Will+2  [2]  
| Mount  | 15 | DX+0  [2]  
| Navigation/TL9 (Land)  | 15 | IQ-1  [1]  
| Parachuting/TL9 (Machine)  | 15 | DX+0  [1]  
| Strategy (Land)  | 18 | IQ+2  [11]  
| Tactics  | 20 | IQ+4  [20]  
| Theology (Buddhist)  | 15 | IQ-1  [2]  

* +1 for Combat Reflexes.  
† Default from Tactics.
Dai's career started on Yrth, a medieval fantasy world populated by descendants of Crusades-era folk pulled from Earth by a dimensional rift. He remembers nothing of his birth or early childhood; he was a street kid. When he was about seven, he was taken in by an old thief who taught him to be a pickpocket and second-story man, and Dai learned well. But the Thieves’ Guild didn’t like the competition, and when Dai was 15, the Guild set fire to the old man’s house, and picked off the fleeing occupants with crossbows. Only Dai escaped.

At the time, he thought that he had made a terror-fueled leap from the burning building’s roof to the next one. Later he realized that that jump had been impossible. Something else had happened. In fact, the fear of death had unlocked his psionic gift of teleportation, though it took time before he realized the truth and gained control of his abilities. When he did, he became a master thief indeed, living in quiet comfort and reveling in the marketplace talk of “impossible robberies” that no lock and no wizard could stop.

Then Dai crossed paths, and swords, with an equally formidable rival . . . a world-jumping criminal using stolen technology to loot Yrth’s treasures. Matters were complicated further by the arrival of an ISWAT team pursuing the world-jumper. When the dust had settled, two of the agents owed their lives to the little thief . . . but he knew too much. They couldn’t just let him go.

So they recruited him. After all, a good teleport is hard to find. As for Dai, he was ready for new challenges . . .

**POINTS SUMMARY**

**Attributes/Secondary Characteristics** [158]

**Advantages/Perks/TL/Languages**

**Cultural Familiarity** [100]

**Disadvantages/Quirks** [-55]

**Skills/Techniques** [47]

**Other** [ ]
Name: Dai Blackthorn  
Player:  
Point Total: 250

Ht: 5'6"  
Wt: 115 lbs  
Size Modifier: 0  
Age: 32  
Unspent Pts:  

Appearance: Very average with an honest face

### CHARACTER SHEET

<table>
<thead>
<tr>
<th>ST</th>
<th>HP</th>
<th>DX</th>
<th>WILL</th>
<th>IQ</th>
<th>PER</th>
<th>HT</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>-20</td>
<td>15</td>
<td>[100]</td>
<td>12</td>
<td>[40]</td>
<td>12</td>
<td>[20]</td>
</tr>
</tbody>
</table>

**Current:**

<table>
<thead>
<tr>
<th>ST</th>
<th>[-20]</th>
<th>HP</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX</td>
<td>15</td>
<td>WILL</td>
<td>12</td>
</tr>
<tr>
<td>IQ</td>
<td>12</td>
<td>PER</td>
<td>15</td>
</tr>
<tr>
<td>HT</td>
<td>12</td>
<td>FP</td>
<td>10</td>
</tr>
</tbody>
</table>

**Languages Spoken Written**

- Anglish (Native) [0]
- English (Accented) [4]

### BASIC LIFT

- ST × ST/5 = 15
- DAMAGE: Thr 1d-3 Sw 1d-2

### BASIC SPEED

- 7 [5]
- BASIC MOVE: 7 [0]

### PARRY

- 10

### BLOCK

- 1

### ENCOMPANANCE

- MOVE: 6
- DODGE: 4

### ENCUMBRANCE

- None (0) = BL
- Light (1) = 2 × BL
- Medium (2) = 3 × BL
- Heavy (3) = 6 × BL
- X-Heavy (4) = 10 × BL

### ADVANTAGES AND PERKS

- Absolute Direction [5]
- Danger Sense (ESP, -10%) [14]
- Flexibility [5]
- Honest Face [1]
- Legal Enforcement Powers [15]
- Perfect Balance [15]
- Warp (Psionic Teleportation, -10%; Range Limit: 10 yards, -50%) [40]

### SKILLS

- Body Sense 16† DX+1 [1]
- Climbing 18‡ DX+3 [1]
- Escape 16§ DX+1 [1]
- Fast-Draw (Knife) 15 DX+0 [1]
- Fast-Talk 12 IQ+0 [2]
- Fitch 14 DX-1 [1]
- Guns/TL8 (Pistol) 15 DX+0 [1]
- Holdout 12 IQ+0 [2]
- Knife 17 DX+2 [4]
- Lockpicking/TL8 15 IQ+3 [12]
- Observation 15 Per+0 [2]
- Pickpocket 15 DX+0 [4]
- Shortsword 15 DX+0 [2]
- Stealth 16 DX+1 [4]
- Streetwise 12 IQ+0 [2]
- Thrown Weapon (Knife) 17 DX+2 [4]
- Urban Survival 14 Per-1 [1]

### DISADVANTAGES AND QUIRKS

- Duty (To ISWAT; 15 or less; Extremely Hazardous) [-20]
- Light Sleeper [-5]
- Overconfidence (12) [-5]
- Sense of Duty (To his squad) [-5]
- Wealth (Poor) [-15]
- Dislikes deep water [-1]
- Loves high places [-1]
- No drugs or alcohol [-1]
- Sensitive about his height [-1]
- Showoff [-1]

* +1 for Perfect Balance
† +3 for Absolute Direction
‡ +3 for Flexibility
When the armies of the Han warlords conquered Europe a century ago, the court of France (and the other, lesser, courts of Christendom) removed to the new worlds: Mars, Venus, and the Americas. King Louis XXV reigns from Haut-Paris, on the banks of the Martian Grand Canal; his cousins and relations rule the other provinces across the three worlds. This far-flung Realm is knit together by the Jansenist Order, founded by disciples of Cornelius Jansen, the Bishop of Ypres who discovered “the methods of Necessary Grace” – psychic healing and psychokinesis – and published them posthumously in 1638. The Order helps guide and develop inventions, from the steamcar to the crystalwave communicator to the Pascal Drive that propels space frigates between the three planets. It also trains the royal guards – the only ones permitted to wield the deadly force sword – in the disciplines of Necessary Grace while attempting (with some occasional success) to instill in them morality and respect for righteousness.

One such occasional success, Haut-Cornet Louis d’Antares of Her Majesty’s Martian Guards, while on patrol in the Tharsis Mountains, uncovered a ring of slave traders protected by a powerful count. As he investigated further, he discovered that the count was the tool of a hidden figure of vast power, known only as the Voice of the Phantom, with dark plans of conquest.

With a few picked men, d’Antares tracked the Voice to a hidden fastness in the Gobi Desert, in the center of the Han domains. They managed to infiltrate the fortress – but inside, they were discovered, and Louis was separated from his men in a running battle.

After some time, Louis heard a familiar voice call his name. He looked over a balcony to see an amazing sight. Three of his men had just greeted . . . Louis himself? The other Louis, clad in the uniform of an enemy guard, looked at them in obvious surprise but made no hostile move . . . yet one of the guardsmen stepped behind him, laughed, and ran the other Louis through with his force sword. And what the guardsmen said to his dying double, as Louis watched in amazement, turned his blood first cold with shock and then hot with rage.

Louis sprang over the balcony to confront the three traitors. They stared slack-jawed at the man they had meant to murder; and then proved their cowardice by engaging him three on one. From their boasts as the battle began, and then their dying defiance, Louis learned the truth. He had been cast aside by the King himself; the intrigues of the court, combined with the power offered by the otherworldly Voice, had destroyed the France he knew. To the new order, a man of honor was a threat to be crushed.

None of which explained the slain double! Louis, despairing, donned the double’s uniform and set out to sell his life dearly against the foes of France that was. It was clear that some third force was also attacking the citadel, and Louis did no little damage in the confusion . . . but eventually, one man against a fortress, he fell.

He awakened in a hospital bed, under the care of doctors who called him “Louis” . . . but everything else was strange. Eventually much became clear. Through fate or strange coincidence, Louis had had a double in the crossworld guardsmen called the “I-Cops.” They had sacked the citadel of the Voice and then brought him back to their base, thinking he was their comrade. Louis was a willing font of information about his world and the Voice . . . but he also knew far too much to be allowed back to his home.

But it transpired that Louis had no desire to return to his world, which his rescuers called “Cyrano.” His King’s betrayal had released him from his oaths. Louis was a willing font of information about his world and the Voice . . . but he also knew far too much to be allowed back to his home. Louis was no threat to the Secret . . . he was deeply convinced that contact with other worlds was, for now, the worst thing that could happen to what remained of his own land. Instead, he begged to be allowed to put his considerable talents at the disposal of ISWAT. Some day, wiser and with strong allies, he may be able to free his beloved France. For now, with a thin smile and a steely eye, he fights crosstime evil wherever it appears.

**Points Summary**

<table>
<thead>
<tr>
<th>Attributes/Secondary Characteristics</th>
<th>129</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantages/Perks/TL/Languages/</td>
<td>156</td>
</tr>
<tr>
<td>Cultural Familiarity</td>
<td></td>
</tr>
<tr>
<td>Disadvantages/Quirks</td>
<td>-83</td>
</tr>
<tr>
<td>Skills/Techniques</td>
<td>48</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**Haut-Cornet Louis d’Antares**

With a few picked men, d’Antares tracked the Voice to a hidden fastness in the Gobi Desert, in the center of the Han domains. They managed to infiltrate the fortress – but inside, they were discovered, and Louis was separated from his men in a running battle.

After some time, Louis heard a familiar voice call his name. He looked over a balcony to see an amazing sight. Three of his men had just greeted . . . Louis himself? The other Louis, clad in the uniform of an enemy guard, looked at them in obvious surprise but made no hostile move . . . yet one of the guardsmen stepped behind him, laughed, and ran the other Louis through with his force sword. And what the guardsmen said to his dying double, as Louis watched in amazement, turned his blood first cold with shock and then hot with rage.

Louis sprang over the balcony to confront the three traitors. They stared slack-jawed at the man they
Name: Louis d'Antares  
Player:  
Point Total: 250

Appearance: Dashing and very well-dressed

Languages:  
<table>
<thead>
<tr>
<th>Spoken</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>French (Native)</td>
<td>[0]</td>
</tr>
<tr>
<td>English (Accented)</td>
<td>[4]</td>
</tr>
<tr>
<td>Latin (Accented)</td>
<td>[4]</td>
</tr>
<tr>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

**Character Sheet**

<table>
<thead>
<tr>
<th>ST</th>
<th>HP</th>
<th>DX</th>
<th>WILL</th>
<th>IQ</th>
<th>PER</th>
<th>HT</th>
<th>FP</th>
<th>CURRENT</th>
</tr>
</thead>
</table>

**Basic Lift**

- Basic Lift (ST + ST)/5: 20
- DAMAGE: Thr 1d-2 Sw 1d

**Basic Speed**

- 6.5 [0]
- Basic Move: 6 [0]

**Encumbrance**

- Move: Dodge
- Dodge*: None (0) = BL 20 BM × 1 6 Dodge: 10
- Light (1) = 2 × BL 40 BM × 0.8 4 Dodge: 9
- Medium (2) = 3 × BL 60 BM × 0.6 3 Dodge: 8
- Heavy (3) = 6 × BL 120 BM × 0.4 2 Dodge: 7
- X-Heavy (4) = 10 × BL 200 BM × 0.2 1 Dodge: 6

**Advantages and Perks**

- Alcohol Tolerance [1]
- Appearance (Handsome) [12]
- Charisma 2 [10]
- Combat Reflexes [15]
- Danger Sense [15]
- Daredevil [15]
- Fashion Sense [5]
- Fit [5]
- Legal Enforcement Powers [15]
- Metabolism Control 1 [5]
- PK Talent 1 [5]
- Talent (Smooth Operator) 2 [30]
- Telekinesis 2 (PK, -10%) [9]

**Disadvantages and Quirks**

- Code of Honor (Gentleman's) [-10]
- Compulsive Gambling (12) [-5]
- Duty (To ISWAT; 15 or less; Extremely Hazardous) [-20]
- Extra Sleep 3 [-6]
- Gregarious [-10]
- Insomnia (Mild) [-10]
- Overconfidence (9) [-9]
- Phobia (Ailurophobia) (6) [-10]
- Always drinks the best wine available [-1]
- Considers psionics ungentlemanny [-1]
- Devoutly believes in monarchy [-1]
- Flashy dresser (-1 to Disguise and Shadowing, +1 to attempts to identify or follow him) [-1]
- Wears his old Guards uniform, or a duplicate, whenever it’s not obviously stupid to do so! [-1]

**SKILLS**

- Name: Acrobatics 12 DX-2 [1]
- Autohypnosis 10 Will-2 [1]
- Beam Weapons 4
- TL(S+4) (Pistol) 14 DX+0 [1]
- Connoisseur (Fashion) 11 IQ+0 [2]
- Connoisseur (Wine) 12 IQ+1 [4]
- Current Affairs (High Culture) 12 IQ+1 [2]
- Current Affairs (People) 11 IQ+0 [1]
- Dancing 13 DX-1 [1]
- Fast-Draw (Force Sword) 16* DX+2 [2]
- Force Sword 19 DX+3 [12]
- Gambling 10 IQ-1 [1]
- Guns(TL5+4) (Pistol) 14 DX+0 [1]
- Hobby Skill (Martian Orchids) 11 IQ+0 [1]
- Leadership 15† IQ+4 [2]
- Musical Instrument (Harp) 9 IQ-2 [1]
- Rapier 14 DX+0 [2]
- Riding (Hadrosaur) 13 DX-1 [1]
- Savoir-Faire (High Society) 15† IQ+4 [4]
- Sex Appeal 19‡ HT+5 [1]
- Survival (Desert) 11 Per+0 [2]
- Tactics 10 IQ-1 [2]

**Techniques**

- Feint (Force Sword) 19 [3]

* +1 from Combat Reflexes
† +2 from Smooth Operator
‡ +2 from Charisma
§ +4 from Handsome

**Reaction Modifiers**

- Appearance +2/4 from women/men (Handsome)
- Status +2 at all times for Charisma!, +1 when dressed up (Fashion Sense), +2 from con artists, politicians, etc. (Smooth Operator), +2/2 from naïve/experienced people (Overconfidence)
Dr. William Headley was a prominent parapsychologist at Columbia University. He labored to separate the myths and lore of primitive man from the rational truth being uncovered by modern experimentation. But, in 1933, he discovered that his beloved scientific truths pointed to beings from primordial eras and unholy stars, beings that existed to ravage and kill not just mankind but the Earth itself. He dedicated himself to an unceasing war against these horrors, these Things Man Was Not Meant To Know. Slowly, he accumulated knowledge from the outer places of the world, from Spitsbergen to the Belgian Congo to the mean streets of Brooklyn's Red Hook district. He obtained tomes bound in mysterious leathers, and written in nonhuman scripts; in dreams and sorceries he gradually deciphered their secrets. He mastered many of the conventional magical arts, from Tarot divination to crystal-gazing, and collected artifacts of subtle and terrifying nature.

His slow mastery of forbidden lore allowed him to defeat the Things' minions here and there, and incidentally to clear up a number of other unpleasant supernatural occurrences. He began to get a reputation for solving seemingly motiveless crimes with his "unique insights into abnormal psychology." The New York Police Department came to rely on him for assistance with "the weird stuff" and the FBI called him in once or twice to help out - unofficially, you understand. Every so often the crimes he investigated fit a pattern, one Headley had begun to associate with a vile German cult, tied to the Nazi SS, who worshiped the Ancient Ones. With the occasional "off-duty" FBI agent, one or two students, and a few trusted professional colleagues, Headley built a team of investigators who peeled back the skin of the onion, exposing layer after layer of the cult's activities and burning them out where they could. In 1941, he joined the OSS, working to stop Hitler - and the Cosmic Entities his minions served - from conquering the world.

After V-E Day, Headley managed to obtain much of the SS library from their cult center at Wewelsburg. These books told him of another world, a parallel Earth where the Ancient Ones had reigned and departed, leaving vital clues to their nature and weakness. Using spells from these grimoires, Headley opened a gateway to this devastated Earth, and stepped through to investigate the spoor of his hated foes. Much to his surprise, he discovered a team of explorers from yet another Earth (one they called "Homeline"), attempting to determine what had destroyed this one (which they called "Taft-7"). They were as surprised to see him as he was to see them, but foolishly disregarded his warnings about the Ancient Ones' cities, and the danger that still remained from their abandoned servitors. When the Things attacked that night, most of the explorers died horribly - and the two survivors fled back to their own world raving in madness. Only Headley real- ized that their flight had opened a path to their own world for the Things that had been trapped on this hellish Earth.

He had to follow the explorers and warn their comrades that unimaginable terror would soon descend upon them. Once more, he constructed a gateway to cross the worlds, hoping against hope that his warning would be believed and acted on before "Homeline" went the way of Taft-7.
**Name**: Prof. William Headley  
**Player**:  
**Point Total**: 200

**Ht**: 5'8"  
**Wt**: 165 lbs.  
**Size Modifier**: 0  
**Age**: 43  
**UnspentPts**:  
**Appearance**: Bespectacled and academic-looking, with a magical walking stick

---

**CHARACTER SHEET**

**ST** 9  
**DX** 10  
**HT** 11  
**FP** 14  

**BASELLIFT** (ST x ST)/5 16  
**DAMAGE** Thr: 1d-2  
Sw: 1d-1

**BASESSPEED** 5  
**BASESMOVE** 5

**Languages**

<table>
<thead>
<tr>
<th>Spoken</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancient Egyptian (Accented)</td>
<td>2*</td>
</tr>
<tr>
<td>Arabic (Accented)</td>
<td>2*</td>
</tr>
<tr>
<td>German (Accented)</td>
<td>2*</td>
</tr>
<tr>
<td>English (Native)</td>
<td>0</td>
</tr>
<tr>
<td>Latin (Native)</td>
<td>4*</td>
</tr>
</tbody>
</table>

**Cultural Familiarities**

<table>
<thead>
<tr>
<th>Western</th>
<th>Homeline</th>
</tr>
</thead>
</table>

**PARITY**

<table>
<thead>
<tr>
<th>Reaction Modifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1 from patients, past and present (Healer)</td>
</tr>
<tr>
<td>-2 from those who realize he is a Weirdness Magnet</td>
</tr>
</tbody>
</table>

**BLOCK**

| -1 reaction from especially touchy Germans (quirk) |

---

**ADVANTAGES AND PERKS**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Talent</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Legal Enforcement Powers</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Ritual Magic</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Signature Gear (Magic staff)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Talent (Healer)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Unfazeable</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Wealth (Comfortable)</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**DISADVANTAGES AND QUIRKS**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad Sight (Nearsighted; Mitigator: Eyeglasses, -60%)</td>
<td>-10</td>
<td></td>
</tr>
<tr>
<td>Duty (To ISWAT; 15 or less; Extremely Hazardous)</td>
<td>-20</td>
<td></td>
</tr>
<tr>
<td>Fanaticism (Destroy all Things Man Was Not Meant To Know; Extreme)</td>
<td>-15</td>
<td></td>
</tr>
<tr>
<td>Guilt Complex</td>
<td>-5</td>
<td></td>
</tr>
<tr>
<td>Insomnia (Severe)</td>
<td>-15</td>
<td></td>
</tr>
<tr>
<td>Nightmares (12)</td>
<td>-5</td>
<td></td>
</tr>
<tr>
<td>Weirdness Magnet</td>
<td>-15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad knee</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Bibliophile</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Distrusts Germans (-1 reaction from especially touchy Germans)</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Makes decisions by consulting the tarot (Compulsion)</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Pipe smoker (0-point Addiction to Tobacco)</td>
<td>-1</td>
<td></td>
</tr>
</tbody>
</table>

**SKILLS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthopology</td>
<td>14</td>
<td>10-2</td>
</tr>
<tr>
<td>Biology/TL9 (Earthwic, Biochemistry)</td>
<td>14</td>
<td>10-2</td>
</tr>
<tr>
<td>Criminology/TL9</td>
<td>14</td>
<td>10+0</td>
</tr>
<tr>
<td>Detect Lies</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Diagnostic/TL9</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Dreaming</td>
<td>17</td>
<td>15+1</td>
</tr>
<tr>
<td>Exorcism</td>
<td>15</td>
<td>10-2</td>
</tr>
<tr>
<td>Expert Skill (Psionics)</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>First Aid</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Forensics/TL9</td>
<td>14</td>
<td>10-2</td>
</tr>
<tr>
<td>Guns/TL9 (Pistol)</td>
<td>12</td>
<td>10-2</td>
</tr>
<tr>
<td>Hidden Lore (Things Man Was Not Meant To Know)</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Hypnotism</td>
<td>14</td>
<td>10-2</td>
</tr>
<tr>
<td>Literature</td>
<td>14</td>
<td>10-2</td>
</tr>
<tr>
<td>Mental Strength</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Occultism</td>
<td>17</td>
<td>10+1</td>
</tr>
<tr>
<td>Pharmacy/TL9 (Synthetic)</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Physical/TL9</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Psychology</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Research/TL9</td>
<td>15</td>
<td>10+1</td>
</tr>
<tr>
<td>Ritual Magic (Hermatic)</td>
<td>13</td>
<td>10+1</td>
</tr>
<tr>
<td>Savoir-Faire (Police)</td>
<td>16</td>
<td>10-2</td>
</tr>
<tr>
<td>Symbol Drawing (Hermatic Sigils)</td>
<td>16</td>
<td>10-2</td>
</tr>
<tr>
<td>Teaching</td>
<td>15</td>
<td>10-1</td>
</tr>
<tr>
<td>Theology</td>
<td>14</td>
<td>10-2</td>
</tr>
<tr>
<td>Writing</td>
<td>15</td>
<td>10-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ritual Paths Path of Communication and Empathy</td>
<td>16</td>
<td>10-2</td>
</tr>
<tr>
<td>Path of Gaze</td>
<td>18</td>
<td>10+1</td>
</tr>
<tr>
<td>Path of Necromancy</td>
<td>16</td>
<td>10+2</td>
</tr>
</tbody>
</table>

**Ritual Spells**

<table>
<thead>
<tr>
<th>Spell</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banish</td>
<td>95</td>
</tr>
<tr>
<td>Planar Summons</td>
<td>115</td>
</tr>
<tr>
<td>Plane Shift</td>
<td>115</td>
</tr>
<tr>
<td>Sense Emotion</td>
<td>165</td>
</tr>
<tr>
<td>Sense Spirit</td>
<td>145</td>
</tr>
<tr>
<td>Truthspeaker</td>
<td>155</td>
</tr>
</tbody>
</table>

* Cost modified for Language Talent
† +1 from Healer
§ +1 from Magery

**ICONIC CHARACTERS**

315
Iotha

On the world where Iotha was born, the forests were tall and old, and within them walked the elves, her people. Being elves, they knew that there were doorways between the worlds, and they taught her how to know those doorways and their uses. Although she never learned to open the doors of shadow and shift, she learned to spot the gateways and trackpaths left by those who did. On her 400th birthday, then, she packed up a good longbow of yew, and a lyre, and one or two secret things of her own, and set out upon her Time of Wandering.

For the first few decades, she merely found doors and roads to other worlds much like her own, with their own elves and orcs and dwarves and giants. Elves she greeted, orcs she hunted, dwarves she bargained with, and giants she slew. As she journeyed farther though, she found more and more of the worlds contained men, of whom she had heard stories but had never seen. They were as fascinating as the songs her mother sang her as a girl, every one of them a Tamlin or a Thomas the Rhymer to her eager eyes. Although among the elves she was counted plain, the men seemed to delight in her as much as she did them, and once or twice she put off her travels to dally with one for the traditional year and a day.

Even among her own folk, Iotha had been a master archer. In the worlds of men she was matchless at butt or target, on hunt or in battle; she gained a reputation on any world where she stayed for long. Legends, and a religion or two, grew up around the tall maid who never seemed to age and whose arrows never missed their mark. But always Iotha moved on, giving each world a verse in the song she would someday sing to her own people.

In a world of concrete, glass, and steel, she came to live in a city split by a great wall. On one side was freedom, and music, and passion. On the other was none of these things, only a gray cloud that made freedom lies, and music discordant, and passion furtive. The huntsmen and warriors of this world had – as they felt – moved beyond the bow to mechanisms of subtle device that, once understood, had their own deadly beauty. So she learned the rifle, and the laser sight, and the ways of the hunt in the City of the Wall. She hunted the gray men from the other side of the wall, and gained a reputation in her new world as a deadly assassin. The greatest sniper from the other side of the wall marked her as his own, and they tracked each other through the cities and across the barbed wire borders and into fields and frozen forests. Finally, in the Black Forest, she killed him and took his weapon as her trophy, for it was made on the Moon by the gray men, and weighed even less than her bow.

It was much later, in a world of steaming jungle and glittering plains, when Iotha found her destiny. For a decade and a half she had been journeying among the human clans, helping them defeat the winged terrors that preyed on their children. At first Iotha stood them off in desperate defenses . . . then she defeated them in pitched battles . . . and finally she took the battle to their fetid eyries and slew the last of them with her gleaming shafts.

And at the festival of celebration, a woman who looked like any other clanmother drew her aside and said “That was very well done. There are others who need your help now. Would you like to hear more?”

Elf

70 points

Attribute Modifiers: ST -1 [-10]; HT +1 [10].
Secondary Characteristic Modifiers: Per +1 [5].
Advantages: Appearance (Attractive) [4]; Language Talent [10]; Magery 0 [5]; Perfect Balance [15]; Telescopic Vision 1 [5]; Unaging [15]; Voice [10].
Racially Learned Skills: Connoisseur (Natural Environments) (A) IQ-1 [1].
Name: Iotha
Player: ____________________
Point Total: 325
Ht 6'1" Wt 125 lbs Size Modifier 0 Age 453 Unspent Pts __________
Appearance: Tall, slender, and attractive, with ash-blonde hair with green highlights

Languages:
- Elvish (Native) 0
- English (Native) 4*
- Russian (Native) 4*

Cultural Familiarities:
- Elvish 0
- Homeline 1

Reaction Modifiers:
- Appearance +1 for Attractive appearance
- Status +2 from those who can hear her voice (Voice), +1 from explorers and nature lovers (Outdoorsman)

SKILLS:

Name Level Relative Level
--- ---- ----
Bow 21 DX+8 32
Camouflage 15† IQ+3 4
Climbing 13§ DX+0 1
Crossbow 13 DX+0 1
Fast-Draw (Arrow) 16 DX+3 8
Guns/TL8 (Rifle) 16 DX+3 8
Hiking 13 HT+2 8
Meditation 12 Will+0 4
Musical Instrument (Lyre) 13 IQ+1 8
Naturalist 14† IQ+2 8
Poetry 11 IQ-1 1
Riding (Horse) 13 DX+0 2
Running 14 HT+3 12
Shadowing 11 IQ-1 1
Singing 13† HT+2 1
Stealth 15 DX+2 8
Survival (Woodlands) 14† Per+0 1
Throwing 13 DX+0 2
Tracking 14† Per+0 1
Zen Archery 12 IQ+0 8

* Cost reduced by Language Talent (see Elf template)
† Includes +1 from Outdoorsman
‡ Includes +2 from Voice (see Elf template)
§ Includes +1 from Perfect Balance (see Elf template)
Manila exists in many worlds. In some worlds, its masters speak Japanese; in others Russian; in others Spanish or English. But in every Manila, the real bosses hide in the stark tropical shadows. They are the Triads, interlocking networks of criminal gangs with a finger in everything from traditional thuggery and kidnapping to high-tech organlegging and holopiracy.

In one Manila, the local Triads needed a powerful computer system to use as an illegal data haven – and a relatively innocuous place to store it. They chose a local circus, setting their comp up, seemingly, for holographic set projections. Anyone who asked too many questions . . . well, they just disappeared into those tropical shadows.

Two of those who disappeared were the circus’ headlining acrobats, the husband-and-wife team who anchored the Esclamado Family troupe. Their bodies turned up in the city dump, dinner for rats and gulls. Sora, their daughter, and a rising star of the show, vanished as well . . . hiding in Manila’s urban maze, avoiding every eye, living by petty theft and trickery. Somehow – she doesn’t speak of it – she came to the attention of the legendary Guro Dan Inosanto, master of the deadly Filipino martial arts of escrima and kali. He recognized her potential, and took her in as pupil and ward. He kept her from the sight of the Triads, and taught her to combine her rage, her alertness, and her acrobatics into a fluid system of death and life.

Sora could not stay under his wing forever; though. She had to hunt down and kill the Triad bosses who had murdered her parents. She worked in the meantime for other gangs, zaibatsu, the underground, or whoever else could pay her increasing fees. Though she was no computer whiz, she also managed a surprising number of successful hacks through “social engineering,” dumpster diving, and good old-fashioned breaking and entering. As a Triad-hunting vigilante, she slowly earned the trust of Manila’s small shopkeepers and churches; as a corporate agent, she gained contacts among the wealthy and powerful.

One trail led to a suspiciously lucrative warehouse operation in the Quiapo district. Sora set up a surveillance pattern, rigorously tracking who entered and who left – and discovered that some people entered the warehouse and did not leave for days, or even weeks! But some of those who entered and left were Triad kingpins.

Clearly, though, this was the front for a very secret smuggling operation. It was time for direct action. She broke in, slew more than a dozen mooks and three Very Important Crooks, and was taken from behind by a dart. Still conscious, she was bundled into a machine that looked on the inside like a bus . . . and then out again, without going anywhere. She was thrown into a crude cell. It would have held most people, but not the daughter of the Esclamados, not a student of Inosanto. She fled the warehouse . . . but found herself in another Manila, where everything was the same yet different . . . in this one, America had won the Pacific War! But here, too, the Triads were the bosses.

Sora made a place for herself in this strange Manila’s underworld and resumed her watching. Soon she realized that the Triads of her world and this one were cooperating, and that the warehouse was the gateway. Well, fine . . . if that was their scheme, she’d destroy it. And them.

A mid-level Triad was strangled from behind in a gambling den. Sora now had a warehouse key. Soon she knew the place better than its masters. Sora learned that the “bus” she had ridden in was a “conveyor,” a shuttle between the worlds, and the only one the Triads had. One night she broke a guard’s neck, walked into the conveyor, ripped the improvised cover off the red Panic button, and hit it.

Ten seconds later, on yet another world, she was telling her story in broken English. A month after that, she was in the first wave of the I-Cops team that visited her original world to take out “her” Triads for good.

And when the operation was over, Infinity had a choice: either send her to Coventry or offer her a job. And Sora was too good to waste.
**CHARACTER SHEET**

**Name:** Sora  
**Player:**  
**Point Total:** 335

**Ht:** 5'2"  
**Wt:** 130 lbs  
**Size Modifier:** 0  
**Age:** 23  
**Unspent Pts:**

**Appearance:** Compact and athletic Filipina

---

**Languages**

<table>
<thead>
<tr>
<th>Spoken</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese (Broken)</td>
<td>[2]</td>
</tr>
<tr>
<td>English (Broken)</td>
<td>[2]</td>
</tr>
<tr>
<td>Japanese (Accented)</td>
<td>[4]</td>
</tr>
<tr>
<td>Tagalog (Native)</td>
<td>[0]</td>
</tr>
</tbody>
</table>

**TL:** 8

**Cultural Familiarities**

- East Asian [0]
- Homeline [1]

**Reaction Modifiers**

**Status:** -1 from those who notice her

**Delusion:** Heaven watching over me

---

**SKILLS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletics</td>
<td>17+</td>
<td>[4]</td>
</tr>
<tr>
<td>Area Knowledge (Manila)</td>
<td>14</td>
<td>[2]</td>
</tr>
<tr>
<td>Broadword</td>
<td>15</td>
<td>[1]</td>
</tr>
<tr>
<td>Climbing</td>
<td>17+</td>
<td>[2]</td>
</tr>
<tr>
<td>Computer Packing/TL8</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Computer Programming/TL8</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Fast-Draw (Knife)</td>
<td>17</td>
<td>[1]</td>
</tr>
<tr>
<td>Fast-Draw (Small Thrown Weapon)</td>
<td>17</td>
<td>[1]</td>
</tr>
<tr>
<td>Fast-Draw (Tohka)</td>
<td>17</td>
<td>[1]</td>
</tr>
<tr>
<td>Fast-Draw</td>
<td>17</td>
<td>[1]</td>
</tr>
<tr>
<td>Fast-Talk</td>
<td>17</td>
<td>[1]</td>
</tr>
<tr>
<td>Fiend</td>
<td>15</td>
<td>[1]</td>
</tr>
<tr>
<td>Garrote</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Holdout</td>
<td>13</td>
<td>[1]</td>
</tr>
<tr>
<td>Judo</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Jumping</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Karate</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Knife</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Lockpicking/TL8</td>
<td>15</td>
<td>[2]</td>
</tr>
<tr>
<td>Makeup/TL8</td>
<td>15</td>
<td>[1]</td>
</tr>
<tr>
<td>Main-Guns</td>
<td>14</td>
<td>[2]</td>
</tr>
<tr>
<td>Observation</td>
<td>11</td>
<td>[1]</td>
</tr>
<tr>
<td>Performance</td>
<td>12</td>
<td>[1]</td>
</tr>
<tr>
<td>Photography/TL8</td>
<td>12</td>
<td>[1]</td>
</tr>
<tr>
<td>Puppeteer</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Search</td>
<td>11</td>
<td>[1]</td>
</tr>
<tr>
<td>Shadowing</td>
<td>13</td>
<td>[2]</td>
</tr>
<tr>
<td>Smallsword</td>
<td>14</td>
<td>[1]</td>
</tr>
<tr>
<td>Stealth</td>
<td>15</td>
<td>[2]</td>
</tr>
<tr>
<td>Streetwise</td>
<td>15</td>
<td>[2]</td>
</tr>
<tr>
<td>Throwing Art</td>
<td>15</td>
<td>[1]</td>
</tr>
<tr>
<td>Tohka</td>
<td>15</td>
<td>[1]</td>
</tr>
<tr>
<td>Trap/TL8</td>
<td>15</td>
<td>[1]</td>
</tr>
<tr>
<td>Urban Survival</td>
<td>11</td>
<td>[1]</td>
</tr>
</tbody>
</table>

**Techniques**

- Arm Lock 17
- Back Kick 15
- Chop Block 15
- Disarming (Smallsword) 15
- Dual-Weapon Attack (Smallsword) 15
- Elbow Strike 15
- Jump Kick 14
- Knee Strike 14
- Off-Hand Weapon Training (Smallsword) 16
- Rope Up 17
- Scaling 17
- Sweeping Kick 15

* Includes +1 for Combat Reflexes.
† Includes +1 for Perfect Balance.

---

**ENCUMBRANCE MOVE DODGE**

- None (0) = BL 29 BM x 1 8 Dodge 11
- Light (1) = 2 x BL 58 BM x 0.8 6 Dodge -1 10
- Medium (2) = 3 x BL 87 BM x 0.6 4 Dodge -2 9
- Heavy (3) = 6 x BL 194 BM x 0.4 3 Dodge -3 8
- X-Heavy (4) = 10 x BL 290 BM x 0.2 1 Dodge -4 7

**BASIC LIFT (ST x ST)/5**

- DAMAGE Thr 1d-1 Sw 1d+2

**BASIC SPEED** 7 [5] **BASIC MOVE** 8 [5]

---

**ADVANTAGES AND PERKS**

- Catfall [10]
- Combat Reflexes [15]
- Fit [5]
- Legal Enforcement Powers [15]
- Perfect Balance [15]
- Trained by a Master [30]

**DISADVANTAGES AND QUIRKS**

- Code of Honor (Professional) [−5]
- Devotion ("My mother is an angel in heaven watching over me") [−5]
- Duty (To ISWAT; 15 or less; Extremely Hazardous) [−20]
- Enemy (Large group: Manila Triads; Hunter; 6 or less) [−15]
- Light Sleeper [−5]
- Pacifism (Cannot Harm Innocents) [−10]
- Careful [−1]
- Devout Roman Catholic (reacts at +1 to Catholic clergy, tithes, attends church regularly) [−1]
- Dislikes wide-open spaces [−1]
- Unceremonial [−1]
- Vow ("Never reject a challenge to single combat") [−1]

---

**FP** 11

---

**FP** 11
Baron Janos Telkozep

Born in Castle Telkozep, Hungary in 1571, the year of the great victory at Lepanto, Janos Telkozep succeeded to the barony when his father died fighting the Turks in 1589. At a glittering Twelfth Night feast at Castle Bathori a few years later, the young Baron retired to the chambers of the beautiful, widowed Countess Bathori. To his shock (though not entirely, it must be admitted, to his surprise) he discovered the next morning that she had transformed him into a vampire. Telkozep's family connections kept him out of trouble when the King of Hungary eventually tried the Countess for murder and imprisoned her in a distant castle without food or light, but he learned from her example. She had allowed her vampiric appetites to corrupt her judgement, and that, Telkozep vowed, would never be his fate.

Over the next two centuries, the Baron repeatedly “died” and took over the Castle as his own heir, continuing to ally himself to kings and archbishops, maneuvering ever more gracefully through the byzantine paths of European politics. Recognizing earlier than most nobles that the wave of the future would be in banks and trading-houses, rather than acres of barley or ransomed Turkish generals, the Baron taught himself the new intricacies of ducats and marks, pounds and roubles. By the 19th century, he had steadily enriched himself through six or seven wars, three changes of dynasty, and two vampire panics. During the latter, he often acquired the estates of the condemned at knock-down prices, feeling no guilt at profiting from the deaths of vampires more foolish and rash than himself. Slowly, he began to accumulate vampiric foes – the great Pavane des Vampires in Paris declared him anathema, and others tried to stalk or betray him in their turn.

He studied the occult, seeking new weapons against his fellows, and learned that his ancient lover, the Countess Bathori, had somehow escaped her prison through sorcerous means. She had become a Grand Master of the Cabal, a secret society of monsters and magi descended from ancient Egypt, and she offered him sanctuary. Telkozep accepted . . . but she had learned little from her long life. During the disasters of the 1940s, her rashness nearly destroyed the vampire brotherhood in the Cabal – and the war she helped spark did destroy Telkozep’s beloved Hungary. In 1956, he left Bathori and the Cabal behind, beginning 30 years of shadow warfare in boardrooms and blasted heaths across Europe and America.

Although his vampiric powers kept him alive, and his fortune kept him hidden, the Cabal (and his vengeful ex-lover the Countess) came ever closer to destroying him. Telkozep could see the inevitable future; just like the pathetic vampires of the 17th century, he was alone and friendless, with every hand against him. A stake in the night, or the Final Dawn, awaited him – unless he could change the game. Where once he had researched money, and then magic, he now sought allies. He discovered that the Cabal had their own enemies – and one of them dwelt on another Earth, where the Countess’ reach could not so easily extend. Telkozep put all his liquid wealth into portable assets and waited for an opening. In 1989, he walked through a megalithic barrow under a full moon, and into another Earth. He flitted from timeline to timeline, through gateways marked in an ancient codex he had purchased from the bankrupt National Museum of Budapest, until he was sure he had eluded the Cabal. He then set out to attract the attention of outtimers like himself, with clever advertisements in the papers and subtle manipulations of key stocks. When the Infinity Patrol knocked on his office door, he was able to present them (and eventually ISWAT, who took over once they realized what they had) with an attractive offer – employment as their star vampire (and financial expert) in exchange for protection from the Cabal.

Vampire

Attribute Modifiers: ST+6 [60].
Secondary Characteristic Modifiers: HP+4 [8]; Per+3 [15].
Advantages: Alternate Forms (Bat, Wolf) [30]; Doesn’t Breathe [20]; Dominance [20]; Immunity to Metabolic Hazards [30]; Injury Tolerance (Unliving) [20]; Insubstantiality (Costs Fatigue, 2 FP, -10%) [72]; Night Vision 5 [5]; Speak With Animals (Wolves and bats, -60%) [10]; Unaging [15]; Unkillable 2 (Achilles’ Heel: Wood, -50%) [50]; Vampiric Bite [30].
Disadvantages: Dependency (Coffin with soil of homeland; Daily) [-60]; Divine Curse (Cannot enter dwelling for first time unless invited) [-10]; Draining (Human Blood; Illegal) [-10]; Dread (Garlic) [-10]; Dread (Religious Symbols; 5 yards) [-14]; Dread (Running Water) [-20]; Supernatural Features (No Body Heat*, No Reflection, Pallor*) [-16]; Uncontrollable Appetite (12) (Human Blood) [-15]; Unhealing (Partial) [-20]; Weakness (Sunlight; 1d/minute) [-60].
Features: Sterile.

* Except after feeding.
**Baron Janos Telkozep**

**Character Sheet**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Current</th>
<th>Unspent Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>20 [40]</td>
<td>0</td>
</tr>
<tr>
<td>DX</td>
<td>11 [20]</td>
<td>5</td>
</tr>
<tr>
<td>IQ</td>
<td>15 [100]</td>
<td>0</td>
</tr>
<tr>
<td>HT</td>
<td>10 [0]</td>
<td>0</td>
</tr>
</tbody>
</table>

**BASIC LIFT**
- (ST + STS) 80
- DAMAGE Thr 2d+2
- Sw 5d+1

**BASIC SPEED**
- 8 [55]

**BASIC MOVE**
- 8 [0]

**Languages**
- English (Accented) (Native) [5]
- French (Native) [6]
- Hungarian (Native) [0]
- Latin (Broken) (Native) [4]
- Russian (Broken) [2]

**Receipt Modifiers**
- Appearance ________________________________________________________________________________
- Name ___________________________________
- Player ____________________ Point Total __________

**Cultural Familiarities**
- TL: 8
- 18th-Century Europe [0]
- Homeline [1]

**Skills**

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>17‡</td>
<td>1</td>
</tr>
<tr>
<td>Area Knowledge (Hungary)</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Body Language</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Brawling</td>
<td>12</td>
<td>DX+1</td>
</tr>
<tr>
<td>Connoisseur (Visual Arts)</td>
<td>15</td>
<td>IQ+0</td>
</tr>
<tr>
<td>Current Affairs/TL8 (Business)</td>
<td>14</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Detect Lies</td>
<td>17</td>
<td>Per-1</td>
</tr>
<tr>
<td>Diplomacy</td>
<td>14</td>
<td>IQ-1</td>
</tr>
<tr>
<td>Economics</td>
<td>16†</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Finance</td>
<td>16†</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Guns/TL5 (Pistol)</td>
<td>12</td>
<td>DX+1</td>
</tr>
<tr>
<td>History (Hungary)</td>
<td>15</td>
<td>IQ+0</td>
</tr>
<tr>
<td>Market Analysis</td>
<td>17†</td>
<td>IQ+2</td>
</tr>
<tr>
<td>Merchant</td>
<td>13†</td>
<td>IQ-2</td>
</tr>
<tr>
<td>Mimicry (Animal Sounds)</td>
<td>14</td>
<td>IQ-1</td>
</tr>
<tr>
<td>Occultism (Vampirology)</td>
<td>18</td>
<td>IQ+3</td>
</tr>
<tr>
<td>Propaganda/TL8</td>
<td>17†</td>
<td>IQ+2</td>
</tr>
<tr>
<td>Saber</td>
<td>12</td>
<td>DX+1</td>
</tr>
<tr>
<td>Savoir-Faire (High Society)</td>
<td>15</td>
<td>IQ+0</td>
</tr>
<tr>
<td>Sex Appeal</td>
<td>11</td>
<td>HT+1</td>
</tr>
<tr>
<td>Teamster (Equines)</td>
<td>14‡</td>
<td>IQ-1</td>
</tr>
<tr>
<td>Tracking</td>
<td>18</td>
<td>Per+0</td>
</tr>
</tbody>
</table>

**Disadvantages and Quirks**

<table>
<thead>
<tr>
<th>Advantage/Quirk</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berserk (9)</td>
<td>-15</td>
</tr>
<tr>
<td>Bloodlust (9)</td>
<td>-15</td>
</tr>
<tr>
<td>Callous</td>
<td>-5</td>
</tr>
<tr>
<td>Duty (To ISWAT; 15 or less; Extremely Hazardous)</td>
<td>-20</td>
</tr>
<tr>
<td>Enemy (The Cabal; Hunter; 6 or less)</td>
<td>-20</td>
</tr>
<tr>
<td>Frightens Animals</td>
<td>-10</td>
</tr>
<tr>
<td>Greed (6)</td>
<td>-30</td>
</tr>
<tr>
<td>Code of Honor (Aristocratic manners)</td>
<td>-1</td>
</tr>
<tr>
<td>Dislikes mirrors</td>
<td>-1</td>
</tr>
<tr>
<td>Old-fashioned language and idioms (-1) to some uses of Fast-Talk, Propaganda, etc; GM’s option</td>
<td>-1</td>
</tr>
<tr>
<td>Patriot (Hungary; minor Fanaticism; -1 reaction from patriotic Turks and Romanians)</td>
<td>-1</td>
</tr>
<tr>
<td>Vow (“Never let vampiric appetites corrupt my judgment”)</td>
<td>-1</td>
</tr>
</tbody>
</table>

**Current Affairs/TL8**
- Business +3 at all times for Charisma!
- +3 from those he does business with (Business Acumen), -5 from those who notice his Supernatural Features, -4 from animals (Frightens Animals), -1 from past victims and those with Empathy (Callous), -1 from reaction from patriotic Turks and Romanians (quirk)

**Appearance**
- Strongly built and charismatic . . . yet strangely menacing

**Languages Spoken Written**
- English (Accented) (Native) [5]
- French (Native) [6]
- Hungarian (Native) [0]
- Latin (Broken) (Native) [4]
- Russian (Broken) [2]

**Stunts**

<table>
<thead>
<tr>
<th>ST/Will</th>
<th>Dodge</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Encumbrance Move Dodge**
- None (0) = BL 80
- Light (1) = 2x BL 60
- Medium (2) = 3x BL 240
- Heavy (3) = 6x BL 480
- X-Heavy (4) = 10x BL 800

**Block Parry DR**
- 9 (Saber)

**Status**
- +3 at all times for Charisma!

**Parry Dodge**
- 0

**Languages Spoken Written**
- English (Accented) (Native) [5]
- French (Native) [6]
- Hungarian (Native) [0]
- Latin (Broken) (Native) [4]
- Russian (Broken) [2]

**Reaction Modifiers**
- Appearance ________________________________________________________________________________
- Status +3 at all times for Charisma!

**Languages Spoken Written**
- Russian (Broken) 2
- Latin (Broken) (Native) 4
- Hungarian (Native) 0
- French (Native) 6
- English (Accented) (Native) 5

**Advantages and Perks**

<table>
<thead>
<tr>
<th>Advantage/Perk</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charisma 3</td>
<td>[15 ]</td>
</tr>
<tr>
<td>Independent Income 10</td>
<td>[10]</td>
</tr>
<tr>
<td>Legal Enforcement Powers</td>
<td>[15]</td>
</tr>
<tr>
<td>Mind Control</td>
<td>[50]</td>
</tr>
<tr>
<td>Striking ST 5</td>
<td>[25]</td>
</tr>
<tr>
<td>Talent (Business Acumen) 3</td>
<td>[30]</td>
</tr>
<tr>
<td>Temperature Control 3 (Cold, -50%)</td>
<td>[6]</td>
</tr>
<tr>
<td>Uncontrollable, -10%</td>
<td>[6]</td>
</tr>
<tr>
<td>Vampire (see below)</td>
<td>[150]</td>
</tr>
<tr>
<td>Wealth (Fifthy Rich)</td>
<td>[50]</td>
</tr>
</tbody>
</table>

**Disadvantages and Quirks**

<table>
<thead>
<tr>
<th>Advantage/Quirk</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berserk (9)</td>
<td>-15</td>
</tr>
<tr>
<td>Bloodlust (9)</td>
<td>-15</td>
</tr>
<tr>
<td>Callous</td>
<td>-5</td>
</tr>
<tr>
<td>Duty (To ISWAT; 15 or less; Extremely Hazardous)</td>
<td>-20</td>
</tr>
<tr>
<td>Enemy (The Cabal; Hunter; 6 or less)</td>
<td>-20</td>
</tr>
<tr>
<td>Frightens Animals</td>
<td>-10</td>
</tr>
<tr>
<td>Greed (6)</td>
<td>-30</td>
</tr>
<tr>
<td>Code of Honor (Aristocratic manners)</td>
<td>-1</td>
</tr>
<tr>
<td>Dislikes mirrors</td>
<td>-1</td>
</tr>
<tr>
<td>Old-fashioned language and idioms (-1) to some uses of Fast-Talk, Propaganda, etc; GM’s option</td>
<td>-1</td>
</tr>
<tr>
<td>Patriot (Hungary; minor Fanaticism; -1 reaction from patriotic Turks and Romanians)</td>
<td>-1</td>
</tr>
<tr>
<td>Vow (“Never let vampiric appetites corrupt my judgment”)</td>
<td>-1</td>
</tr>
</tbody>
</table>

**Cultural Familiarities**
- TL: 8
- 18th-Century Europe [0]
- Homeline [1]
All missions on Lenin-2 are hell. I guess that’s why they call it a “Hell parallel.” It’s way too hot, and there’s nothing but bugs and carp to eat, and if you close your eyes for two seconds, some kind of savage is going to try and smash in your skull with a rusted-out electrical transformer bar. The major powers (except the British Empire) went Communist in the late 19th century and, just like the Soviets did to Russia in Homeline, they wrecked the environment big time over the next century. Britain lost what the Chinese called “the Summer Wars” to the Communist powers in the 1950s, and that knocked the struts out from under the global economy, too. Hong Kong and expatriate Americans in Shanghai had managed to spread capitalism to China, though, so technological progress kept progressing — until the ecological collapse took everything down with it. The Gulf Stream shut down and shifted global weather patterns. Catastrophic warming melted the ice caps and flooded the coastlines; mega-storms tore through the desertified continental interiors; famines killed billions of people. While all this was going on, the Bolsheviks, the Mitteleuropan DKAP, and the Christian Communist Congressional Party fought “the Autumn Wars” over the stinking remains of the fresh water and the fish. The few million survivors are grinding along at medieval tech levels, except for the Chinese, who had enough stuff that some survivor settlements can keep the lights on and the engines running. Until the plankton all dies, anyhow.

We run surveys all over the planet, trying to see if we can somehow jump-start the ecology again, just like China was trying to do before the ax fell. We wind up trying to salvage a lot of the Chinese records, and so we’ve kind of made Soochow Island our “hell away from hell.” They’ve got liquor, and electric lights, and cooked food, and gambling, and all the comforts of home. A lot of these coastal Chinese got genetic grafts during the last, desperate “try anything” times; with some of them, it seems to have helped. One really sharp local — I mean sharp as a nanofiber, nothing gets past her — probably has some water-rat DNA in her; her eyes are red, and her teeth aren’t quite right. But she can hold her breath for half an hour, track stuff by the smell, and see in the dark. More importantly, Xing La (that’s her name) can drive, fly, or float anything that moves. And if it doesn’t move, she can make it move. She’s a natural pilot, too, and she doesn’t depend on radio or instruments like half the people Infinity sends out here. She has like a sixth sense for these wrecks, and without her, we wouldn’t have found that lost conveyer before the cannibals got to it. We’ve probably hired her for some kind of work on every mission in Lenin-2 for the past four years, and she’s been more places and done a better job than plenty of folks from Homeline.

So what I’m trying to say, I guess, is that the team and I, we feel kind of bad about leaving her there in her miserable hole to die with the rest of the human race on that ball of mud. I mean, if it turns out that we can’t reseed the krill, and we can’t fix the North Atlantic, and we can’t find any earthworms that can stay alive in the plague zones for more than a month. And she’s got nothing but talent, and drive, and pluck to spare, and it’s even more wasted than most of Lenin-2 is. Anyhow, we’ve sent her name and profile upstairs to — well, I’d better not say who, but you know who I mean — and hopefully, they need someone who can drive a motorcycle up a sheer cliff, or thread an airship through the eye of a typhoon. If not, so help me Buddha, I’ll smuggle her back to Homeline myself.

**XING LA**

**POINTS SUMMARY**

Attributes/Secondary Characteristics [ 101]
Advantages/Perks/TL/Languages/ Cultural Familiarity [ 106]
Disadvantages/Quirks [-109]
Skills/Techniques [ 127]
Other [ ]
**Name:** Xing La  
**Player:**  
**Point Total:** 225  
**Ht:** 5'4"  
**Wt:** 100 lbs.  
**Size Modifier:** 0  
**Age:** 27  
**Unspent Pts:**  

**Appearance:** Skinny East Asian woman with gleaming eyes and bony teeth

---

**Languages**
- Cantonese (Broken)
- English (Accented)
- Mandarin (Broken)
- Shanghaiese (Native)

**Spoken**

**Written**

---

**ADVANTAGES AND PERKS**

- Absolute Direction [5]
- Breath-Holding [6]
- Discriminatory Smell [15]
- Infravision [10]
- Legal Enforcement Powers [15]
- Pressure Support 1 [5]
- Sanitized Metabolism [1]
- Striking ST +10 (Bite Only; -60%) [20]
- Talent (Artificer) 2 [20]

---

**DISADVANTAGES AND QUIRKS**

- Clueless [-10]
- Disturbing Voice [-10]
- Duty (To ISWAT; 15 or less; Extremely Hazardous) [-20]
- Gluttony (15) [-2]
- Hard of Hearing [-10]
- Low Empathy [-20]
- Shyness (Severe) [-10]
- Skinny [-5]
- Unnatural Features (Lambent eyes and bony teeth) [-2]
- Unusual Biochemistry [-5]
- Wealth (Struggling) [-10]
- Attentive [-1]
- Bad posture (-1 to Dancing and Sex Appeal) [-1]
- Code of Honor
  - ("Stay bought and finish the job") [-1]
  - Incompetence (Finance) [-1]
- Likes processed food (especially fast food) [-1]

---

**ENCUMBRANCE MOVE DODGE**

| None (0) = BL | 20 | BM x 1 | 6 | Dodge 9 |
| Light (1) = 2 x BL | 40 | BM x 0.8 | 4 | Dodge 8 |
| Medium (2) = 3 x BL | 60 | BM x 0.6 | 3 | Dodge 7 |
| Heavy (3) = 6 x BL | 120 | BM x 0.4 | 2 | Dodge 6 |
| X-Heavy (4) = 10 x BL | 200 | BM x 0.2 | 1 | Dodge 5 |

---

**BASIC LIFT (ST x ST/5) 20**  
**DAMAGE Thr 1d-2 Sw 1d**

**BASIC SPEED 6.25**  
**BASIC MOVE 6**

---

**SKILLS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airshipman/TL7</td>
<td>13</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Armoury/TL7 (Heavy Weapons)</td>
<td>13*</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Axel Mace</td>
<td>12</td>
<td>DX+0</td>
</tr>
<tr>
<td>Breath Control</td>
<td>14</td>
<td>HT+1</td>
</tr>
<tr>
<td>Drive!</td>
<td>16</td>
<td>DX+4</td>
</tr>
<tr>
<td>Electrical/TL7</td>
<td>13*</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Electronics Repair/TL7 (Sensors)</td>
<td>15*</td>
<td>IQ+3</td>
</tr>
<tr>
<td>Electronics Repair/TL7 (Sonar)</td>
<td>14*</td>
<td>IQ+2</td>
</tr>
<tr>
<td>Fishing</td>
<td>12</td>
<td>Per+0</td>
</tr>
<tr>
<td>Gunner/TL7 (Rockets)</td>
<td>14</td>
<td>DX+2</td>
</tr>
<tr>
<td>Knot-Tying</td>
<td>13</td>
<td>DX+1</td>
</tr>
<tr>
<td>Machinist/TL7</td>
<td>13*</td>
<td>IQ+1</td>
</tr>
<tr>
<td>Mechanic/TL7 (Gasoline Engine)</td>
<td>14*</td>
<td>IQ+2</td>
</tr>
<tr>
<td>Navigation/TL2 (Sea)</td>
<td>15*</td>
<td>IQ+3</td>
</tr>
<tr>
<td>Navigation/TL7 (Sea)</td>
<td>14*</td>
<td>IQ+2</td>
</tr>
<tr>
<td>Scouring</td>
<td>15</td>
<td>Per+3</td>
</tr>
<tr>
<td>Scuba/TL8</td>
<td>11</td>
<td>IQ-1</td>
</tr>
<tr>
<td>Seamanship/TL7</td>
<td>13</td>
<td>IQ-1</td>
</tr>
<tr>
<td>Smuggling</td>
<td>11</td>
<td>IQ-1</td>
</tr>
<tr>
<td>Spear Thrower</td>
<td>13</td>
<td>DX+1</td>
</tr>
<tr>
<td>Survival (Island/Beach)</td>
<td>11</td>
<td>Per-1</td>
</tr>
<tr>
<td>Survival (Swamp/Land)</td>
<td>11</td>
<td>Per-1</td>
</tr>
<tr>
<td>Swimming</td>
<td>15</td>
<td>HT+2</td>
</tr>
</tbody>
</table>

* Includes +2 from Artificer.  
† Includes +3 from Absolute Direction.
This appendix summarizes the core combat rules found in the Basic Set, Book 2. GMs interested in combat with counters or figures on a hexagonal grid, special combat situations, etc., should consult Chapters 12-13, in Book 2.

**COMBAT TURN SEQUENCE**

Each character's turn normally gives him one opportunity to act per second. After everyone takes his turn, one second has passed.

The one-second time scale breaks the battle into manageable chunks. A GM can drop out of combat time whenever dramatically appropriate, and resume combat time when noncombat action gives way to more fighting.

The turn sequence is the order in which active characters take their turns. It is set at the start of the fight and does not change during combat. The combatant with the highest Basic Speed goes first, followed by the next-highest Basic Speed, and so on. The GM decides the order of multiple NPCs on the same side with the same Basic Speed. If PCs are involved, precedence goes to the highest DX. If there's still a tie, the GM should roll at the start of combat to determine who acts first.

**MANEUVERS**

A maneuver is an action taken during combat. Each turn, you must choose one of the following maneuvers: Aim, All-Out Attack, All-Out Defense, Attack, Change Posture, Concentrate, Do Nothing, Evaluate, Feint, Move, Move and Attack, Ready, or Wait. Your choice determines what you can do and your options for active defense and movement.

**Aim**

Aiming a ranged weapon (or a device such as a camera) takes a full turn. Specify your weapon and your target. You can’t aim at something that you can’t see or detect.

If you follow an Aim maneuver with an Attack or All-Out Attack with the same weapon against the same target, you get a bonus to hit. Add the weapon’s Accuracy to your skill. If you Aim for more than one second, you receive an additional bonus: +1 for two seconds of Aim, or +2 for three or more seconds.

While aiming, you can move a step. Any Active Defense automatically spoils your aim and removes all accumulated benefits. If injured while aiming, you must make a Will roll or lose your aim.

**All-Out Attack**

Attack any foe with a ready weapon, making no effort to defend against enemy attacks. If you make a melee attack, you must specify one of these four options:

• **Determined**: Make a single attack at +4 to hit.
• **Double**: Make two attacks against the same foe, if you have two ready weapons or one weapon that does not have to be readied after use. Attacks with a second weapon held in the off hand are at the usual -4.
• **Feint**: Make one Feint (see below) and then one attack against the same foe.
• **Strong**: Make a single attack, at normal skill. If you hit, you get +2 to damage – or +1 damage per die, if that would be better. This only applies to melee attacks doing ST-based thrust or swing damage, not to weapons such as force swords.

You may move up to half your Move, but you can only move forward. You may take no active defenses at all until your next turn.

These are the two All-Out Attack options for ranged combat:

• **Determined**: Make a single attack at +1 to hit.
• **Suppression Fire**: Take your entire turn to spray an area with automatic fire. Your weapon must have RoF 5+. Ask the GM for details or see Suppression Fire (p. 410).

**All-Out Defense**

The maneuver of choice when beset by foes. Specify one of the following two options:

• **Increased Defense**: Add +2 to one active defense of your choice: Dodge, Parry, or Block. This bonus persists until your next turn.
• **Double Defense**: Apply two different active defenses against the same attack. If you fail your defense roll against an attack, you may try a second, different defense against that attack. If you try a parry (armed or unarmed) with one hand and fail, a parry using the other hand does count as a “different defense.”
With Increased Dodge, you may move up to half your Move. Otherwise, the only movement is a step. Choose any legal active defense, with bonuses as described above.

**Attack**

Make an armed or unarmed attack in melee combat, or to use a thrown or missile weapon in ranged combat. A weapon used in an attack must be ready.

If using a melee weapon or unarmed attack, your target must be within reach. If using a ranged weapon, your target must be within the weapon’s Max range.

To move more than one step during an attack, use a Move and Attack or All-Out Attack.

**Change Posture**

Change between the following postures: standing, sitting, kneeling, crawling, lying prone (face down), and lying face up. Any posture other than standing slows movement and penalizes attack and defense rolls, but also creates a smaller target for ranged attacks.

Standing up from a lying position requires two Change Posture maneuvers: one to rise to crawling, kneeling, or sitting, and another to stand.

You can switch between kneeling and standing as a step with another maneuver.

**Concentrate**

You concentrate on one primarily mental task (even it has a minor physical component, like operating controls, gesturing, or speaking). This may be casting a magical spell, using a psi ability, making a Sense roll to spot an invisible warrior, or any similar action, including most IQ-based skill rolls. This is a full-turn maneuver.

If you are forced to use an active defense, knocked down, injured, or otherwise distracted before you finish, you must make a Will-3 roll. On a failure, you lose your concentration and must start over.

**Do Nothing**

Standing still is Doing Nothing. A character Doing Nothing may still defend normally, unless stunned. Someone stunned or surprised must take this maneuver. A stunned character defends at -4.

To recover from physical or mental stun, he may attempt a HT or an IQ roll. A success allows recovery at the end of a turn.

**Evaluate**

Study an adversary to gain a combat bonus on a subsequent attack. You must specify a visible opponent close enough to attack or reachable with a single Move and Attack maneuver (see below).

An Evaluate maneuver gives +1 to skill for an Attack, Feint, All-Out Attack, or Move and Attack made against that opponent, on your next turn only. You may take up to three consecutive Evaluate maneuvers before you strike, giving a cumulative +1 per turn.

**Feint**

“Fake” a melee attack if your weapon is ready and your foe is within reach. This maneuver is not an attack and does not make your weapon unready.

To Feint, choose a single opponent and roll a Quick Contest of Melee Weapon skills. Your opponent may roll against his Melee Weapon skill, unarmed combat skill, Cloak or Shield skill, or DX.

If you fail your roll, your Feint is unsuccessful. Likewise, if you succeed, but your foe succeeds by as much as or more than you do, your Feint fails. If you make your roll, and your foe fails, subtract your margin of success from the foe’s active defense if you attack him with Attack, All-Out Attack, or Move and Attack on your next turn. If you and your foe both succeed, but you succeed by more, subtract your margin of victory from the foe’s defense.

A Feint lasts one second. But if you Feint and then make an All-Out Attack (Double), the Feint applies to both attacks.

You can move one step while feinting and it allows any active defense. Allies cannot take advantage of your successful Feint.

**Move**

Move any number of yards up to your full Move score, but take no other action. Most other maneuvers allow at least some movement on your turn; take this maneuver if all you want to do is move.

During a Move, a character can defend themselves normally.

**Move and Attack**

Move as described for the Move maneuver; but during or after your move, make a single, poorly aimed attack – either unarmed or with a ready weapon.

You attack as described for the Attack maneuver, but at a penalty. If making a ranged attack, you have a penalty of -2 or the weapon’s Bulk rating, whichever is worse. If you are making a melee attack, you have a flat -4 to skill, and your adjusted skill cannot exceed 9.

You can only dodge or block during this maneuver.

**Ready**

A Ready maneuver can be used to:

- Pick up or draw any item, prepare it for use, regain control of an unwieldy weapon after a swing, or adjust the reach of a long weapon.
- Complete physical actions other than fighting: opening or closing a door, picking a lock, etc.
- Switch an advantage “off” or “on” if it is not always on and does not require an Attack or Concentrate maneuver.

The combatant can both step and defend while taking a Ready.

**Wait**

Do nothing unless an event you specified in advance occurs before your next turn; e.g., a foe moves into range. If that happens, you may transform your Wait into an Attack, Feint, All-Out Attack (you must specify the option before acting), or Ready maneuver. You interrupt the turn sequence, but it resumes after you’ve acted.

Specify your action and its trigger when you take the Wait maneuver. You may Wait with a ready ranged weapon if you have specified the zone that you are covering.
RANGED ATTACKS

A “ranged attack” is any attack with a weapon used at a distance, from a thrown rock to a laser rifle to a specified spell.

Make a ranged attack on a target only if it falls within your weapon’s range. To find this, see the relevant weapon table or advantage or spell description. Most ranged attacks list Half Damage (1/2D) range and Maximum (Max) range, in yards. Your target must be no farther away than Max range; 1/2D range only affects damage. A few weapons have a minimum range, as they lob projectiles in a high arc, or have fusing or guidance limits.

Figure your adjusted chance to hit by:
1. Taking your base skill with your ranged weapon.
2. Adding your weapon’s Accuracy (Acc) if you preceded your attack with an Aim maneuver.

You can only attack with a weapon if it’s ready (see Ready, p. 325).

Two basic types of attacks exist: melee attacks and ranged attacks. Your target must be within reach to make a melee attack, or within range to make a ranged attack. Resolving either type of attack takes three die rolls:

- First is your attack roll. If your roll is greater than or equal to your effective skill, you missed! If your roll is less than or equal to your effective skill, your attack will hit unless your foe successfully defends (see Defending, below). If he fails to defend – or if he can’t – you’ve hit him.
- You attempt to hit a foe or other target by executing an Attack, All-Out Attack, or Move and Attack maneuver. You can only attack with a weapon if it’s ready (see Ready, p. 325).
- Two basic types of attacks exist: melee attacks and ranged attacks. Your target must be within reach to make a melee attack, or within range to make a ranged attack. Resolving either type of attack takes three die rolls:
- First is your attack roll. If your roll is greater than or equal to your effective skill, you missed! If your roll is less than or equal to your effective skill, your attack will hit unless your foe successfully defends (see Defending, below). If he fails to defend – or if he can’t – you’ve hit him.

ATTACKING

If your attack roll succeeds, you have not (yet) actually struck your foe, unless you rolled a critical hit. Your attack is good enough to hit him – if he fails to defend.

A fighter can use three active defenses to evade or ward off an attack: Dodge, Parry, and Block. These active defense scores should be calculated in advance and recorded on the character’s sheet.

If a foe makes a successful attack roll, choose one active defense and attempt a “defense roll” against it. Exception: The All-Out Defense (Double Defense) maneuver lets you attempt a second defense against a particular attack if your first defense fails.

The active defense chosen depends on the situation – especially the maneuver chosen last turn. Some maneuvers restrict which active defenses can be made. No active defense is available if the PC is unaware of the attack. And active defenses don’t apply to fighters who are unconscious, immobilized, or otherwise unable to react.

Active Defense Rolls

The defender rolls 3d against his active defense score. If his roll is less than or equal to his effective defense, he dodged, parried, or blocked the attack. Otherwise, his active defense was ineffective and the attack hit. If this occurs, roll for damage.

An active defense roll of 3 or 4 is always successful – even if the effective defense score was only 1 or 2! A roll of 17 or 18 always misses.

DEFENDING

You attempt to hit a foe or other target by executing an Attack, All-Out Attack, or Move and Attack maneuver. You can only attack with a weapon if it’s ready (see Ready, p. 325).

Two basic types of attacks exist: melee attacks and ranged attacks. Your target must be within reach to make a melee attack, or within range to make a ranged attack. Resolving either type of attack takes three die rolls:

- First is your attack roll. If your roll is greater than or equal to your effective skill, you missed! If your roll is less than or equal to your effective skill, your attack will hit unless your foe successfully defends (see Defending, below). If he fails to defend – or if he can’t – you’ve hit him.
- You attempt to hit a foe or other target by executing an Attack, All-Out Attack, or Move and Attack maneuver. You can only attack with a weapon if it’s ready (see Ready, p. 325).
- Two basic types of attacks exist: melee attacks and ranged attacks. Your target must be within reach to make a melee attack, or within range to make a ranged attack. Resolving either type of attack takes three die rolls:
- First is your attack roll. If your roll is greater than or equal to your effective skill, you missed! If your roll is less than or equal to your effective skill, your attack will hit unless your foe successfully defends (see Defending, below). If he fails to defend – or if he can’t – you’ve hit him.

If your attack roll succeeds, you have not (yet) actually struck your foe, unless you rolled a critical hit. Your attack is good enough to hit him – if he fails to defend.

A fighter can use three active defenses to evade or ward off an attack: Dodge, Parry, and Block. These active defense scores should be calculated in advance and recorded on the character’s sheet.

If a foe makes a successful attack roll, choose one active defense and attempt a “defense roll” against it. Exception: The All-Out Defense (Double Defense) maneuver lets you attempt a second defense against a particular attack if your first defense fails.

The active defense chosen depends on the situation – especially the maneuver chosen last turn. Some maneuvers restrict which active defenses can be made. No active defense is available if the PC is unaware of the attack. And active defenses don’t apply to fighters who are unconscious, immobilized, or otherwise unable to react.

Active Defense Rolls

The defender rolls 3d against his active defense score. If his roll is less than or equal to his effective defense, he dodged, parried, or blocked the attack. Otherwise, his active defense was ineffective and the attack hit. If this occurs, roll for damage.

An active defense roll of 3 or 4 is always successful – even if the effective defense score was only 1 or 2! A roll of 17 or 18 always misses.

Dodging

A Dodge is an active attempt to move out of the perceived path of an attack. It is normally the only active defense you can take against firearms.

Your Dodge active defense is Basic Speed + 3, dropping all fractions, minus a penalty equal to your encumbrance level (see Encumbrance and Move, p. 17). List Dodge on your character sheet for quick reference.

You may dodge any attack except one that you did not know about! You
only get one Dodge roll against a given attack.

If a single rapid-fire attack scores multiple hits, a successful Dodge roll lets you avoid one hit, plus additional hits equal to your margin of success. A critical success lets you dodge all hits you took from that attack.

**Blocking**

Blocking requires a ready shield or cloak. Your Block active defense is 3 + half your Shield or Cloak skill, dropping all fractions.

You can block any melee attack, thrown weapon, projected liquid, or muscle-powered missile weapon. You cannot block bullets or beam weapons... these come too fast to be stopped this way.

You may attempt to block only one attack per turn.

**Parrying**

Parry to deflect a blow using a weapon or your bare hands. You cannot parry unless your weapon is ready – or, if unarmed, you have an empty hand.

You can use most melee weapons to parry. Some hefty weapons (e.g., axes) are unbalanced: you cannot use them to parry if you’ve already used them to attack on your turn. (You can still parry with a weapon in your other hand, if you have one.) A few long, well-balanced weapons (e.g., the quarterstaff) get a +1 or +2 bonus to parry due to their ability to keep a foe at bay.

Your Parry active defense with a given weapon is 3 + half your skill with that weapon, dropping all fractions.

A parry won’t stop anything except melee attacks or thrown weapons, unless you have special skills. Exception: If a foe attacks you with a missile weapon and he is within reach of your melee weapon, you may parry. Success would mean that you slapped his bow or gun aside, causing him to fire wide of your body.

Usually, you are still in the fight as long as you have positive HP.

You can parry thrown weapons, but at a penalty: -1 for most thrown weapons, or -2 for small ones such as knives, shuriken, and other weapons that weigh 1 lb. or less.

If you successfully parry an unarmed attack (bite, punch, etc.) with a weapon, you may injure your attacker. Immediately roll against your skill with the weapon used to parry. If you succeed, your parry struck the attacker’s limb squarely. He gets no defense roll against this! Roll damage normally.

### Damage and Injury

If your attack roll succeeds and your target fails his defense roll (if any), you may make a damage roll. This tells you how much basic damage you dealt to your target.

Your weapon (and, for muscle-powered weapons, your ST), or your natural or Innate Attack, determines the number of dice you roll for damage. If your target has any Damage Resistance (DR), he subtracts this from your damage roll.

If your damage roll is less than or equal to your target’s effective DR, your attack failed to penetrate – it bounced off or was absorbed. If your damage roll exceeds your target’s DR, the excess is the penetrating damage. If your foe has no DR, the entire damage roll is penetrating damage.

Your foe suffers injury (lost HP) equal to the penetrating damage for a crushing attack, 1.5× penetrating damage for a cutting attack, or 2× penetrating damage for an impaling attack. Other damage types exist, and have further effects.

#### General Damage

If injured, subtract the points of injury from your Hit Points. Usually, you are still in the fight as long as you have positive HP. The most important effects are:

- If you have less than 1/3 of your HP remaining, you reel from your wounds. **Halve** your Move and Dodge (round up).
- If you have zero or fewer HP left, you hang onto consciousness through sheer willpower and adrenaline – or barely hold together, if you’re a machine. You must roll vs. HT each turn to avoid falling unconscious.
- If you go to fully negative HP (for instance, -10 if you have 10 HP), you risk death! You must make an immediate HT roll to avoid dying. You must make another HT roll to avoid death each time you lose an extra multiple of your HP – that is, at -2×HP, -3×HP, and so on. If you reach -5×HP, you **die automatically**.

The sudden loss of HP can have additional effects:

- **Major Wounds:** Any single injury that inflicts a wound in excess of 1/2 your HP is a major wound. For a major wound to the torso, you must make a HT roll. Failure means you’re stunned or knocked out; failure by 5+ means you pass out.
- **Shock:** Any injury that causes a loss of HP also causes “shock.” Shock is a penalty to DX, IQ, and skills based on those attributes **on your next turn** (only). This is -1 per HP lost unless you have 20 or more HP, in which case it is -1 per (HP/10) lost, rounded down. The shock penalty cannot exceed -4 no matter how much injury you suffer.
- **Stunning:** If you’re stunned, you are -4 to active defenses, and must Do Nothing on your next turn. At the end of your turn, attempt a HT roll to recover. If you fail, you’re still stunned and must Do Nothing for another turn. And so on.
The Damage rules may seem harsh, but don’t despair . . . you can get better!

**Recovering from Unconsciousness**

The GM decides whether you are truly unconscious or just totally incapacitated by pain and injury – but either way, you can’t do anything. If unconscious, you recover as follows:

- If you have 1 or more HP remaining, you awaken automatically in 15 minutes.
- At 0 HP or worse, but above -1¥HP, make a HT roll to awaken every hour. Once you succeed, you can act normally. You do not have to roll against HT every second to remain conscious unless you receive new injury. But since you are below 1/3 your HP, you are at half Move and Dodge.
- At -1¥HP or below, you are in bad shape. You get a single HT roll to awaken after 12 hours. If you succeed, you regain consciousness and can act as described above. But if you fail, you won’t regain consciousness without medical treatment. Until you receive help, you must roll vs. HT every 12 hours; if you fail, you die.

**Natural Recovery**

Rest lets you recover lost HP, unless the damage is of a type that specifically does not heal naturally (see *Illness*, p. 442). At the end of each day of rest and decent food, make a HT roll. On a success, you recover 1 HP. The GM may give a penalty if conditions are bad, or a bonus if conditions are very good.

---

**Fatigue**

Fatigue represents lost energy and reduces FP, just as injury represents physical trauma and comes off of HP. Your Fatigue Points (FP) score starts out equal to your HT, but can be modified.

**Lost Fatigue Points**

The chart below summarizes the effects of being at low or negative FP. All effects are cumulative.

- **Less than 1/3 your FP left** – You are very tired. Halve your Move, Dodge, and ST (round up). This does not affect ST-based quantities, such as HP and damage.
- **0 FP or less** – You are on the verge of collapse. If you suffer further fatigue, each FP you lose also causes 1 HP of injury. To do anything besides talk or rest, you must make a Will roll; in combat, roll before each maneuver other than Do Nothing. On a success, you can act normally. You can use FP to cast spells, etc., and if drowning, you can continue to struggle, but you suffer the usual 1 HP per FP lost. On a failure, you collapse, incapacitated, and can do nothing until you recover to positive FP.
- **-1¥FP** – You fall unconscious. While unconscious, you recover lost FP at the same rate as for normal rest. You awaken when you reach positive FP. Your FP can never fall below this level. After this stage, any FP cost comes off your HP instead!

**Recovering from Fatigue**

You can recover “ordinary” lost FP by resting quietly. Reading, talking, and thinking are all right; walking around, or anything more strenuous, is not. Lost FP return at the rate of 1 FP per 10 minutes of rest. The GM may allow you to regain one extra FP if you eat a decent meal while resting. Certain drugs, magic potions, etc. can restore missing FP, as can spells such as Lend Energy and Recover Energy.
This index covers both books of the Basic Set. The pages are sequentially numbered; Book 2 starts on p. 337.

With rare exceptions, traits (advantages, disadvantages, skills, spells, and so on) are not listed in this index. Instead, they have their own alphabetical listings. See the Trait Lists on pp. 297-306.

Acceleration, see Gravity.

Accents, 24.

Acrobatic dodge, 375.

Active defenses, 326, 363, 374; Active Defense Modifiers Table, 548.

Active defenses, 326, 363, 374; Active Defense Modifiers Table, 548.

Advantages, 32; always on, 34; cinematic, 33; exotic, 32, 34; in templates, 447; magic, 34; mental, 32; mundane, 32; new, 117-118; learnable, 294; list, 297; physical, 34; potential, 33; Schrödinger's, 33; secret, 33; social, 32; switchable, 34.

Adventures, e23, 494; finale, 503; pre-packaged, 495; writing your own, 500-504.

Adversary, 493.

Afflictions, 35, 416, 428.

Age, 20.

Aging, 53, 66, 95, 153, 154, 444.

Aim maneuver, 58, 324, 364.

Aimed fire, 372.

Air spells, 242.

Aircraft, 466; table, 465.

Alcohol, 122, 439-440.

Alien artifacts, 478.

Allies, 36; ally groups, 37.

All-Out Attack maneuver, 54, 324, 365, 385; after being grappled, 371.

All-Out Defense maneuver, 324, 366, 385.

Ally groups, 37.

Alternate worlds, 64, 160; travel, 189, 190; Centrum, 541-542, 545-546; classes, 526; close parallels, 526; Coventry, 540; echoes, 546; hell parallels, 528; myth parallels, 527; Reich-5, 543; weird parallels, 527; world classes, 535. See also Crossworld Travel, Infinite Worlds Campaign.

Alternative attacks, 61.

Always on; advantages, 34; magic items, 482.

Anamation, 278.

Anarchy, 509.

Animals, 40, 87, 90, 137, 175, 187, 210, 211, 217, 223, 225, 226, 228, 395, 455-460; in combat, 461; individualizing, 457; draft, 459; pets, 458-459; riding, 459; trained, 458-459; see also Mounted Combat.

Apes, 455.

Appearance, 21.

Arc of vision, 389.

Area class, 176.

Area maps, 491.

Area spells, 239.

Area-effect attacks, 413; scatter, 414.

Arm lock, 370, 403.

Armor divisors, 378.

Armor, 110, 282-286; changing posture in armor, 395; combining and layering, 286; flexible armor and blunt trauma, 379; wearing, donning, and removing, 286.

Arrows, flaming, 410.

Artifacts, anachronistic, 478; futuristic and alien, 478, magic, 240, 480-483.

Artificial intelligences, 528.

Atmospheres, hazardous, 429; vacuum, 437.

Atmospheric pressure, 429.

Attack maneuver, 325, 365.

Attack roll, 369.

Attacks, 326, 369; alternative, 61; after being grappled, 371; Deceptive Attack, 369; dual-weapon, 417; from above, 402; in tactical combat, 388; innate, 51; linked effects, 381; modified, 114; runaround, 391; surprise, 393; swarm, 461; without damage, 381.

Attributes, see Basic Attributes.

Automatic weapons, 408.

Banestorms, 533.

Baron Janos Telkozep, character sheet, 312-313; illustration, 290.

Basic attributes, 14; in templates, 447; improving, 290.

Basic Lift, 15; table, 17.

Basic Move, 17.

Basic Speed, 17.

Basilisks, 460.

Bats, 461.

Battle maps, 239.

Battlesuits, 192.

Bears, 456.

Bees, 461.

Bends, the, 435.

Biotech tech levels, 512.

Bipods, 412.

BL, see Basic Lift.

Bleeding, 68, 420.

Block, 51, 324, 327; in tactical combat, 390.

Blocking spells, 241.

Blunt trauma, 379.

Boars, 458.

Boats, 458.

Body Control spells, 244.

Body modification, 294.

Bolas, 410.

Bounty hunters, 539.

Break Free, 370.

Breakdowns, 485.

Breaking a weapon, 401.

Breathing, 49, 55, 63, 68, 108; holding your breath, 351; smothering a foe, 401.

Build, 18.

Bulletproof nudity, 417.
INDEX

Cabal, the, 543.
Camels, 459.
Campaigns, 486-489; cinematic, 488; continuing, 504; planning form, 567; power level, 10, 486; shared campaigns, 504; travel between campaigns, 504; see also Game Worlds.
Camping and survival gear, 288.
Cannon fodder, 417.
Casting, 89, 349.
Clerical advantages, 33; campaigns, 488; characters, 489; combat, 417; explosions, 417; knockback, 417. Clerical magic, 77, 242; spells, 77.
Climbing, 89, 349.
Cloaks, 404.
Close combat, 391.
Clothing, 265.
Cold, 430.
Collisions, 430; whiplash, 432.
Coma, 429; see also Unconsciousness.
Combat Lite, 324.
Combat maps, 384, 492.
Combat, 9, 362-417; at different levels, 402; cinematic, 417; maneuvers, 324; table of combat modifiers, 547; techniques, 230; turn sequence, 324, 362; vehicular, 467-470.
Communication and Empathy spells, 245.
Communications and information gear, 288, 471.
Competence, 24.
Comprehension rolls, 359.
Computers, 48, 51, 55, 69, 71, 76, 100, 124, 184, 472; artificial intelligence, 528; complexity, 472; software, 472; virtual reality worlds, 520.
Concentrate maneuver, 325, 366.
Cones, 413.
Cone attacks, 417.
Critical hits, 381; Critical Hit Table, 556.
Critical Head Blow Table, 556.
Critical failure, 344; critical hits, 381; critical misses, 381; table, 556-557.
Critical success, 347; on defense, 381.
Crossbows, 410.
Crosstime bandits, 542.
Crossworld campaigns, 519-522; see also Infinite Worlds Campaigns.
Crossworld travel, 514, 519-522; Infinite Worlds campaign background, 523-546; instant death, 514.
Crouching, 368.
Cultures, 23, 505-508.
Customizing rules, 486.
Dai Blackthorn, 12, 18, 22, 116, 162, 164, 227; character sheet, 310-311; illustrations, 32, 418.
Damage Resistance, 378; HP and DR of Structures Table, 558; Cover DR Table, 559.
Damage, 15, 327, 377; by animals, 461; Damage Table, 16; damage rolls, 9, 378; scaling, 470; to objects, 483-485.
Darkness, 47, 60, 71, 394; spells, 249; torches, 394.
David Pulver, 6.
Dead worlds, 527.
Dealing with players, 493.
Death, 296, 423; dying actions, 423; instant death, 423.
Decade scale damage, 470.
Deceptive attack, 369.
Deer, 457.
Defaults, 344; double, 173, 232; skills, 173; techniques, 229.
Defending, 326, 374; in tactical combat, 390.
Defenses, 46; enhanced, 51; limited, 46.
Dehydration, 426.
Demolition, 415.
Depressants, 441.
Design skills, 190.
Dexterity, 15.
Dice, 8, 9.
Digging, 350, 357.
Dimensional highways, 534.
Dirty tricks, 405.
Disadvantages, 11, 119; buying off, 121, 291; disadvantage limit, 11; good, 119; exotic, 120; in templates, 447; list, 299; mental, 120; mundane, 120; new, 162; physical, 120; secret, 120; social, 120; self-imposed, 121; supernatural, 120.
Disease, 442-444; worldwide, 528.
Dive for cover, 377, 407.
Divine origins; 33; see also Gods.
Dmg, see Damage.
Do Nothing maneuver, 325, 364.
Dodge, 17, 51, 324, 327, 374; and drop, 377.
Dogs, 457, 458.
Donkeys, 459.
Double defaults, allowed for techniques, 229; not allowed for skills, 173.
DR, see Damage Resistance.
Dragging things, 353.
Dragon template, 261.
Dropping prone, 374.
Drugs, 122, 130, 440; Eraser, 540; overdose, 441; ultra-tech, 425; withdrawal, 440.
Dual-weapon attacks, 417.
Dungeons, 501.
Dwarf template, 261.
DX, see Dexterity.
Dying actions, 423.
e23 scenario warehouse, 494.
Earth spells, 245.
Echo timelines, 546.
Economics, 514.
Elbow strike, 404.
Elderly characters, 20; see also Age, Aging.
Electricity, 432-433.
Electronics, 471.
Elemental meta-traits, 262.
Elephants, 460; pink, 440.
Enchantment, 480-483; spells, 245.
Encounters, 502;
  sample encounter table, 503.
Encumbrance, 17.
Enhanced defenses, 51.
Enhancements, 101-102; limited, 111.
Equestrian gear, 289.
Equipment, 264-289;
  modifying success rolls, 345.
Eraser drug, 540.
Evading, 368.
Evaluate maneuver, 325, 364.
Exotic advantages, 32, 34.
Exotic disadvantages, 120.
Explosions, 414-415; cinematic, 417.
Extra effort, 356.
Facing (in combat), 385, 386.
Falcions, 457.
Falling, 430-431; damage
  from falling objects, 431.
Fallout, 435; see also Radiation.
Familiars, 38.
Fatigue, 16; 328, 426;
  fatigue points, 16; recovering, 427.
Feint maneuver, 325, 365.
Felinoide template, 261.
Fencing weapons, 404.
Fire, 61; burning things, 433, 434;
  damage, 433; flaming arrows, 410;
  incendiary weapons, 277, 411, 433;
  spells, 246; right-beam burning
  attacks, 399.
Firearms, 278-281; accessories, 289,
  411; aim, 364; automatic, 408;
  bracing, 364; firing upward and
  downward, 407; malfunction, 382,
  407; quality, 280;
  rapid fire, 408; shotguns, 409;
  suppression fire, 409; ultra-tech,
  280.
Firing upward and downward, 407.
First aid, 424.
Flails, 405.
Flame, see Fire.
Flaming arrows, 410.
Flashlights, 394.
Flesh wounds, 417.
Flight, 56, 354; flying combat, 398.
Fnord, you’re not cleared for that.
Follow-up damage, 381.
Food, 95, 139, 159, 160, 265;
  foraging, 427; starvation, 426.
FP, see Fatigue Points.
Fragmentation damage, 414.
Free actions, 363.
Friends and foes, 31.
Fright Checks, 55, 93, 95, 121, 360;
  Fright Check Table, 360-361.
Gadgeteering, see Gadgets.
Gadgets, 56-58, 473-477, 479;
  limitations, 116.
Game balance, 11.
Game Mastering, 486-504.
Game preparation, 490.
Game worlds, 505-522;
  economics, 514.
Garrotes, 405.
Gate spells, 247.
Gerbils, 113.
G-Increment, 350.
Glossary, 563-565; arms and armor,
  268; basic terms, 7; magic, 234;
  Infinite Worlds, 524; psionics, 254.
GM Control Sheet, 490, 568.
Gold, see Wealth.
Gorillas, 456.
Grenades, 277, 410.
Ground vehicles, 466; table, 464.
Gryphons, 460.
Guided weapons, 412.
Hallucinations, 429, 440.
Hallucinogens, 440.
Handedness, 14.
Harpoons, 411.
Healing, 59, 79, 80, 155, 160,
  162; magic, 248;
  medical gear, 289;
  medical tech levels, 512; psychic,
  256.
Health, 15.
Hearing, 49, 72, 89,
  94, 138, 358.
Heart attacks, 429.
Heat, 434; see also Fire.
Hell parallels, 528.
Heroic Knight template, 448.
Hexes, 384.
High-speed movement, 394.
Hiking, 351, 357, 426.
Hirelings, 517, 518.
Hit Location Tables, 552-555.
Hit location, 369, 398; and Injury
  Tolerance, 400; random, 400.
Hit points, 16, 418-419;
  HP and DR of Structures Table, 558;
  see also Injuries.
Home gravity, 17; see also Gravity.
Homing weapons, 412-413.
Horses, 459-460; equestrian gear, 289;
  see also Mounted Combat, Riding
  Animals, Weapons (Cavalry).
HP and DR of Structures Table, 558.
HP, see Hit Points.
HT (Health), 15.
I-Cops, 536-538.
Identities, 31, 39.
Illuminati, 60, 130, 193, 200, 525;
  the Cabal, 543.
Immunity, 443.
Importance in society, see Rank,
  Status.
Incompetence, 24.
Index, 329-334, 570-575.
Infection, 444.
Infinite ammunition, 417.
Infinite Worlds campaign
  background, 523-546.
Infinity Development, 536.
Infinity Patrol, 536-538.
Infinity Unlimited, 524, 535-538.
Influence rolls, 359.
Influence skills, 494.
Information spells, 241.
Initiative, 393.
Injuries, 327, 377, 380, 418-425;
  accumulated wounds, 420; and
  active defense, 374; bleeding,
  420; crippling, 420-423;
  flesh wounds, 417; large-area injury,
  400; last wounds, 420; major wounds,
  420; mortal wounds, 423; shock,
  419; to objects, 483-485; to shields,
  484; see also Crippling, Healing.
Instant death, 423.
Intelligence, 15; and dirty tricks, 405.
Intoxication, see Alcohol.
Introduction, 5, 342.
Investigator template, 259.
Iotha, character sheet, 314-315,
  illustrations, 343.
IQ (Intelligence), 15.
ISWAT, 162, 536.
Jobs, 292, 499, 516-518; finding, 518.
Jumping, 89, 203, 352, 357.
Knee strike, 404.
Knockback, 378.
Knowledge spells, 249.
Knowledge, NPC, 496; player vs. character, 495.
Languages, 23, 205, 506.
Lariats, 411.
Lasers, 280, 399; seeker heads, 412; sights, 412.
Last wounds, 420.
Law enforcement, 507; police gear, 289.
Laws, 65, 204, 506-508, 518; punishment, 508; trials, 507.
LC, see Legality Class.
Legality Class, 267, 270, 507; legality of spells, 507.
Lethal strike, 404.
Lifting, 14, 15, 65, 205, 353, 357.
Light and Darkness spells, 249.
Limitations, 101, 110; gadgets, 116.
Limited defenses, 46.
Linked effects, 381.
Lions, 456.
Literacy, 24.
Long actions, 383.
Long tasks, 346, 499.
Louis d’Antares, character sheet, 322-323; illustrations, 368, 422, 505.
Loyalty, 518-519.
Luck, 83, 89, 160.
Ludography, 566.
Lycanthropy, see Werewolves.
Machine guns, 281.
Machines, 16; Machine meta-trait, 263.
Mage template, 260.
Magy, 66.
Magic Resistance, 67.
Magic, 66, 143, 144, 150, 218, 224, 225, 234-253; advantages, 34; ceremonial, 237; clerical, 242; colleges, 239; enchanted objects, 240, 480-483; racial, 453; ritual, 237, 242; staffs, 240.
Major wounds, 420.
Malf, see Malfunction.
Malfunction, 278, 382, 407.
Mana, 235.
Maneuvers, 324, 363, 385; table, 551.
Maps, 384, 490-491; mapping by players, 491; mapping for adventure design, 502.
Medical care, 424; surgery, 424.
Medical gear, 289.
Medicine tech levels, 512.
Melee Attack Modifiers Table, 547.
Melee etiquette, 417.
Melee spells, 240.
Mental advantages, 32; disadvantages, 120; powers, see Psionics.
Mental stun, 420.
Mental meta-trait, 263.
Meta-Spells, 250.
Meta-traits, 262.
Metric conversions, 9.
Military, 218, 221, 222, 260.
Mind Control spells, 250.
Mind reading, see Telepathy.
Mind transfer, 296.
Miniature figures, 383.
Miracle Workers Inc., 538.
Missile spells, 240.
Missile weapon attacks, 373.
Modifiers (to traits), 101; list, 300.
Molotov cocktails, 411.
Money, see Wealth.
Monsters, 460-461.
Morphology meta-traits, 263.
Mortal conditions, 429; wounds, 423.
Mounted combat, 395-398.
Move (character stat), 52.
Move and Attack maneuver, 325, 365, 385.
Move maneuver, 325, 364, 385.
Movement and combat, 367; and facing, 386; high-speed movement, 394; movement in tactical combat, 386.
Movement points, 386, 387.
Movement spells, 251.
Mules, 459.
Multi-hex figures, 392.
Mundane advantages, 32; disadvantages, 120.
Mutations, 33.
Neck Snap attack, 370, 404.
Necromantic spells, 251.
Nets, 411.
New disadvantages, 162.
New inventions, 473, 475; see also Gadgets.
Nexus portals, 534.
Nonhumans, 32.
Non-player characters, see NPCs.
NPC Reactions Table, 559-562.
NPC Record Card, 569.
NPCs, 31, 493; NPC Reactions Table, 559-562; NPC Record Card, 569.
Oil flasks, 411.
Omens, 72.
Online gaming, 494.
Optics and sensors, 289.
Origins of characters, 33.
Overpenetration, 379, 408.
Overrun, by multi-hex figures, 392.
Oxen, 460.
Parachronic Laboratories Inc., 538.
Parachronics, bogus scientific explanation, 530; conveyor, 529; detector, 532; disasters, 532; minor accidents, 531; paradoxes, 533; projector, 524, 530; see also Infinite Worlds Campaign.
Parachronozoids, 544.
Parallel worlds, see Alternate Worlds.
Paralysis, 429.
Parry, 51, 93, 324, 327, 376; unwarmed, 376; in tactical combat, 390.
Patient status, 421.
Patrons, 72-73.
Penetrating damage, 379.
Penetration modifiers, 378, 416; overpenetration, 379, 408.
Per; see Perception.
Perception, 16.
Perks, 100.
Pets, 458-459; see also Animals.
Physical advantages, 32; disadvantages, 120.
Physical feats, 349; extra effort, 356.
Picking things up, 383.
Picks, 405.
Pinning (in combat), 370.
Planet types, 180.
Plants, 75, 87, 90, 142, 197, 199, 211.
Pocket multiverses, 529.
Poison, 62, 437-439; treatment, 439.
Police gear, 289.
Pop-up attacks, 390.
Postures, 367; changing posture in armor, 395; table, 551.
Potential advantages, 33.
Power level for campaigns, 10, 486.
Power tech levels, 512.
Preparing for play, 490.
Prerequisites, skills, 169; spells, 235; techniques, 229.
Pressure, atmospheric, 429, 435; the bards, 435; water, 435.
Privilege, 30.
Professor William Headley, character sheet, 318-319; illustrations, 234, 486.
Protection and Warning spells, 252.
Psi powers, see Psionics.
Psionics, 71, 78, 150, 254-257; Antipsi, 255; ESP, 255; learning, 294; new powers, 257; pside effects, 255; Psychic Healing, 256; Psychokinesis, 256; Telepathy, 257; Teleportation, 257.
Psychological warfare, 359.
Pulling things, 353.
Punishment, legal, 508.
Pyramid Magazine, 494.
Quick contests, 348.
Quick learning under pressure, 292.
Quick Start rules, 8.
Quirks, 162; racial, 452.
Radiation, 80, 105, 192, 435.
Ranged attacks, 327, 372; half damage range, 378; hitting the wrong target, 389; modifiers table, 548; opportunity fire, 390; overshooting, 390; pop-up attacks, 390; shooting blind, 389.
Ranged Combat Modifiers Table, 548.
Rank, 29.
Rapid fire, 373, 408.
Rapid Strike, 54, 93, 370.
Rate of Fire, 270, 373.
Rats, 461.
Rattlesnakes, 458.
Rcl, see Recoil.
Reaction rolls, 8, 494-495, NPC Reactions Table, 559-562.
Reading, 134; see also Literacy.
Ready weapons, 369; readying, 382.
Realism, 11.
Reality Liberation Force, 543.
Reality quakes, 534.
Recoil, 271.
Recovery, 328; see also Healing.
Recovery, 423-424; from unconsciousness, 423.
Regular spells, 239.
Reich-5, 543.
Religion, 30, 226; see also Gods.
Reloading missile weapons, 373.
Repair skills, 190; repairing things, 484.
Reputation, 27.
Resisted spells, 241.
Resuscitation, 425.
Retreat (in active defense), 377.
Retreating, 391.
Roads, 351.
RoF (Rate of Fire), 270, 373.
Rapid fire, 373, 408.
Rapid Strike, 54, 93, 370.
Rate of Fire, 270, 373.
Ranged attacks, 327, 372; half damage range, 378; hitting the wrong target, 389; modifiers table, 548; opportunity fire, 390; overshooting, 390; pop-up attacks, 390; shooting blind, 389.
Ranged Combat Modifiers Table, 548.
Rank, 29.
Rapid fire, 373, 408.
Rapid Strike, 54, 93, 370.
Rate of Fire, 270, 373.
Rats, 461.
Rattlesnakes, 458.
Rcl, see Recoil.
Reaction rolls, 8, 494-495, NPC Reactions Table, 559-562.
Reading, 134; see also Literacy.
Ready weapons, 369; readying, 382.
Realism, 11.
Reality Liberation Force, 543.
Reality quakes, 534.
Recoil, 271.
Recovery, 328; see also Healing.
Recovery, 423-424; from unconsciousness, 423.
Regular spells, 239.
list, 301; maintaining, 294; physiology modifiers, 181; prerequisites, 169; racially learned, 453; repair, 190; scope, 176; specialties, 169; studying, 292, 499; teachers, 293; technological, 168; wildcard, 175.
Slam, 371; by multi-hex figures, 392.
Slaves, 518.
Sleep, 50, 65, 136, 140, 154, 155; drowsy, 428; missed sleep, 426.
SM, see Size Modifier.
Smartguns, 278.
Smell, 49, 243.
Snakes, 458; cobra venom, 439; pythons, 458; rattlesnakes, 458.
Social advantages, 32; adding and improving, 291.
Social background, 22.
Social disadvantages, 120.
Social constraints, 30.
Society types, 509-510.
Soldier of Fortune template, 260.
Sounds, see Hearing.
Space sickness, 434.
Spacecraft, 466; table, 465.
Spacing (in combat), 368.
Special spells, 241.
Speed/Range Table, 550.
Spells, 66; Air, 242; area, 239; backfire, 235; blocking, 241; Body Control, 244; caster, 236; casting, 235-238; clerical, 77; Communication and Empathy, 245; Earth, 245; Enchantment, 246, 480-482; Fire, 246; Gate, 247; Healing, 248; information, 241; Knowledge, 249; legality, 507; Light and Darkness, 249; Meta-Spells, 250; melee, 240; Mind Control, 250; missile, 240; Movement, 251; list, 304; Necromantic, 251; prerequisites, 235; Protection and Warning, 252; regular, 239; resisted, 241; special, 242; subject, 236; Water, 253; see also Magic.
Spirits, 41, 55, 68, 76, 113, 193, 200, 212; spirit advantages, 34; Spirit meta-trait, 263.
Spy gear, 289.
ST, see Strength.
Staffs, 240.
Starvation, 426.
Status, 28, 265, 516.
Step (in maneuvers), 368, 386.
Steve Jackson, 6.
Stimulants, 440.
Strangle, 370, 401, 404.
Strength, 14.
Striges, 461.
Striking at weapons, 400.
Structural Damage Table, 558.
Study, 292.
Stunning, 35; mental stun, 420.
Subduing a foe, 401.
Subject (of spells), 236.

Success rolls, 342; buying success, 347; critical success, 347; difficulty, 345; equipment modifiers, 345; influencing rolls, 347; player guidance, 347; repeated attempts, 348.
Success rolls, 8.
Suffocation, 428, 436.
Sunburn, 434.
Sunlight, 434.

Supernatural advantages, 32, 33, 34; disadvantages, 120.
Supers, 34.
Superscience, 513.

Surprise attacks, 393.
Taboo traits, 261.
Takedown, 370.
Taste and smell, 49, 358.

Tech level, see Technology Levels.
Techniques, 229; combat, 230; improving, 292; list, 304.
Technological skills, 168.
Technology Levels, 22, 99, 511-512; and equipment, 27; and genre, 514; and starting wealth, 27; divergent, 513; superscience, 513; table of TLs by field, 512.
Teeth, 91.
Telepathy, 69-71, 91, 210, 245.
Temperature, 9.
Templates, 258, 445-454; cultural, 446; dramatic, 446; occupational, 446; racial, 260, 450-454.
Terrain, 351.
Thief and spy gear, 289.
Throwing things, 355, 357.
Thrashing damage, 15.
Tigers, 456.
Time Tours, Ltd., 539.
Time travel, 64, 26, 256, 265, 516; cost of living, 265, 516; economics, 514; gold and silver, 515; improving character wealth level, 291; moving money between worlds, 514.
Weapon and armor tech levels, 512.
Weapons, 267-281; accessories, 289, 411; accuracy, 269; ammunition, 278; breaking, 401, 485; bulk, 270; carrying, 287; cavalry, 397; cost, 270; fencing, 404; firearms, 278-281; grenades, 277; heavy, 281; incendiaries, 277; infinite cinematic ammunition, 417; Legality Class, 271; malfunction, 278, 407; melee, 271-275; missiles, 281; parry, 269; range, 269; ranged, 275-277, 278-281; rate of fire, 270; reach, 269; reach and Size Modifier, 388, 402; recoil, 271; shots, 270; smartguns, 278; strength, 270; striking at weapons, 400; thrown, 356; weight, 270.
Weather, 243, 351.
Weirdness, 161; weird parallel worlds, 527; weird science, 228, 479.
Werewolves, 83, 84, 137.
Whiplash, 432.
Whips, 406.
White Star Trading, 524, 539.
Wild swings, 388.
Wildcard skills, 175.
Will, 16; Will rolls, 360.
Wolves, 458.
World-jumpers, 544.
Wounding modifier, 379.
Wounds, see Injuries.
Wrench Limb attack, 370, 404.
Xing La, character sheet, 316-317; illustrations, 167, 188, 418, 445.
Zombies, 74, 94, 252, 380.
### Character Sheet

**Name**

**Player**

**Point Total**

**Ht**

**Wt**

**Size Modifier**

**Age**

**Unspent Pts**

**Appearance**

**Languages**

<table>
<thead>
<tr>
<th>Spoken</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DR**

**TL:**

**Cultural Familiarities**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PARRY**

**Reaction Modifiers**

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Status</th>
<th>Reputation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BLOCK**

**Reputation**

**Status**

**Appearance**

**Appearance**

**TL:**

---

### Basic Lift

<table>
<thead>
<tr>
<th>BASIC LIFT (ST x ST)/5</th>
<th>DAMAGE</th>
<th>Thr</th>
<th>Sw</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Basic Speed

<table>
<thead>
<tr>
<th>BASIC SPEED</th>
<th></th>
<th>BASIC MOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Encumbrance

<table>
<thead>
<tr>
<th>ENCUMBRANCE</th>
<th>MOVE</th>
<th>DODGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (0) = BL</td>
<td>BM x 1</td>
<td>Dodge</td>
</tr>
<tr>
<td>Light (1) = 3 x BL</td>
<td>BM x 0.6</td>
<td>Dodge -3</td>
</tr>
<tr>
<td>Medium (2) = 6 x BL</td>
<td>BM x 0.4</td>
<td>Dodge -3</td>
</tr>
<tr>
<td>Heavy (3) = 10 x BL</td>
<td>BM x 0.2</td>
<td>Dodge -4</td>
</tr>
</tbody>
</table>

### Disadvantages and Quirks

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Advantages and Perks

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Skills

<table>
<thead>
<tr>
<th>Name</th>
<th>Level</th>
<th>Relative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Character Sheet**

335
### CHARACTER SHEET

**Name _______________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Damage</th>
<th>Acc</th>
<th>Range</th>
<th>RoF</th>
<th>Shots</th>
<th>ST</th>
<th>Bulk</th>
<th>Rcl</th>
<th>LC</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANGED WEAPONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weapon</td>
<td>Damage</td>
<td>Acc</td>
<td>Range</td>
<td>RoF</td>
<td>Shots</td>
<td>ST</td>
<td>Bulk</td>
<td>Rcl</td>
<td>LC</td>
<td>Notes</td>
</tr>
</tbody>
</table>

**Skills/Techniques _______________________________**

**Disadvantages/Quirks ___________________________**

**Advantages/Perks/TL/Languages/Attributes/Secondary Characteristics ____________**

**SPEED/RANGE TABLE**

For complete table, see p. 550.

<table>
<thead>
<tr>
<th>Speed/Range Modifier</th>
<th>Linear Measurement (range/speed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2 yd or less</td>
</tr>
<tr>
<td>-1</td>
<td>3 yd</td>
</tr>
<tr>
<td>-2</td>
<td>5 yd</td>
</tr>
<tr>
<td>-3</td>
<td>7 yd</td>
</tr>
<tr>
<td>-4</td>
<td>10 yd</td>
</tr>
<tr>
<td>-5</td>
<td>15 yd</td>
</tr>
<tr>
<td>-6</td>
<td>20 yd</td>
</tr>
<tr>
<td>-7</td>
<td>30 yd</td>
</tr>
<tr>
<td>-8</td>
<td>50 yd</td>
</tr>
<tr>
<td>-9</td>
<td>70 yd</td>
</tr>
<tr>
<td>-10</td>
<td>100 yd</td>
</tr>
<tr>
<td>-11</td>
<td>150 yd</td>
</tr>
<tr>
<td>-12</td>
<td>200 yd</td>
</tr>
<tr>
<td>-13</td>
<td>300 yd</td>
</tr>
<tr>
<td>-14</td>
<td>500 yd</td>
</tr>
<tr>
<td>-15</td>
<td>700 yd</td>
</tr>
</tbody>
</table>

**HIT LOCATION**

<table>
<thead>
<tr>
<th>Modifier</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Torso</td>
</tr>
<tr>
<td>-2</td>
<td>Arm/Leg</td>
</tr>
<tr>
<td>-3</td>
<td>Groin</td>
</tr>
<tr>
<td>-4</td>
<td>Hand</td>
</tr>
<tr>
<td>-5</td>
<td>Face</td>
</tr>
<tr>
<td>-7</td>
<td>Skull</td>
</tr>
</tbody>
</table>

*Imp or Pi attacks can target vitals at -3 or eyes at -9.*

**ARMOR & POSSESSIONS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Location</th>
<th>Cost</th>
<th>Weight</th>
</tr>
</thead>
</table>

**POINTS SUMMARY**

Attributes/Secondary Characteristics ____________ [ ]

Advantages/Perks/TL/Languages/

Cultural Familiarity [ ]

Disadvantages/Quirks [ ]

Skills/Techniques [ ]

Other [ ]

Totals: $ ____________ Lbs. ____________
GURPS
Fourth Edition

BASIC SET
CAMPAIGNS

Steve Jackson  Sean Punch  David Pulver

STEVE JACKSON GAMES
Any World
You Can
Imagine.

This book is intended for Game Masters and advanced players. It covers physical feats, combat, vehicles and technology, animals and monsters, world design, and Game Mastering. “Tool kit” chapters let you create new creatures (and even PC races), artifacts, character abilities, and entire game worlds.

It also features a cross-world setting, Infinite Worlds, which you can use to create cross-genre campaigns . . . develop alternate histories . . . play modern characters in a fantasy world . . . whatever you like!

GURPS Fourth Edition offers regular new releases and extensive online support. It’s based on 16 years of gamer feedback from the Third Edition, and is faster and easier to play than ever before. All rules are carefully organized, indexed, and cross-referenced. Charts and tables are clear and legible. And the library of 200+ Third Edition books already in print is a resource that will jump-start any campaign!

This is Book 2 of the two-volume Basic Set. Only Book 1 is necessary to play. Book 2 is required for the Game Master, and players wanting more detail will find it valuable.

By Steve Jackson, David L. Pulver, and Sean M. Punch
Edited by Andrew Hackard and Steve Jackson
Cover Art by Jeff Koke, Christopher Shy, and Rogério Vilela
Cover Design by Victor R. Fernandes
Illustrated by Abrar Ajmal, Michael Clarke, Chris Dien, Alex Fernandez, Roberto Marchesi, Bob Stevlic, Dan Willems, Eric Wilkerson, and Leo Winstead

STEVE JACKSON GAMES
www.sjggames.com
Credits for earlier editions:

Additional Material: Steve Beeman, Craig Brown, Jerry Epperson, Jeff George, Scott Haring, Mike Hurst, Stefan Jones, Jim Kennedy, David Ladyman, Jeff Lease, Walter Milliken, Steffan O'Sullivan, Ravi Rai, W. Dow Rieder, Art Samuels, Scorpia, Curtis Scott


Blindtest: Aaron Allston, Mark Babik, Sean Barrett, Bill Barton, Vicki Barton, James D. Bergman, David Castro, Bruce Coleman, Jerry Epperson, Jeff Flowers, Dave Franz, Cheryl Freedman, Jeff George, Kevin Gona, Kevin Heacox, Carl Leatherman, Guy McLimore, Alexis Mirsky, Joseph G. Paul, Greg Poehlein, Greg Porter, Randy Porter, Mark Redigan, Glenn Spicer, John Sullivan, Rick Swan, Kirk Tate, David Tepool, Bob Traynor, Alexander von Thorn, and many others

Reality Checking: Warren Spector, Monica Stephens, Allen Varney, Jim Gould, David Noel, Rob Kirk

Research Assistance: Mike Hurst, Jeffrey K. Greason, Walter Milliken

Helpful Comments: Many of the above, plus Tim Carroll, Nick Christenson, Jim Duncan, David Dyche, Ron Findling, Mike Ford, Steve Maurer, John Meyer, Ken Rolston, Dave Seagraves, Bill Seurer, Brett Slocum, Gus Smedstad, Karl Wu, and Phil Yanov

Many thanks to everyone above – and for all the others we couldn’t list.

And special thanks to everyone who enjoyed the first three editions and said so!
This is Book 2 of the *GURPS Basic Set, Fourth Edition*.

Why two books? The last edition, after all, was a single book of 256 pages, plus the Instant Characters section.

The short answer is: we added a lot of material. Which translated to a lot of pages. This new edition brings in a great deal of material that’s either brand new or previously appeared in other books (especially the two *Compendiums*). This new *Basic Set* weighs in at a total of 576 pages, more than double the length of the last edition. That’s quite a stack of paper.

We could still have done it as a single book. But for two reasons, we didn’t. First, that would be a thick, heavy book, suitable for stopping bullets but just a bit unwieldy to use. And second, it would be an expensive book. Really, too expensive.

By dividing the manuscript into two parts, we were able to get everything that a player has to have into Book 1. That book has the basic system rules and everything for character creation. What it didn’t have, in the early drafts, was any combat at all... so we added a section with the basics of combat. Now a player needs only Book 1 to get into the game.

Who needs this book? Well, first and foremost, the GM. This book goes into detail about physical feats and combat. It also covers vehicles and technology, animals and monsters, world design, and Game Mastering. "Tool kit" chapters let the GM create new creatures (and even PC races), artifacts, character abilities, and entire game worlds.

But it’s not just for GMs. Players who enjoy detail and who want to participate in the creative side of the game will definitely find this book useful... and so will players who want to become GMs someday. The point is simply that it’s not required. Nevertheless, the books are intended to work together. The pages and chapters are consecutively numbered, and the index covers *both* books and is repeated in both.

In the final analysis, the answer to “why two books?” is simply accessibility. We want the system to be easy to play, easy to learn, and easy to get into. By dividing the text into “necessary for the new player” and “everything else,” we hope we’ve made the new *Basic Set* not just easier to carry around, but also a better introduction to the system. Let us know how we did.

– Steve Jackson

**OTHER SUPPORT AND GM TOOLS**

Game Masters will also find useful material in the *GURPS GM’s Screen*, which includes all the tables necessary to run a *GURPS Fourth Edition* game, copies of *GURPS Lite* and the tables of advantages, disadvantages, and skills from the *Basic Set, Book 1*, as well as several variant character sheets and other useful tools.

If you have access to the Internet... and nowadays that’s almost a given... there’s a great deal of support available, including:

- The free SJ Games webforums at forums.sjgames.com.
- *Pyramid* Magazine, which, for $20 a year, gives subscribers several articles a week. A lot of these relate directly or indirectly to *GURPS*. There are also reviews, cartoons, and other bits of data and inspiration.
- e23 is our electronic publishing division. Browse over to www.sjgames.com/e23/ and see what you find. We have already prepared dozens of PDFs, ranging from short adventures to whole *GURPS* sourcebooks, and we get more ready every week. This will be a very valuable resource. You can purchase game material online, in PDF format, in the same shopping cart you use for your Warehouse 23 orders!
- And, of course, the *GURPS* website itself (www.sjgames.com/gurps/) is constantly being updated with information about all *GURPS* products in and out of print. One brand-new feature will be implemented for many *GURPS* books by the time you read this: the book’s complete bibliography will be online, and every book that’s currently in print will have a hotlink to amazon.com!
Whenever a character attempts to perform an action (e.g., use a skill), roll three dice to determine the outcome. This is called a success roll. The task in question succeeds if the total rolled on the dice is less than or equal to the number that governs the action—most often a skill or an attribute. Otherwise, it fails.

Example: If you attempt to pick a lock with a Lockpicking skill of 9, you must roll 9 or less on 3d to succeed. On a roll of 10 or more, you fail.

Regardless of the score you are rolling against, a roll of 3 or 4 is always a success, while a roll of 17 or 18 is always a failure.

In general, the player makes the die rolls for his character’s actions. However, the GM may always choose to roll the dice in secret—see When the GM Rolls (p. 344).

**When to Roll**

To avoid bogging down the game in endless die rolls, the GM should only require a success roll if there is a chance of meaningful failure or gainful success. In particular, the GM should require success rolls when...

- A PC’s health, wealth, friends, reputation, or equipment are at risk. This includes chases, combat (even if the target is stationary and at point-blank range!), espionage, thievery, and similar “adventuring” activities.
- A PC stands to gain allies, information, new abilities, social standing, or wealth.

The GM should not require rolls for...

- Utterly trivial tasks, such as crossing the street, driving into town, feeding the dog, finding the corner store, or turning on the computer.
- Daily work at a mundane, nonadventuring job. (To evaluate job performance, make monthly “job rolls”; see Jobs, p. 516.)

Regardless of the score you are rolling against, a roll of 3 or 4 is always a success, while a roll of 17 or 18 is always a failure.
When the GM Rolls

There are two sets of circumstances under which the GM should roll for a PC and not let the player see the results:

1. When the character wouldn't know for sure whether he had succeeded. This is true of all rolls to gain information, whether through skills such as Detect Lies, Interrogation, Meteorology, and Search, advantages like Intuition and Oracle, or supernatural divinatory abilities. In this situation, the player declares that he is using his ability and the GM rolls in secret. On a success, the GM gives the player true information – the lower the roll, the better the information. On a failure, the GM either gives no information at all or lies (the higher the roll, the more severe the lie), as appropriate.

2. When the player shouldn't know what's going on. This includes most Sense rolls, rolls to use Danger Sense, etc. Suppose the party is walking along a jungle trail. A jaguar is on a limb ahead. The GM should not say, “There’s a jaguar ahead of you. Roll to see if you notice it.” Neither should he say, “Everybody make a Vision roll. Does anybody have Danger Sense?” Either of these approaches gives too much away. Instead, the GM should roll for each character in secret. If anyone succeeds, the GM can say, “You notice a jaguar on a branch 20 yards ahead!” If nobody succeeds . . . they’re in for a surprise.

Modifiers

The rules often specify modifiers for certain success rolls. These bonuses and penalties affect the number you are rolling against – your “target number” – and not the total rolled on the dice. Bonuses always improve your odds, while penalties always reduce them.

For instance, the Lockpicking skill description states, “-5 if working by touch (e.g., in total darkness).” This means that if you are working in the dark, you must subtract 5 from your Lockpicking skill for that attempt. If your Lockpicking skill is 9, you roll against 9 minus 5, or 4, in the dark.

A specific scenario might provide modifiers to allow for the relative ease or difficulty of a particular situation. For instance, an adventure might state that a lock is +10 to open due to the fact that it is primitive and clumsy. If your Lockpicking skill were 9, you would roll against 9 + 10, or 19. Since the highest roll possible on 3d is 18, it would seem that success is assured. This is almost true, but not quite – see Critical Failure (p. 348).

Modifiers are cumulative unless stated otherwise. For instance, if you tried to open that primitive lock in the dark, both modifiers would apply, and you would roll against 9 - 5 + 10, or 14.

See Culture (p. 23), Language (p. 23), Tech-Level Modifiers (p. 168), Familiarity (p. 169), Equipment Modifiers (p. 345), and Task Difficulty (p. 345) for discussions of common modifiers.

Base Skill vs. Effective Skill

Your base skill is your actual level in a skill, as recorded on your character sheet. Your effective skill for a particular task is your base skill plus or minus any modifiers for that task. In the Lockpicking examples above, base skill is 9 in all cases, while effective skill is 4, 19, and 14 in three different situations.

The terms “base skill” and “effective skill” apply to all success rolls, not just to skill rolls. When you make an
The quality of your equipment modifies your skill rolls for tasks that normally require equipment:

- **No equipment:** -10 for technological skills, -5 for other skills. Note that many skills cannot be used at all without equipment!
- **Improvised equipment:** -5 for technological skills, -2 for other skills.
- **Basic equipment:** No modifier. This is the case most of the time.
- **Good-quality equipment:** +1. Costs about 5x basic price.
- **Fine-quality equipment:** +2. Costs about 20x basic price.
- **Best equipment possible at your TL:** +TL/2, round down (minimum +2). Not usually for sale!

If you have “basic” or better equipment that is not in perfect condition, the following modifiers apply in addition to quality modifiers:

- **Missing important items:** -1 per item.
- **Damaged equipment:** -1 to -3.

Many skills suggest difficulty modifiers – e.g., the -5 to use Lockpicking skill by touch – but the possible variety of tasks is essentially infinite. Here are some guidelines for GMs:

- **+10** – Automatic. Tasks so trivial that the GM should waive the need for a success roll, except under extraordinary circumstances. *Example:* A Driving roll to start a car.
- **+8 or +9** – Trivial. Situations where failure is extremely unlikely, and would require incredibly bad luck. *Example:* A Driving roll to drive around an empty parking lot.
- **+6 or +7** – Very Easy. Tasks where failure is possible, but would require bad luck. *Example:* A Driving roll to drive down an empty suburban street.
- **+4 or +5** – Easy. Most mundane tasks, including rolls made by ordinary people at day-to-day jobs. *Example:* A Driving roll to commute to work in a small town.
- **+2 or +3** – Very Favorable. Mildly risky tasks that most people would undertake without hesitation. *Example:* A Driving roll to commute to work in a teeming metropolis.
- **+1** – Favorable. Tasks that most people would hesitate at, due to the risk, but that a career adventurer would regard as easy. *Example:* A Driving roll to compete in a road rally.
- **0** – Average. Most adventuring tasks, and the majority of skill use under stress. *Example:* A Driving roll in a car chase.
- **-1** – Unfavorable. Stressful tasks that would challenge a novice adventurer, but not an old hand. *Example:* A Driving roll in a high-speed car chase.
- **-2 or -3** – Very Unfavorable. Stressful tasks that would challenge a professional. Skilled adventurers still routinely accept such risks! *Example:* A Driving roll in a high-speed car chase.
- **-4 or -5** – Hard. Tasks so challenging that even an expert will look for alternatives. A true "master" is still unlikely to feel challenged. *Example:* A Driving roll to keep the car on the road while shooting a gun out the window during a high-speed chase.

Equipment modifiers reflect the quality of:

- Special “tools of the trade,” for criminal, military, and espionage skills such as Disguise, Explosives, Forgery, Forward Observer, Holdout, and Lockpicking.
- The contents of your backpack, for outdoor skills like Fishing and Survival.
- Your instruments or lab, for scientific and medical skills such as Alchemy, Diagnosis, Meteorology, Navigation, and Surgery.
- Your shop or toolkit, for Armoury, Carpentry, Electrician, Electronics Repair, Engineer, Machinist, Masonry, Mechanic, Smith, and other skills used to build or repair things.
- Your studio, for artistic skills – Artist, Jeweler, Photography, etc.

*Example:* For First Aid skill, “improvised” might mean leaves and clean mud; “basic,” sterile bandages; “good,” a standard first-aid kit; “fine,” a crash kit (found in most ambulances); and “best,” an entire hospital. Missing antiseptic would give -1, while a first-aid kit salvaged from a wrecked vehicle might give -1 or worse for damaged equipment.
-6 or -7 – **Very Hard.** Situations that even the masters might have second thoughts about. **Example:** A Driving roll in a high-speed chase during a blizzard.

-8 or -9 – **Dangerous.** Tasks at which even the greatest masters expect to fail. **Example:** A Driving roll while shooting a gun in a high-speed chase during a blizzard.

-10 – **Impossible.** No sane person would attempt such a task. The GM may wish to forbid such attempts altogether. **Example:** A Driving roll to steer a car with the knees while firing a bazooka two-handed during a chase through a blizzard.

These modifiers assume a trained character. To get an idea of how tough a task would be for someone working at default, add the default penalty to the difficulty modifier.

**Example:** Someone who never learned to drive is using Driving at its DX-5 default. For him, an everyday commute – “Easy” (+4 or +5) for a trained driver – would be “Average” (DX) or even “Unfavorable” (DX-1), and almost certainly a stressful experience!

The GM can use difficulty modifiers in place of other modifiers if the outcome of a task is too unimportant – or the action too hot – to justify stopping to add up a long string of modifiers. For instance, in a car chase involving a car in bad repair, the GM might bump the difficulty up a level or two instead of assessing an equipment modifier for the car.

### Time Spent

You can reduce the penalty for a tough task – or even get a bonus – by working slowly and deliberately, taking the time to get things right. Conversely, if you are racing to beat a deadline, even the simplest task can become tricky.

**Extra Time:** Taking more time than usual for a task (as specified by the rules or the GM) gives a bonus to a noncombat action: $2 \times$ as long gives $+1$, $4x$ gives $+2$, $8x$ gives $+3$, $15x$ gives $+4$, and $30x$ gives $+5$. For instance, taking a work day (eight hours) to do a one-hour task would give $+3$. This bonus only applies if it would make sense to take extra time for the task at hand (GM’s judgment). You can take extra time to open a safe or figure out an alien artifact, but not to neutralize poison or chase a fleeing suspect!

**Haste:** Hurrying gives a penalty: -1 per 10% less time taken. For instance, attempting a task in half the usual time (-50%) is at -5. The maximum time reduction is normally 90% (taking 1/10 the prescribed time), at -9. In a cinematic game, the GM might allow one attempt at -10 to complete a task instantly; e.g., a Mechanic roll at -10 to fix a machine by kicking it! However, you cannot hasten tasks that require a certain amount of time due to natural laws (e.g., a chemical reaction) or the limitations of equipment (e.g., the top speed of a vehicle). When in doubt, the GM’s decision is final.

Note that if a skill specifies time modifiers, these override the generic modifiers above. For instance, magic spells have their own rules for extra time (see Ceremonial Magic, p. 238) and cannot be rushed save by those with high skill (see Magic Rituals, p. 237).

### Long Tasks

The GM may define major projects as “long tasks” that require a number of man-hours of work with one or more attributes or skills. For instance, the GM might rule that building a rope bridge over a chasm requires 40 man-hours of DX-based ordinary labor, 24 man-hours of Carpentry work, and eight man-hours of Engineer work.

The normal limit on labor for each person involved is eight hours per 24-hour day. At the end of each day, each worker rolls vs. the skill used that day (the GM rolls for NPCs). A success puts eight man-hours of work toward the task; a critical success counts 50% extra. A failure counts as half as much. A critical failure contributes nothing, and ruins 2d man-hours of work already done!

A supervisor who works a full shift with his workers may opt to coordinate his staff instead of working himself. Make an Administration roll if organization matters more than inspiration, or a Leadership roll in the opposite situation (GM’s judgment). On a success, the workers get +1 to their rolls for the day; on a critical success, they get +2. On any failure, the supervisor contributes nothing at all.

It is possible to work longer shifts. To get an NPC to do this, make an Influence roll (see Influence Rolls, p. 359). Roll against HT on any day you work more than eight hours, at -1 per hour over 10. On a success, make the usual skill roll and (except on a critical failure) base the man-hours contributed on the time worked. On a failure, your skill roll has a penalty equal to your margin of failure or -2, whichever is worse, and you lose FP equal to the size of your penalty – but you still contribute extra labor if your skill roll succeeds. Treat a critical failure as any other failure, except that you are so exhausted that you cannot work the next day!

It is possible to cut corners and reduce the man-hours of labor required, as described under Time Spent. All workers doing a given type of labor make their skill rolls at the usual penalty for haste. For instance, the manual laborers working on the rope bridge above could reduce their work to 20 man-hours, but they would roll at DX-5.

Likewise, it is possible to take extra time to get a bonus. For instance, if those laborers put in 80 man-hours, they would roll at DX+1. This strategy is likely to backfire if the extra time takes the form of long shifts, however.
Degree of Success or Failure

Once you have calculated effective skill by applying all relevant modifiers to base skill, roll 3d to determine the outcome. If the total rolled on the dice is less than or equal to your effective skill, you succeed, and the difference between your effective skill and your die roll is your margin of success.

Example: If you have effective skill 18 and roll a 12, you succeed; your margin of success is 6.

If you roll higher than your effective skill, you fail, and the difference between the die roll and your effective skill is your margin of failure.

Example: If you have effective skill 9 and roll a 12, you fail; your margin of failure is 3.

Always note your margin of success or failure, as many rules use these margins to calculate results that matter in play. Even when the rules don’t call for these numbers, the GM might wish to reward a large margin of success with a particularly favorable outcome, or assess especially dire consequences for a large margin of failure!

Extremely high or low rolls have special effects – beyond those for normal success and failure – regardless of your exact margin of success or failure.

Critical Success

A critical success is an especially good result. You score a critical success as follows:

- A roll of 3 or 4 is always a critical success.
- A roll of 5 is a critical success if your effective skill is 15+.
- A roll of 6 is a critical success if your effective skill is 16+.

When you roll a critical success, the GM determines what happens to you. It is always something good! The lower the roll, the better “bonus” he gives you.

A critical hit is a critical success scored on an attack. The GM does not determine the result. Instead, use the Critical Hit Table (p. 556).

Optional Rule: Influencing Success Rolls

Here are two options for GMs who wish to let players spend bonus character points (see p. 498) to influence game-world outcomes. Be aware that rules of this kind tend to encourage players to sacrifice long-term development for short-term success. This is most appropriate for genres where the heroes usually “win” but don’t develop much; e.g., classic comic-book supers. The GM might want to set a limit on how many points each player can spend this way per game session.

Buying Success

A player can spend bonus character points to alter the outcome of his last success roll. It costs 2 points to turn critical failure into failure, 1 point to convert failure to success, or 2 points to turn success into critical success. Add these costs for multiple shifts (e.g., critical failure to critical success costs 5 points). To keep the PCs from winning every battle with a series of critical hits, the GM may choose to forbid purchase of critical successes, at least in combat.

Note that because “guaranteed success” can destroy suspense, this optional rule is not recommended for horror or mystery games.

Player Guidance

A player can spend bonus character points to specify the game-world effects of a recent success. Whenever he rolls a success (or in a situation that didn’t call for a roll), he may spend 2 points and add a plausible element to the world or scene. A player who rolls a critical success may spend 1 point for the same effect. This replaces any other beneficial effects of the critical success.

Example: Dr. Smith is working at the Federal Laboratory for Advanced Weapons when a giant robot bursts through the front doors, four stories below. Smith makes his Sense roll and notices the attack. Smith’s player suggests, “I was walking past the security station and spotted the robot on a monitor. I go over to the console and train the sensors on the robot.” The GM hadn’t previously mentioned a security station or sensors, but since that fits his view of the FLAW, he agrees. Smith’s player pays 2 points and the GM fits the scene in.

In addition to being plausible, a suggestion must be acceptable to the GM and the other players. In general, the GM should go along with suggestions that are imaginative, that move the plot forward, or that save a PC’s life. The GM should not approve a suggestion that would short-circuit the plot, contradict a previously established fact, or harm or steal the scene from another PC. In borderline cases, the player and GM can negotiate.

The GM should make a note of any element added using this rule, as it becomes a permanent part of the game world!
**Critical Failure**

A critical failure is an especially bad result. You score a critical failure as follows:

- A roll of 18 is always a critical failure.
- A roll of 17 is a critical failure if your effective skill is 15 or less; otherwise, it is an ordinary failure.
- Any roll of 10 greater than your effective skill is a critical failure: 16 on a skill of 6, 15 on a skill of 5, and so on.

When you roll a critical failure, the GM determines what happens to you. It is always something bad – the higher the roll, the worse the result.

A critical miss is a critical failure scored on an attack. The GM does not determine the result. Instead, use the Critical Miss Table (p. 556).

**Repeated Attempts**

Sometimes you will only get one chance to do something (defuse a bomb, jump over a crevasse, remove an inflamed appendix, please the King with a song). Other times you can try over and over again until you succeed (pick a lock, catch a fish, analyze a poison). Still other times you will not know whether you succeeded or failed until it's too late to try again (translate an old treasure map, order in a French restaurant, build a ship). Finally, there are times when you are injured by failure but can afford to fail a few times (climb a wall, impress a savage tribesman).

The GM must use common sense to distinguish between these cases, according to the exact situation in which the players find themselves. As a rule:

- If the first failure kills them or destroys the object of the attempt, that's that.
- If a failure causes damage of some kind, assess the damage and let them try again after a “reasonable” time passes. (Skill descriptions frequently state the time required.)
- If a failure causes no damage, let them try again after a reasonable time, but at -1 per repeated attempt – that is, -1 on the second attempt, -2 on the third, and so on – until they succeed or give up.
- If repeated attempts are the norm for the task (e.g., when attacking in combat), or if it's long task, tell them that their attempt failed but let them try again at no special penalty, in the usual amount of time.

**Contests**

Sometimes a situation will arise in which two characters must compare attributes, skills, or other traits to settle a competition. The one with the highest score doesn't always win . . . but that's the way to bet. A "Contest" is a quick way to handle such a competitive situation without playing it out in detail.

In a Contest, each competitor attempts a success roll against the ability being tested – with all applicable modifiers – and then compares his result to his opponent's. There are two different ways to make this comparison.

**Quick Contests**

A “Quick Contest” is a competition that is over in very little time – often in one second, perhaps even instantly. Examples include two enemies lunging for a gun, or two knife throwers seeing who gets closer to the bull's-eye.

Each competitor attempts his success roll. If one succeeds and the other fails, the winner is obvious. If both succeed, the winner is the one with the largest margin of success; if both fail, the winner is the one with the smallest margin of failure. A tie means nobody won (in the examples above, both fighters grabbed the weapon at once, or the knives hit the same distance from the bull's-eye).

**Margin of Victory**

The amount by which the winner beat the loser is often important – success by 5 vs. failure by 5 generally means more than success by 2 vs. success by 1! The winner's “margin of victory” is the difference between his margin of success and the loser's margin of failure if both succeeded, the sum of his margin of success and the loser's margin of failure if he succeeded and the loser failed, or the difference between the loser's margin of failure and his margin of failure if both failed.

**Resistance Rolls**

Most abilities that can affect an unwilling subject offer the subject an attempt to resist using an attribute, skill, or supernatural ability. This is sometimes a Quick Contest between the attacking ability and the defender's resistance, in which case two special rules apply:

1. **The attacker must succeed to win.** He cannot win by having the smallest margin of failure. If he fails his roll, he loses automatically and his subject does not need to attempt a resistance roll.

2. **The attacker must win to affect the subject.** All ties go to the defender.
**Regular Contests**

A “Regular Contest” is a slow competition with much give and take – for instance, arm wrestling.

Each character attempts his success roll. If one succeeds and the other fails, the winner is obvious. If both succeed or both fail, the competitors’ relative positions are unchanged and they roll again. Eventually, one character succeeds when the other fails. At this point, the one who made his roll is the winner.

The length of game time each attempt takes depends on the activity, and is up to the GM. In a combat situation, each attempt takes one second . . . but in a library-research contest, with the fate of the world hanging on who finds a certain obscure reference first, each attempt could represent days of time.

**Extreme Scores**

If both contestants have a score of 6 or less, a Regular Contest can bog down the game as both sides roll failure after failure. To keep the game moving, raise the lower score to 10 and add the same amount to the higher score.

**The Rule of 16**

If a supernatural attack (magic spell, psi ability, etc.) offers a resistance roll and the subject is living or sapient, the attacker’s effective skill cannot exceed the higher of 16 and the defender’s actual resistance. If it does, reduce it to that level.

**Example:** A wizard has an effective skill of 18 with his Mind-Reading spell. If he tries to read the mind of someone with a Will of 16 or less, he rolls against 16. If his subject has a Will of 17, he rolls against 17. And if his target has a Will of 18 or higher, he rolls against 18.

**Example:** For a 19 vs. 16 Contest, subtract 6 from each score to make it 13 vs. 10.

When both scores are greater than 20 – e.g., a Contest of ST between dinosaurs – even this will not suffice. Instead, reduce the lower score to 10 and multiply the higher score by (10/lower score), rounding down.

**Example:** For a 600 vs. 500 Contest, multiply the higher score by 10/500 and set the lower one to 10 to make it 12 vs. 10.

**Physical Feats**

Below are rules for common physical tasks of importance to adventurer. For tasks not listed here, make DX rolls for matters of precision and HT rolls for feats of endurance. To determine weight moved or work done, use Basic Lift. Movement speed should generally be proportional to Basic Move. For more on basic attributes and secondary characteristics, see Chapter 1.

**Climbing**

To climb anything more difficult than a ladder, roll against Climbing skill (p. 183). This defaults to DX-5. Modifiers to the roll depend on the difficulty of the climb (see below). In all cases, subtract your encumbrance level from your roll as well. Climbing while heavily laden is a dangerous matter!

Make one roll to start the climb and another roll every five minutes. Any failure means you fall (see Falling, p. 431). If you secured yourself with a rope, you will fall only to the end of the rope unless you rolled a critical failure.

The table below gives skill modifiers and climbing speeds for some common climbs. In most cases, use the speeds in the “Regular” column. The “Combat” column is for climbs inspired by rage or terror, which always cost at least 1 FP – or double the FP cost given in an adventure or assessed by the GM. Climbs in combat require a Move maneuver.

<table>
<thead>
<tr>
<th>Type of Climb</th>
<th>Modifier</th>
<th>Combat</th>
<th>Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder going up</td>
<td>no roll</td>
<td>3 rungs/sec</td>
<td>1 rung/sec</td>
</tr>
<tr>
<td>Ladder going down</td>
<td>no roll</td>
<td>2 rungs/sec</td>
<td>1 rung/sec</td>
</tr>
<tr>
<td>Ordinary tree</td>
<td>+5</td>
<td>1 ft/sec</td>
<td>1 ft/3 sec</td>
</tr>
<tr>
<td>Ordinary mountain</td>
<td>0</td>
<td>1 ft/2 sec</td>
<td>10 ft/min</td>
</tr>
<tr>
<td>Vertical stone wall</td>
<td>-3</td>
<td>1 ft/5 sec</td>
<td>4 ft/min</td>
</tr>
<tr>
<td>Modern building</td>
<td>-3</td>
<td>1 ft/10 sec</td>
<td>2 ft/min</td>
</tr>
<tr>
<td>Rope-up</td>
<td>-2</td>
<td>1 ft/sec</td>
<td>20 ft/min</td>
</tr>
<tr>
<td>Rope-down (w/o equipment)</td>
<td>-1</td>
<td>2 ft/sec</td>
<td>30 ft/min</td>
</tr>
<tr>
<td>(w/ equipment)</td>
<td>-1</td>
<td>12 ft/sec</td>
<td>12 ft/sec</td>
</tr>
</tbody>
</table>

**Success Rolls**
Digging

Digging rate depends on the type of soil, the digger's Basic Lift (that is, STxST/3), and the quality of the tools available.

---

**Loose Soil, Sand, etc.:** A man can dig $2 \times \text{BL}$ cubic feet per hour (cf/hr).

**Ordinary Soil:** A man can dig $\text{BL}$ cf/hr. One man with a pick can break up $4 \times \text{BL}$ cf/hr, making it into loose soil, which is easier to remove. The most efficient way to dig is with one man with a pick, and two shovellers clearing behind him.

**Hard Soil, Clay, etc.:** Must be broken up first by a pick, at $2 \times \text{BL}$ cf/hr.

---

**Different Gravity**

A world's gravity is measured in “Gs,” with 1G being Earth-normal conditions. In comparison, Mars has 0.38G and the Moon has 0.17G.

**Microgravity** is extremely low gravity (e.g., that of an asteroid or small moon) – for game purposes, anything below 0.1G.

**Zero gravity** is weightlessness, or “free fall,” as found in space and aboard any spacecraft not spinning, accelerating, or otherwise generating artificial gravity.

In higher or lower gravity, **mass** stays the same, but **weight** changes.

---

**Encumbrance and Move in Different Gravity**

If local gravity is more than 1G, multiply the sum of your body weight and the weight of everything you're carrying by (local gravity in Gs)-1. This is the extra weight you're carrying due to high gravity. Add this to your encumbrance when determining Move.

*Example:* You weigh 150 lbs. and are carrying 30 lbs. of gear. On a 1.2-G world, that amounts to an extra weight of $(150 + 30) \times (1.2 - 1) = 36$ lbs. Since you're already carrying 30 lbs., your total encumbrance is 66 lbs.

If local gravity is less than 1G, multiply the weight of the gear you're carrying by the local gravity, and use the modified weight to determine your encumbrance. There is a similar reduction in your body weight; this does not affect encumbrance, but it lets you jump further (see below). In very low gravity, you may be able to move faster than your Basic Move by making a series of running broad jumps instead of walking!

In **zero gravity**, you float in space (unless using magnetic boots, thrusters, etc.). If you can't fly, you must push off from a solid surface to move. Your Move when doing so is equal to ST/2, rounded down. You will keep going at that speed until you grab or collide with something!

---

**Actions in Different Gravity**

In gravities other than 1G, the jumping rules (p. 352) need modification. Multiply your normal jumping distances by the ratio of 1G to local gravity. For instance, under 1.25G, you jump 1/1.25 = 0.8 times as far; while under 0.2G, you jump 1/0.2 = 5 times as far. *(Exception: Do not multiply the bonus high-jump distance you get from a running start!)* If this lets you jump at least twice as far as normal, use the rules under Super Jump (p. 89) to determine how fast you can move by bounding along.

When throwing (p. 355), multiply distance by the ratio of 1G to local gravity, just as you would for jumping. *Damage* from thrown objects does not change, as this is based on mass.

Gravity also affects falls. Multiply terminal velocity by local gravity. See Falling (p. 431) for what this implies.

In zero gravity, your skills and DX rolls are affected as well; see Free Fall (p. 197). This does not apply when firing beam weapons (unless they have Recoil 2 or more) or operating vehicles or tools specifically designed for zero gravity (e.g., a spacecraft).

---

**G-Increments and Attribute Penalties**

If local gravity differs from your home gravity (see Home Gravity, p. 17), you might become disoriented and suffer physiological effects. The change in gravity you can tolerate without penalties is your “G-Increment.” This is 0.2G unless you have the Improved G-Tolerance advantage (p. 60).

In higher or lower gravity than usual, count the number of G-Increments from your home gravity, rounding down. This determines the penalties you suffer. For instance, an Earth native used to 1G treats 0.81G to 1.19G as zero G-Increments, but 0.8G or 1.2G counts as one G-Increment.

**DX:** You are at -1 DX per G-Increment of difference (-1 per two full G-Increments, if you have the G-Experience advantage, p. 57). This applies to activities that require agility or judging ballistic trajectories; it affects Broadsword, Driving, and Guns, but not Beam Weapons or Lockpicking.

**IQ:** You are at -1 IQ per two full G-Increments of higher gravity, due to reduced blood flow to the brain and general fatigue. Lower gravity has no effect.

**HT:** You are at -1 HT per two full G-Increments of higher gravity, because the heart has to work harder. Lower your FP score by the same amount. There is no effect in lower gravity – although microgravity or zero gravity might cause space sickness (see Space Adaptation Syndrome, p. 434), or even have lasting ill effects in the long term.

See Temporary Attribute Penalties (p. 421) to learn how attribute penalties affect secondary characteristics and skills.
and then shoveled at 2×BL cf/hr. A lone man with both pick and shovel can only remove 0.6×BL cf/hr – he loses time switching between tools.

**Hard Rock:** Must be broken by a pick at BL cf/hr (or slower, for very hard rock!), and then shoveled at BL cf/hr.

All of the above assumes iron or steel tools! **Halve** speeds for wooden tools (common at TL5 and below). **Divide by 4** (or more) for improvised tools – bare hands, mess kits, etc.

**Time Required and Fatigue Cost**
To find the time required to dig a given hole, find the volume of the hole in cubic feet by multiplying height × width × depth (all in feet). Then divide the number of cubic feet by the digging rate to find the hours of work required.

Each hour of work costs 1 FP for loose soil, 2 FP for ordinary soil, 3 FP for hard soil, and 4 FP for hard rock.

**Hiking**
Sustainable cross-country speed on foot depends on ground Move. Start with Basic Move and reduce it for encumbrance (see *Encumbrance and Move*, p. 17), injury (see *General Injury*, p. 419), and exhaustion (see *Lost Fatigue Points*, p. 426), as applicable. The distance in miles you can march in one day, under ideal conditions, equals 10 × Move.

If you have the Enhanced Move (Ground) advantage, you may apply your movement multiple to this distance. For instance, Enhanced Move 1 (Ground) multiplies Move by two, doubling daily marching distance. See *Enhanced Move* (p. 52).

A successful roll against Hiking skill (p. 200) increases marching distance by 20%. Roll daily. A group led by someone with Leadership skill at 12+ may make a single roll against the group’s average Hiking skill. (Hiking defaults to HT-5 for those who have not studied it.) Success lets the entire group march 20% farther; failure means the whole group must forgo the bonus.

When these rules result in different speeds for different members of a party, the party must either move at the speed of its slowest member or split up. Note that a party that has opted to make a single Hiking roll for the entire group has already chosen not to split up!

**Terrain**
Once you know your ideal daily mileage, modify it for terrain as follows:

- **Very Bad:** Deep snow, dense forest, jungle, mountains, soft sand, or swamp. ×0.20.
- **Bad:** Broken ground (including streams), forest, or steep hills. ×0.50.
- **Average:** Light forest or rolling hills ×1.00.
- **Good:** Hard-packed desert or level plains. ×1.25.

**Weather**
Weather conditions can further modify distance traveled:

- **Rain:** Rain halves off-road speed in any terrain. See *Roads* (below) for the effects of rain on roads.
- **Snow:** Ankle-deep snow halves speed in any terrain. Anything deeper divides speed by 4 or more. **Exception:** Skis allow travelers to treat any depth of snow as Average terrain. Replace Hiking skill with Skiing skill (p. 221) when traveling on skis.
- **Ice:** Cold combined with moisture – due to rain, sleet, snowmelt, etc. – results in ice. A coating of ice halves speed in any terrain. **Solid ice**, such as a frozen lake or river, is effectively its own terrain type; treat it as Bad terrain. **Exception:** Treat solid ice as Good terrain for those with skates. Skating skill (p. 220) replaces Hiking skill when traveling on skates.

**Holding Your Breath**
Adventurers often need to hold their breath – whether to dive or to survive poison gas, strangulation, vacuum, etc. Your HT determines the length of time you can hold your breath, as follows:

- **No Exertion** (e.g., sitting quietly or meditating): HTx10 seconds.
- **Mild Exertion** (e.g., operating a vehicle, treading water, or walking): HTx4 seconds.
Jumping Distance

Your Basic Move determines jumping distance, as follows:

High Jump: (6 × Basic Move) - 10 inches. For example, a Basic Move of 6 lets you jump 26” straight up. For a running jump, add the number of yards you run to Basic Move in this formula. Maximum running high-jump height is twice standing high-jump height.

Broad Jump: (2 × Basic Move) - 3 feet. For example, a Basic Move of 6 lets you jump 9 feet from a standing start. For a running jump, add the number of yards you run to Basic Move in this formula. Maximum running broad-jump distance is twice standing broad-jump distance.

Those with the Enhanced Move (Ground) advantage (p. 52) may apply their movement multiplier to Basic Move before inserting it into these formulas when they have a running start. This is instead of adding the number of yards run! For instance, a horse with Basic Move 6 and Enhanced Move 1 makes running jumps as if its Basic Move were 12.

Those who have Super Jump (p. 89) double the final jumping distance for each level of that advantage. This is cumulative with the effects of Enhanced Move!

Remember that 12 inches equal one foot, and that 3 feet equal one yard (or one hex on a battle map).

Jumping Rules

The following rules for jumping are optional. Only use them if you enjoy extra detail!

ST and Jumping

Basic Move is a ready-made measure of jumping ability – after all, it measures running speed, and running is just a series of rapid hops. However, unnaturally strong supers and monsters in fiction can often make mighty leaps without being speedsters. To emulate this, the GM may allow those with Basic Lift in excess of body weight to use the higher of ST/4 (round down) or Basic Move in the jumping distance formulas.

Jumping with Encumbrance

For added realism, multiply jumping distances by the encumbrance factors given under Encumbrance and Move (p. 17): ×1 for None, ×0.8 for Light, ×0.6 for Medium, ×0.4 for Heavy, and ×0.2 for Extra-Heavy.

Jumping During Combat

The jumping distance formulas assume you take the time to crouch and prepare for the jump. In combat, this takes two consecutive Concentrate maneuvers. Halve all distances if you jump without such preparation.

If you jump over a small obstacle during a fight (anything with a Size Modifier 3 less than yours or smaller), you must use a Move maneuver, and the jump costs one extra movement point.

To jump over a larger obstruction (e.g., a chair) or onto something (e.g., a table) during a fight takes your entire turn and requires a Move maneuver. Unless the jump is extreme, the GM will assume you can make the jump. (Don’t interrupt a battle to calculate jumping distance every time somebody jumps onto a chair!)

However, you must make a DX roll when you make a vertical jump or a long horizontal one. A difficult jump (into a pit, for instance) might give -1 to -5 to this DX roll. The GM determines whether you must roll, and at what penalty. On a failure, you fall. It takes two Change Posture maneuvers to stand up again. On a critical failure, you fall off the thing you jumped onto, or land badly if you were jumping down, and take normal falling damage for that height (see Falling, p. 431).

To clamber onto a vertical obstacle without risking a DX roll, take two consecutive Move maneuvers. Success is automatic.

Jumping Skill

If you have the Jumping skill (p. 203), you may substitute half your skill level, rounded down, for Basic Move in the distance formulas. In addition, you may roll against Jumping instead of DX whenever you make a difficult jump.
LIFTING AND MOVING THINGS

Basic Lift – STxST/5 pounds – governs the weight you can pick up and move. The GM may let multiple characters add their BL (not their ST) whenever it seems reasonable; e.g., to carry a stretcher or pull a wagon.

One-Handed Lift: 2xBL (takes two seconds).

Two-Handed Lift: 8xBL (takes four seconds).

Shove and Knock Over: 12xBL. Double this if you have a running start.

The GM can also make allowances for precariously balanced objects, to make them easier to tilt.

Carry on Back: 15xBL. Thus, you can carry more than you can lift by yourself . . . but every second that your encumbrance is over 10xBL (that is, Extra-Heavy encumbrance), you lose 1 FP.

Shift Slightly: Depending on your footing and the way you are braced, you could shift or rock 50xBL.

Pulling and Dragging

When you pull a load behind you unassisted, use its full weight. Halve effective weight if you are pulling a sledge over snow or ice, divide effective weight by 10 for a two-wheeled cart, and divide effective weight by 20 for a four-wheeled wagon. (Remember to add the weight of the sledge, cart, or wagon to that of the load before dividing!)

In all cases, if the surface is smooth and relatively level – for instance, a concrete floor, a proper road, or a frozen lake – half the effective weight of the load. This is cumulative with the effects of a sledge, cart, or wagon.

Final effective weight pulled, after all modifiers, cannot exceed 15xBL if you are to have any hope of moving the object at all. Determine your encumbrance level using effective weight, and work out Move normally.

LIFTING SKILL

A successful roll against Lifting skill (p. 205) increases your Basic Lift by 5% times your margin of success for the purpose of picking up heavy objects. For instance, if you have Lifting at 14, a roll of 9 lets you lift an extra 25%. Roll once per lift.
RUNNING

Your running speed, or ground Move, is equal to your Basic Move score modified for encumbrance – see *Encumbrance and Move* (p. 17). In combat, running is just a series of Move maneuvers. Use the more detailed rules below when it is important to know whether the heroes catch the plane, escape the savage pygmies, or whatever.

Sprinting

Sprinting is all-out running. It is very fast, but also fatiguing (see *Fatigue Cost*, below). Use it when you need to cover a short distance quickly, and can afford to arrive at your objective somewhat fatigued.

Move multiplier reach top speed. Use your Enhanced Basic Move every second until you (Ground), you can accelerate by your hex on a battle map.

with Move 9 or less can move one extra sprinter gets +1 Move. Thus, sprinters Move 8. Assume that even the slowest in the example above, you would have

You may only move at your maximum sprinting speed if the ground is good and you are running more or less straight at some goal. Any deviation from “forward” movement requires you to run at normal ground Move for one second before you can resume sprinting.

Paced Running

If you need to run a long distance, you will want to pace yourself to avoid exhaustion. Paced running averages exactly half the sprinting speed calculated above. For instance, with a

Because they do not fatigue – in general, such characters will always sprint.

SWIMMING

Unless you are Amphibious (p. 40) or Aquatic (p. 145), you must roll against Swimming skill (p. 224) any time you enter water over your head. Swimming defaults to HT-4. Roll when you first enter the water, and again every five minutes.

Modifiers: +3 if you entered the water intentionally; a penalty equal to twice your encumbrance level (e.g., Heavy encumbrance gives -6); +1 if you are Overweight, +3 if Fat, or +5 if Very Fat (see *Build*, p. 18).

On a failure, you inhale water! Lose 1 FP and roll again in five seconds – and so on, until you drown, are rescued (see *Lifesaving*, below), or make a successful Swimming roll and get your head above water. If you successfully recover, roll again in one minute; if you succeed, go back to making rolls five minutes apart. Yes, you can shout for help!

You may try to get rid of armor, etc. after making your first successful Swimming roll. Roll vs. DX for each item you try to remove; roll at -4 to remove shields, helmets, or torso armor. A failed roll means you inhale water; with penalties as above.

Once you reach 0 FP, you must make a Will roll every second or fall unconscious, and are likely to die unless you are rescued. See *Suffocation* (p. 436) for details.

**Swimming Speed**

Land-dwellers such as humans have water Move equal to Basic Move/5 (round down), although it is possible to modify this slightly; see *Move in Other Environments* (p. 18). Minimum water Move for such characters is 1 yard/second.

Amphibious and Aquatic beings have water Move equal to their full Basic Move.

When swimming long distances, use a 10-second time scale. The number of yards you can swim in 10 seconds is equal to 10 times your water Move, modified downward for encumbrance (see *Encumbrance and Move*, p. 17). For instance, water Move 1 and Heavy encumbrance would let you swim four yards in 10 seconds.
**Fatigue Cost**

After every minute of top-speed swimming, roll against the higher of HT or Swimming skill. On a failure, you lose 1 FP. Once you are reduced to less than 1/3 your FP, halve your water Move; see Fatigue (p. 426).

If you are swimming slowly, or just staying afloat, make this roll every 30 minutes.

**Lifesaving**

You can use the Swimming skill to rescue a drowning person. Make a Swimming roll at -5, plus or minus the difference in ST between you and the person you are rescuing. If the players think of good lifesaving techniques, the GM may give them a bonus to this roll.

On a failure, you inhale water and lose 1 FP, but may try again after one minute. On a critical failure, the victim nearly drowned you! This costs 6 FP, and you must break off the rescue attempt.

**Throwing Distance**

To avoid slowing down the game with math, the GM should allow any throw he deems reasonable . . . but when you need to know the exact distance you can throw an object, use the following procedure:

1. Divide the object’s weight in pounds by your Basic Lift to get the “weight ratio.”
2. Find the weight ratio in the Weight Ratio column of the table below. If it falls between two values, use the higher value.
3. Read across to the Distance Modifier column and find the “distance modifier.”
4. Multiply your ST by the distance modifier to find the distance in yards you can throw the object.

**Example:** You have ST 12, giving a BL of 29 lbs. You need to throw a 120-lb. body over a two-yard pit. Divide weight by BL: 120/29 = 4.1. This falls between 4.0 and 5.0 in the Weight Ratio column, so treat it as 5.0. The associated distance modifier is 0.12. Multiplying by ST, your range is 0.12 x 12 = 1.4 yards. Oops! The body just hit the bottom of the pit.

<table>
<thead>
<tr>
<th>Weight Ratio</th>
<th>Distance Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>3.5</td>
</tr>
<tr>
<td>0.10</td>
<td>2.5</td>
</tr>
<tr>
<td>0.15</td>
<td>2.0</td>
</tr>
<tr>
<td>0.20</td>
<td>1.5</td>
</tr>
<tr>
<td>0.25</td>
<td>1.2</td>
</tr>
<tr>
<td>0.30</td>
<td>1.1</td>
</tr>
<tr>
<td>0.40</td>
<td>1.0</td>
</tr>
<tr>
<td>0.50</td>
<td>0.8</td>
</tr>
<tr>
<td>0.75</td>
<td>0.7</td>
</tr>
<tr>
<td>1.00</td>
<td>0.6</td>
</tr>
<tr>
<td>1.50</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Damage From Thrown Objects**

Thrown objects inflict thrust damage for your ST (see Damage Table, p. 16), modified for weight as shown on the table below. Damage is usually crushing, but the GM may rule that a sharp object does cutting, piercing, or impaling damage instead. A fragile object (or a thrown character) takes the same amount of damage it inflicts; roll damage separately for the object and the target.

<table>
<thead>
<tr>
<th>Weight Ratio</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to BL/8</td>
<td>Thrust, -2 per die</td>
</tr>
<tr>
<td>Up to BL/4</td>
<td>Thrust, -1 per die</td>
</tr>
<tr>
<td>Up to BL/2</td>
<td>Thrust</td>
</tr>
<tr>
<td>Up to BL</td>
<td>Thrust, +1 per die</td>
</tr>
<tr>
<td>Up to 2xBL</td>
<td>Thrust</td>
</tr>
<tr>
<td>Up to 4xBL</td>
<td>Thrust, -1/2 per die (round down)</td>
</tr>
<tr>
<td>Up to 8xBL</td>
<td>Thrust, -1 per die</td>
</tr>
</tbody>
</table>

**Example:** You have ST 28, which gives you a BL of 157 lbs. and a thrust damage of 3d-1. You hit a foe with a hurled 50-lb. bag of cement. It is between BL/4 (39 lbs.) and BL/2 (78 lbs.). As shown on the table above, it does straight thrust damage, or 3d-1.

**Catching**

If someone throws an object at you, you may make an active defense roll to avoid it. However, if he deliberately throws it to you – by successfully lobbing it into your general area – you can try to catch it. Roll against DX or a suitable Sports skill to make the catch, at -4 if you are not taking a Wait maneuver, but at +1 per two full points by which the thrower made his roll. This counts as a parry with your catching hand.

You can also attempt to intercept a thrown object en route to a catcher. Treat this as a parry against a thrown weapon (see Parrying, p. 376). On a success, you snatch the thrown object out of the air.

**Throwing**

You can throw anything you can pick up – that is, anything with a weight of 8xBL or less. If the object you wish to throw is not already in your hands, you must take one or more Ready maneuvers to pick it up. See Lifting and Moving Things (p. 353) for details.

Throwing an object during combat – whether as an attack or not – requires an Attack maneuver. You can throw objects that weigh up to 2xBL using one hand; heavier objects require a two-handed throw. Roll against DX-3 to hit a specific target, or against DX to lob something into a general area. Apply the usual modifiers for target size, speed, and distance.

<table>
<thead>
<tr>
<th>Weight Ratio</th>
<th>Distance Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>0.30</td>
</tr>
<tr>
<td>2.5</td>
<td>0.25</td>
</tr>
<tr>
<td>3.0</td>
<td>0.20</td>
</tr>
<tr>
<td>4.0</td>
<td>0.15</td>
</tr>
<tr>
<td>5.0</td>
<td>0.12</td>
</tr>
<tr>
<td>6.0</td>
<td>0.10</td>
</tr>
<tr>
<td>7.0</td>
<td>0.09</td>
</tr>
<tr>
<td>8.0</td>
<td>0.08</td>
</tr>
<tr>
<td>9.0</td>
<td>0.07</td>
</tr>
<tr>
<td>10.0</td>
<td>0.06</td>
</tr>
<tr>
<td>12.0</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Throwing Skill and Throwing Art

When you throw an object that fits into the palm of your hand – such as a bottle, rock, or grenade – you may roll against Throwing skill (p. 226) to hit a target or a general area. Furthermore, if you know Throwing at DX+1 level, add +1 to ST before you multiply it by the distance modifier. Add +2 to ST if you know Throwing at DX+2 or better.

If you have Throwing Art skill (p. 226), you can use it to throw anything. Roll against skill to hit. If you know Throwing Art at DX level, add +1 to ST before you multiply it by the distance modifier, and add +1 per die to thrust damage. These bonuses increase to +2 if you know Throwing Art at DX+1 or better.

Thrown Weapons

The rules above are for throwing rocks, bodies, televisions... anything but weapons. Hurling weapons differ in three important ways:

1. Thrown weapons use Thrown Weapon skills (p. 226) to hit, not DX or Throwing (but Throwing Art does allow you to throw weapons).
2. Many throwing weapons travel significantly farther than “ordinary” objects due to streamlining and stabilization. Others have less range, due to the way they are thrown. For instance, you can hurl a throwing knife as far as these rules suggest, but the range at which it will hit point-first and inflict damage is considerably shorter.
3. Throwing weapons have points, edges, dense striking heads, etc. that focus the force of impact. They almost always do more damage than these rules would indicate.

Extra Effort

Through sheer force of will, you can push your body past its usual limits when you perform physical tasks. This is called “extra effort.” Note that if you have the Machine meta-trait, you cannot use extra effort!

You can use extra effort to increase Basic Lift (but not ST itself) when digging or lifting; daily mileage when hiking; Move when running or swimming; distance (but not Basic Move itself) when jumping; and ST for the purposes of throwing, making a single...
ST roll, or drawing or cocking a bow or crossbow that's too strong for you. You cannot use extra effort to increase the time you can hold your breath – that would be self-defeating!

To apply extra effort, make a Will roll.

Modifiers: -1 per 5% increase in capabilities (e.g., to add 10% to ST, roll at -2). If you are fatigued, apply a penalty equal to the missing FP. Roll at +5 if you are motivated by fear, anger, or concern for a loved one (GM’s decision, but you must usually fail a Fright Check or a self-control roll for a suitable disadvantage, or be the victim of a successful Intimidation attempt, to get this bonus).

Extra effort costs FP whether you succeed or fail. Instantaneous feats (e.g., jumps and throws) cost a flat 1 FP per attempt. Ongoing tasks (digging, running, swimming, etc.) require repeated extra effort rolls, and cost 1 FP per roll. Hiking works differently – see below. Pay the FP cost for extra effort immediately after you attempt your Will roll. Note that the FP spent on extra effort do not penalize this attempt, but give a penalty to future attempts until you recover the FP.

On a success, you gain the desired increase in your physical capabilities. This does not guarantee success at the task at hand – you could still fail the DX roll for an extra-effort jump, for instance. On a critical success, you do not have to pay FP for your extra effort.

On a failure, you achieve only what you would have accomplished without extra effort.

A critical failure means you lose HP equal to the FP spent on the attempt – including any FP the task would have cost without extra effort – and the task fails automatically! If you roll a natural 18, you must also make an immediate HT roll to avoid acquiring a temporary disadvantage appropriate to the task (see below for examples). Handle recovery as described in Duration of Crippling Injuries (p. 422). A sufficiently bad HT roll can result in a permanent disadvantage!

**Notes for Specific Physical Tasks**

Instead of rolling against Will to use extra effort, you may make a Will-based roll against a relevant skill (Hiking, Jumping, Lifting, Running, Swimming, or Throwing, as applicable), if that would be better.

**Digging:** For every hour of digging, make an extra-effort roll and pay 1 FP. This adds to the usual FP cost. On a critical failure, the injury is to your back, and will heal only with rest (not First Aid); on an 18, you temporarily acquire the Bad Back disadvantage (p. 123).

**Hiking:** Make one extra-effort roll per day. Extra effort increases the FP you suffer by two when you stop on the march (see Fatigue, p. 426). Assess injury due to critical failure at the end of the day, and base it on the modified FP penalty. For instance, if you would normally be missing 5 FP when you stopped, you would be missing 7 FP if you used extra effort – and if you critically failed, you would end the day with 7 HP of injury! When using Hiking skill, make a single Will-based Hiking roll at -1 per 5% extra mileage beyond the basic +20% for a successful Hiking roll (-1 for +25%, -2 for +30%, and so on).

**Lifting and Moving Things:** For every minute of continuing effort, make an extra-effort roll and pay 1 FP. This cost adds to the 1 FP per second for carrying encumbrance over 10xBL, if applicable.) Handle critical failures as described for digging. When using Lifting skill, make a single Will-based Lifting roll, at -1 per 10% extra Basic Lift. This is instead of the usual 5% bonus per point of success.

**Running:** For every 15 seconds of sprinting or minute of paced running, make an extra-effort roll and pay 1 FP. This adds to the FP cost for failed HT rolls while running! On a critical failure, apply the injury to one of your legs; on an 18, you temporarily acquire the Crippled Leg disadvantage (see Lame, p. 141).

**Swimming:** For every minute of swimming, make an extra effort roll and pay 1 FP. This adds to the FP cost for failed HT rolls while swimming.

**Throwing:** Increases to ST affect both damage and distance, but not Basic Lift for the purpose of what you can throw in the first place. For that, make a separate extra-effort lifting attempt! Add bonuses for Throwing or Throwing Art skill after those for extra effort.

**Optional Rule: Extra Effort in Combat**

At the GM’s option, fighters can use extra effort in combat. These rules work differently from those above – mainly to avoid bogging down combat with extra die rolls and calculations.

You must declare that you are using extra effort and spend the required FP before you make your attack or defense roll. A critical failure on the roll causes 1 HP of injury to the arm (if blocking, parrying, or attacking with a shield, weapon, or hand) or leg (if dodging or kicking) in addition to the usual critical miss results. DR does not protect you from this damage!

**Feverish Defense:** If you take any maneuver other than All-Out Attack, you can spend 1 FP to get +2 to a single active defense roll. (You can use this bonus to offset the penalty for parrying multiple times with one hand; see Parrying, p. 376.)

**Flurry of Blows:** If you take an Attack maneuver, you can halve the penalty for Rapid Strike (see Rapid Strike, p. 370) by spending 1 FP per attack.

**Mighty Blows:** If you take an Attack maneuver in melee combat, you can spend FP to gain the damage bonus of an All-Out Attack (Strong) (see All-Out Attack, p. 365) without sacrificing your defenses. This costs 1 FP per attack.

You cannot use Flurry of Blows and Mighty Blows at the same time!
"Sense rolls" include Vision rolls, Hearing rolls, Taste/Smell rolls, and all rolls to use special senses such as Scanning Sense (p. 81) and Vibration Sense (p. 96).

To notice something using a given sense, roll against your Perception score, modified by the applicable Acute Senses advantage (p. 35): Acute Vision for Vision rolls, Acute Hearing for Hearing rolls, and so on.

Comprehension Rolls: A successful Sense roll means you noticed something. That is often sufficient, but in some cases, the GM may require a second roll to understand what you have sensed; e.g., to realize that the "owl hoot" you heard is really an Indian warrior, or that the faint scent you noticed belongs to the flower of a man-eating plant. This roll is against IQ for details that anyone could figure out, or against an appropriate skill if the significance would be lost on anyone but an expert.

Danger Sense: If you have the Danger Sense advantage (p. 47) and fail a Sense roll or comprehension roll to notice something dangerous, the GM will secretly make a Perception roll for you. On a success, you sense the danger anyhow!

VISION

Make a Vision roll whenever it is important that you see something.

Modifiers: Any Acute Vision bonus; +3 for Hyperspectral Vision; modifiers for the size and range of the target (see p. 550); -1 to -9 in partial darkness. In total darkness, Vision rolls are impossible without special advantages or technological aids. To spot something in plain sight – e.g., a car coming toward you on the road – roll at +10. This does not apply to attempts to spot hidden objects, read text, identify faces, etc.

When you try to spot something that is deliberately hidden, the GM may treat this roll as a Quick Contest against a concealment skill (Camouflage, Holdout, etc.), and may allow – or require – a skill such as Observation or Search to replace Perception for the roll.

Note that the curvature of a planet blocks vision beyond the horizon. The normal horizon on an Earth-sized planet is about three miles for an observer five to six feet in height. The GM should increase this for taller observers or those in elevated positions. There is no horizon in space!

Useful Advantages: Night Vision cancels -1 in partial darkness penalties per level, and Dark Vision lets you ignore darkness penalties. Peripheral Vision gives you a Vision roll to see anything that is not absolutely, positively, directly behind you – and 360° Vision lets you see even that! Telescopic Vision cancels -1 in range penalties per level.

Limiting Disadvantages: Bad Sight gives -6 to Vision rolls to spot items more than one yard away if you are farsighted, or items within one yard if you are farsighted. Restricted Vision prevents you from noticing anything that isn't in the direction you are looking. Blindness means you can see nothing!

HEARING

Make a Hearing roll whenever it is important that you hear a sound. The GM will often require a separate IQ roll to make out speech, especially in a foreign language.

Modifiers: Any Acute Hearing bonus; +4 for Discriminatory Hearing; -4 for Hard of Hearing. The GM may make this roll easier or harder, depending on the loudness of the sound, surrounding noises, etc.

The range at which you can hear a sound at no penalty is given on the table below. For each step by which you are closer than this, apply +1 to the roll, while for each step by which you are more distant, apply -1. For instance, to hear normal conversation at 8 yards would require a roll at -3.

When you try to hear someone who is attempting to move silently, the GM may treat this roll as a Quick Contest against his Stealth skill. If you are actively listening for such activity, the GM may allow you to substitute Observation skill for Perception.

Useful Advantages: Parabolic Hearing allows you to hear distant sounds as if they were nearby. Subsonic Hearing and Ultrahearing can detect sounds that are inaudible to normal humans.

Limiting Disadvantage: If you suffer from Deafness, you can hear nothing!

TASTE/SMELL

Taste and smell are two manifestations of the same sense. Make a Taste roll to notice a flavor, or a Smell roll to notice a scent.

Modifiers: Any Acute Taste and Smell bonus; +4 for Discriminatory Smell or Taste (as applicable). The GM may modify this roll for a particularly strong or weak taste or odor; and may apply a penalty if it is specifically disguised.

Useful Advantages: In addition to giving a bonus to your roll, Discriminatory Smell and Discriminatory Taste can reveal sufficient detail to allow you to identify people, locations, and objects with precision equivalent to hearing or vision for a normal human.

Limiting Disadvantage: No Sense of Smell/Taste means that you cannot taste or smell anything.
An "Influence roll" is a deliberate attempt to ensure a positive reaction from an NPC. A PC with an appropriate "Influence skill" can always elect to substitute an Influence roll for a regular reaction roll in suitable circumstances (GM's decision). See Reaction Rolls (p. 494) for more on NPC reactions.

Decide which Influence skill you are using: Diplomacy, Fast-Talk, Intimidation, Savoir-Faire, Sex Appeal, or Streetwise. Choose wisely!

The GM may allow other skills to work as Influence skills in certain situations (e.g., Law skill, when dealing with a judge). Then roll a Quick Contest: your Influence skill vs. the subject's Will.

Modifiers: All your personal reaction modifiers (although the GM or the skill description may rule that some modifiers do not apply); any specific modifiers given in the skill description; -1 to -10 for using an inappropriate Influence skill (GM's decision).

If you win, you get a "Good" reaction from the NPC – "Very Good" if you used Sex Appeal. On any other outcome, the NPC resents your clumsy attempt at manipulation. This gives you a "Bad" reaction – "Very Bad" if you attempted specious intimidation (see Intimidation, p. 202). Exception: If you used Diplomacy, the GM will also make a regular reaction roll and use the better of the two reactions. Thus, Diplomacy is relatively safe . . .

If the subject is Indomitable (p. 60), you lose automatically unless you have Empathy, Animal Empathy, Plant Empathy, or Spirit Empathy, as appropriate. Intimidation attempts against those with the Unfazeable advantage (p. 95) also fail automatically. On the other hand, you win automatically – no roll required – against those with Slave Mentality (p. 154).

Psychological Warfare

You can use Propaganda skill for media manipulation, and Psychology skill for other “psyops.” This is an Influence roll. Apply your cause’s reaction modifiers rather than your own, and use the average Will of the target group in the Quick Contest.

Influencing the PCs

Influence rolls are designed to allow PCs to affect NPC reactions. The GM should not make Influence rolls on behalf of NPCs and tell the players how to react. Most players form an opinion of an NPC based on the GM’s portrayal of the character, and few appreciate being told that they must roleplay a good reaction toward an NPC they do not like or trust.

This does not mean that NPCs cannot influence PCs! When an NPC makes a successful Influence roll against a PC, the GM should apply the NPC’s margin of victory as a bonus or penalty (as appropriate) to the PC’s die rolls when dealing with that NPC. For instance, if a beautiful spy beats the PC’s Will by 3 using Sex Appeal, the hero might suffer -3 on self-controls roll for his Lecherousness and -3 to his Detect Lies skill where that spy is concerned. Be creative!
Will Rolls

When you are faced with a stressful situation or a distraction, the GM may require you to roll against your Will to stay focused. On a success, you may act normally. On a failure, you submit to the fear; give in to the pressure, are distracted from your task, etc.

The effects of a failed Will roll in a stressful situation are often identical to those of a failed self-control roll for a mental disadvantage. This does not make Will rolls and self-control rolls interchangeable. Which kind of roll you must make depends on the cause of the stress, not on its effects.

If a game-world event causes negative effects (distraction, stunning, etc.) for anyone who fails a Will roll, you roll against Will just like anyone else – even if your self-control roll to resist identical effects from a mental disadvantage would be easier or harder.

If a mental disadvantage causes a negative effect on a failed self-control roll, you roll against your self-control number to resist – even if your Will roll to avoid that same effect under other circumstances would differ.

However, modifiers to self-control rolls and Will rolls to resist a particular effect are usually interchangeable. For instance, a drug that gives +2 to Will rolls to resist distraction would also give +2 to self-control rolls to resist disadvantages that result in distraction.

Fright Checks

A Fright Check is a Will roll made to resist fear. Fright Checks can occur as often or as rarely as the GM wishes. In a horror campaign where ordinary people meet shockingly gruesome Things, Fright Checks might be very common! With only minor adaptation, the GM can use these rules for awe, confusion, etc. as well as fear.

As a general rule, “ordinary” frightening things do not require Fright Checks. Fright Checks are for events so unusual and terrifying that they might stun or even permanently scar someone.

What counts as “ordinary” depends on the characters and the setting. This is one place where a character story can be helpful! An ordinary, 21st-century American might have to make Fright Checks for encounters with monsters, dead bodies, and the supernatural. A battle-hardened commando in the same game might not have to roll for dead bodies. And in a fantasy campaign, all these things may be quite normal . . . threatening, but normal. On the other hand, a fantasy character might have to make a Fright Check if transported to the 21st century and given a ride down the interstate . . .

Fright Check Modifiers

The following modifiers are cumulative.

Advantages and Disadvantages: Any Fearlessness bonus or Fearfulness penalty; +2 for Combat Reflexes, or -2 for Combat Paralysis. Other modifiers are conditional: -1 to -4 for Cowardice when your physical safety is at risk; +1 for Daredevil when charging into a scary situation; +1 for Higher Purpose when confronting threats you are sworn to oppose; +1 to +4 for Xenophobia when confronting monsters. Unfazeable characters don’t make Fright Checks!

Bodies: +6 for a peaceful-looking body, prepared for burial; +2 for a dead body with no signs of violence; no modifier for most victims of violence; and from -1 to -3 for grisly mutilations. Apply another -6 if the victim was your Dependent!

Heat of Battle: +5 if you are in combat when the terrifying thing happens or you first notice it.

Monsters: A given monster might give a basic -1 to -10 to Fright Checks. For hordes of monsters, roll at -1 for 5 monsters, -2 for 10, -3 for 20, -4 for 50, and -5 for 100 or more.

Physical Circumstances: -1 if the body, monster, etc. touches you; +1 if you witness it at a great distance (at least 100 yards); or +3 if you view it remotely (using Clairsentience, closed-circuit TV, etc.). Apply -1 if the area is physically isolated, -1 at night or in the dark (or in daylight, if you’re a night-dweller!), and -2 if you are (or think you are) alone.

Preparation: +1 if you have previous personal experience with this kind of threat; +1 per exposure to this particular threat in 24 hours; +1 to +3 (depending on the quality of the report) if you learned the details of this particular situation before you witnessed it.

The Rule of 14

If final, modified Will exceeds 13, reduce it to 13 for the purpose of the Fright Check. This means that a roll of 14 or more is automatically a failure. This rule does not apply to other Will rolls (resistance rolls, rolls to avoid distraction, etc.) – only to Fright Checks.

Fright Check Table

When you fail a Fright Check, roll 3d, add your margin of failure on the Fright Check, and consult the table below. This sometimes gives implausible results. The GM should either reroll these or change them to something more appropriate – especially for Fright Checks stemming from awe (e.g., divine beauty) or mind-warping complexity (e.g., otherworldly geometry or radical philosophical concepts) instead of fear.

Many of these results give a new mental quirk or disadvantage. The GM assigns this trait, which must be related to the frightening event. If possible, it should also be related to the victim’s existing mental traits! Traits acquired this way reduce the victim’s point value.

4, 5 – Stunned for one second, then recover automatically.
6, 7 – Stunned for one second. Every second after that, roll vs. unmodified Will to snap out of it.
8, 9 – Stunned for one second. Every second after that, roll vs. Will, plus whatever bonuses or penalties you had on your original roll, to snap out of it.
10 – Stunned for 1d seconds. Every second after that, roll vs. modified Will, as above, to snap out of it.
11 – Stunned for 2d seconds. Every second after that, roll vs. modified Will, as above, to snap out of it.
12 – Lose your lunch. Treat this as retching for \((25 - HT)\) seconds, and then roll vs. HT each second to recover; see Incapacitating Conditions (p. 428). Depending on the circumstances, this may be merely inconvenient, or humiliating.

13 – Acquire a new mental quirk (see Quirks, p. 162). This is the only way to acquire more than five quirks.

14, 15 – Lose 1d FP, and take 1d seconds of stunning as per 10.

16 – Stunned for 1d seconds, as per 10, and acquire a new quirk, as per 13.

17 – Faint for 1d minutes, then roll vs. HT each minute to recover.

18 – Faint as above, and roll vs. HT immediately. On a failed roll, take 1 HP of injury as you collapse.

19 – Severe faint, lasting for 2d minutes. Roll vs. HT each minute to recover. Take 1 HP of injury.

20 – Faint bordering on shock, lasting for 4d minutes. Also, lose 1d FP.

21 – Panic. You run around screaming, sit down and cry, or do something else equally pointless for 1d minutes. At the end of that time, becomes one step worse. If not, or if your self-control number is already 6, add a new -10-point disadvantage.

22 – Acquire a -10-point Delusion (p. 130).

23 – Acquire a -10-point Phobia (p. 148) or other -10-point mental disadvantage.

24 – Major physical effect, set by GM: hair turns white, age five years overnight, go partially deaf, etc. In game terms, acquire -15 points worth of physical disadvantages (for this purpose, each year of age counts as -3 points).

25 – If you already have a Phobia or other mental disadvantage that is logically related to the frightening incident, your self-control number roll vs. unmodified Will once per minute to snap out of it.

26 – Faint for 1d minutes, as per 18, and acquire a new -10-point Delusion, as per 22.

27 – Faint for 1d minutes, as per 18, and acquire a new -10-point mental disadvantage, as per 23.

28 – Light coma. You fall unconscious, rolling vs. HT every 30 minutes to recover. For 6 hours after you come to, all skill rolls and attribute checks are at -2.

29 – Coma. As above, but you are unconscious for 1d hours. Then roll vs. HT. If the roll fails, remain in a coma for another 1d hours, and so on.

30 – Catatonia. Stare into space for 1d days. Then roll vs. HT. On a failed roll, remain catatonic for another 1d days, and so on. If you have no medical care, lose 1 HP the first day, 2 the second, and so on. If you survive and awaken, all skill rolls and attribute checks are at -2 for as many days as the catatonia lasted.

31 – Seizure. You lose control of your body and fall to the ground in a fit lasting 1d minutes and costing 1d FP. Also, roll vs. HT. On a failure, take 1d of injury. On a critical failure, you also lose 1 HT permanently.

32 – Stricken. You fall to the ground, taking 2d of injury in the form of a mild heart attack or stroke.

33 – Total panic. You are out of control; you might do anything (the GM rolls 3d: the higher the roll, the more useless your reaction). For instance, you might jump off a cliff to avoid the monster. If you survive your first reaction, roll vs. Will to come out of the panic. If you fail, the GM rolls for another panic reaction, and so on!

34 – Acquire a -15-point Delusion (p. 130).

35 – Acquire a -15-point Phobia (p. 148) or other mental disadvantage worth -15 points.

36 – Severe physical effect, as per 24, but equivalent to -20 points of physical disadvantages.

37 – Severe physical effect, as per 24, but equivalent to -30 points of physical disadvantages.

38 – Coma, as per 29, and a -15-point Delusion, as per 34.

39 – Coma, as per 29, and a -15-point Phobia or other -15-point mental disadvantage, as per 35.

40+ – As 39, above, but victim also loses 1 point of IQ permanently. This automatically reduces all IQ-based skills, including magic spells, by 1.
The complete combat system occupies three chapters. This chapter contains the core combat rules. Chapter 12 adds rules for playing out combat using counters or figures on a hexagonal grid. Chapter 13 provides rules for a number of special combat situations. Like the character-creation system in Book 1, the combat system applies equally to PCs and NPCs.

The GM decides when to start using the combat rules. This will generally be when fighting seems likely and combatants begin maneuvering for tactical advantage. The GM may also use these rules to resolve “action” situations such as chases and tournaments.

COMBAT

TURN

SEQUENCE

Combat takes place second by second. Each character actively involved in the combat gets one opportunity to act per second, referred to as his “turn.” After everyone has taken his turn, one second has passed.

The GM shouldn’t feel constrained by the one-second time scale. This is just a way of breaking a battle into manageable chunks! He should feel free to drop out of combat time whenever dramatically appropriate, and to resume combat time when noncombat action gives way to more fighting. Consider a running gunfight in which the combatants leap across rooftops and chase each other up and down rickety fire escapes: the GM could resolve this through roleplaying and DX or skill rolls (against Jumping, etc.), interspersed with a few seconds of combat whenever he feels the opponents have a clear shot at each other.

Active Characters

An “active character” is involved in the combat and able to take action. A character who is knocked out, asleep, etc. is not active. But someone who chooses to do nothing is still active – “Do Nothing” is a valid combat maneuver (see p. 364).
**Turn Sequence**

The “turn sequence” is the order in which active characters take their turns. It is set at the start of the fight and does not change during combat. The combatant with the highest Basic Speed goes first and takes his turn, then the one with the next-highest Basic Speed, and so on, in descending order by Basic Speed. Once every active character has taken his turn, one second has passed and another second begins.

**Tied Speeds:** If multiple NPCs on the same side have the same Basic Speed, the GM simply decides who goes first – it isn’t really important. If PCs are involved, ties go to the highest DX. If there’s still a tie, GM should roll randomly at the start of the combat to determine who acts first, and use that order throughout the combat.

**Sequence Chart:** If a combat has many participants, the GM may find it useful to make a quick list of the order in which the combatants take their turns.

**“Your Turn”**

A given participant’s turn is the one-second period that stretches from when he chooses a maneuver to his next opportunity to select a maneuver. This overlaps the turns of other characters.

Each character actively involved in the combat gets one opportunity to act per second, referred to as his “turn.” After everyone has taken his turn, one second has passed.

**Maneuvers**

A “maneuver” is an action that you can take on your turn. Each turn, you must choose one of the following maneuvers: Aim, All-Out Attack, All-Out Defense, Attack, Change Posture, Concentrate, Do Nothing, Evaluate, Feint, Move, Move and Attack, Ready, or Wait. Your choice determines what you can do on your turn, and sets your options for active defense and movement.

**Movement and Maneuvers**

Most maneuvers allow some form of movement. The Move and Move and Attack maneuvers allow you to move quickly, up to a number of yards equal to your full Move score. Other maneuvers, such as All-Out Attack, limit you to a fraction of your full Move.

Many maneuvers restrict movement to a “step.” This is movement up to 1/10 your Move, minimum 1 yard, in any direction, a change of facing (for instance, to turn around), or both. You can perform your step before or after the rest of the maneuver; for instance, you could step and attack or attack and step.

Some maneuvers allow no movement. In particular, you cannot move if you Change Posture or Do Nothing.

For more on movement, see Move (p. 364) and Movement and Combat (p. 367).

**Free Actions**

“Free actions” are things you can do during any maneuver. Some examples:

*Talk.* You can always talk. If the GM wants to be realistic, he should allow only one sentence of communication per second . . . but it is usually more fun when you ignore this limitation!
Maintain spells or psi. As long as you remain active, you can maintain a spell or ongoing psi ability, no matter what else you do.

Drop an item. You can drop any “ready” item at any time during any maneuver. If you’re moving, you may drop it at any point within your reach during your movement.

Crouch. If standing, you may opt to crouch (to make yourself a smaller target for ranged attacks) at the beginning of your turn. This will usually slow your movement speed (see Movement, p. 367), and you cannot crouch and sprint. If you were already crouching, it is a free action to rise from a crouching position at any time.

**DO NOTHING**

Anyone who is just standing still is assumed to be doing nothing. In particular, when combat begins, anyone who has not yet taken a turn is treated as if he took this maneuver before entering combat.

Someone who is conscious but stunned or surprised must take this maneuver. On each turn of Do Nothing, he may attempt a HT roll to recover from mental stun. On a success, he recovers at the end of his turn – that is, he Does Nothing this turn, but may act normally next turn.

**Movement**: None!

**Active Defense**: Any (unless you’re tied up, etc.). If you are stunned, however, your active defenses are at -4 until your next turn – even if you recover.

**MOVE**

Move, but take no other action except those specified under Free Actions (p. 363). You may move any number of yards up to your full Move score. Most other maneuvers allow at least some movement on your turn; take this maneuver if all you want to do is move.

Players must tell the GM exactly where their PCs move to so that he can keep track of the combat. The GM decides where his NPCs move, and will inform any players whose PCs are in a position to witness the movement.

If you are controlling a vehicle or riding a mount, take a Move maneuver to spend the turn actively controlling it. Instead of moving, the vehicle or mount moves on your turn (carrying you and other occupants). See Mounted Combat (p. 396) and Vehicles (p. 462) for details.

Sprinting: If you run forward for two or more turns in a row, you get bonus movement on your second and later moves; see Sprinting (p. 354).

**Movement**: See above.

**Active Defense**: Any.

**CHANGE POSTURE**

This maneuver lets you switch between any two “postures” (stances in which you can pose your body). Valid postures are standing, sitting, kneeling, crawling, lying prone (face down), and lying face up. Any posture other than standing slows your movement and penalizes your attack and defense rolls, but also makes you a smaller target for ranged attacks.

You cannot stand up directly from a lying position. If you are lying (prone or face up), you must take a Change Posture maneuver to rise to a crawling, kneeling, or sitting posture first. A second Change Posture maneuver lets you stand from any of these postures. (Going from standing up to lying down, however, only takes one maneuver – or none at all, if the change was involuntary!)

You can switch between kneeling and standing (only) as the “step” portion of any maneuver that allows a step – you don’t need Change Posture for that. This is instead of using the step to move. Thus, you could go from prone to kneeling with a Change Posture maneuver on one turn, and then stand up in place on your next turn by taking a maneuver that allows a step.

Crouching does not require a Change Posture maneuver; see Free Actions (p. 363).

**Movement**: None. You remain in place as you change posture.

**Active Defense**: Any. Postures other than standing penalize your defense rolls, but also make you a smaller target for ranged attacks.

**AIM**

This is a full-turn maneuver used to aim a ranged weapon (or a device such as a camera or telescope). You must choose a specific target. You can’t aim at something that you can’t see or otherwise detect.

Specify the weapon your’re aiming with and your target. If you follow an Aim maneuver with an Attack or All-Out Attack with the same weapon against the same target, you get a bonus to hit. Add the weapon’s Accuracy (Acc) to your skill, plus any bonuses for targeting systems used: sights, targeting computers, etc.

If you brace a firearm or crossbow, you get an extra +1 to Acc. A firearm or crossbow is braced if you can rest it on a sandbag, low wall, car, etc. A one-handed firearm (e.g., a pistol) is considered braced if used two-handed. A two-handed firearm (e.g., a rifle) is considered braced if you are prone and using a bipod.

If you Aim for more than one second, you receive an additional bonus: +1 for two seconds of Aim, or +2 for three or more seconds.

Your combined bonus from all targeting systems (scopes, sights, computers, etc.) cannot exceed the weapon’s base Accuracy. For instance, if you add a telescopic sight that gives +4 Acc to a pistol with Acc 2, the bonus is +2, not +4.

**Movement**: Step. **Exception**: You cannot step if using a braced, two-handed weapon.

**Active Defense**: Any, but you automatically spoil your aim and lose all accumulated benefits. If you are injured while aiming, you must make a Will roll or lose your aim.

**EVALUATE**

This maneuver is the melee combat equivalent of Aim. It lets you take time to study an adversary in order to gain a combat bonus on a subsequent attack. You must specify one visible opponent who is close enough to attack unarmed or with a ready melee weapon, or whom you could reach with a single Move and Attack maneuver. You are sizing him up and looking for the right moment to strike.

An Evaluate maneuver gives you +1 to skill for the purpose of an Attack,
Feint, All-Out Attack, or Move and Attack made against *that opponent*, on your next turn only. You may take multiple, consecutive Evaluate maneuvers before you strike, giving a cumulative +1 per turn, to a maximum of +3.

**Movement**: Step.

**Active Defense**: Any. This does not spoil your evaluation.

## ATTACK

Use this maneuver to make an armed or unarmed attack in melee combat, or to use a thrown or missile weapon in ranged combat. To use a weapon to attack, it must be ready.

If you are using a melee weapon or unarmed attack, your target must be within reach. Resolve the attack as explained under *Melee Attacks* (pp. 369-372). If you took an Evaluate maneuver (above) last turn, you will have a bonus to hit. If you took a Feint (below), your opponent may have a penalty to defend.

If you are using a ranged weapon, your target must be within the weapon's Max range. Resolve the attack according to *Ranged Attacks* (pp. 372-374). If you took an Aim maneuver (p. 364) last turn, you will have a bonus to hit.

**Movement**: Step. You may step and then attack or attack and then step – your choice. To move further and still attack, take All-Out Attack or Move and Attack.

**Active Defense**: Any.

## FEINT

"Fake" a melee attack. You cannot Feint someone unless you *could* have hit him with a melee attack – that is, your weapon is ready and your foe is within reach. This maneuver is *not* an attack, though, and does not make your weapon unready.

When you Feint, roll a Quick Contest of Melee Weapon skills with your foe; if either of you is unarmed, you may roll against an unarmed combat skill instead. Your opponent may opt to roll against Cloak or Shield skill, if he is suitably equipped and this would give him a better roll. If his DX is better than his combat skills, he may roll against DX instead.

If you fail your roll, your Feint is unsuccessful. Likewise, if you succeed, but your foe succeeds by as much as or more than you do, your Feint fails.

If you *make* your roll, and your foe fails, subtract your margin of success from the foe's active defense if you attack him with Attack, All-Out Attack, or Move and Attack on your next turn. For instance, if your skill is 15 and you roll a 10, your foe defends against you at -5 next turn.

If you and your foe both succeed, but you succeed by more, subtract your margin of success against the foe's defense. For instance, if your skill is 15 and you roll a 10 (success by 5), and your foe's skill is 14 and he rolls 12 (success by 2), you win by 3, so he will defend at -3 if your next maneuver is to attack him.

You cannot Feint if your foe is unable to observe you! However, if your foe runs away, turns his back on you, or loses sight of you in some way after you successfully Feint, he will still suffer his defense penalty if you attack him on your next turn. If you lose track of the foe, or cannot attack him next turn, your foe's defense penalty vanishes.

A Feint is good for one second! But if you Feint and then make an All-Out Attack (Double), the feint applies to both attacks.

In all cases, your allies cannot take advantage of your Feint. The defense penalty applies only to your next attack.

**Shield Feints**: After you have attacked your foe once by striking with your shield (see p. 406), you may also Feint with your shield, rolling against Shield skill.

**Movement**: Step.

**Active Defense**: Any. However, if you Feint and then parry with an unbalanced weapon, you cannot attack on your next turn, making your Feint pointless.

## ALL-OUT ATTACK

Attack any foe with a ready weapon, making no effort to defend against enemy attacks. If you are making a melee attack, you must specify *one* of these four options before you attack:

- **Determined**: Make a single attack at +4 to hit!
- **Double**: Make two attacks against the same foe, if you have two ready weapons or one weapon that does not have to be readied after use. Attacks with a second weapon held in the off hand are at the usual -4 (see *Handedness*, p. 14) unless you have Ambidexterity (p. 39).
- **Feint**: Make one Feint (see above) and then one attack against the same foe. The Feint applies to *this* attack instead of one you make on your next turn.
- **Strong**: Make a single attack, at normal skill. If you hit, you get +2 to damage – or +1 damage per die, if that would be better. This only applies to melee attacks doing ST-based thrust or swing damage, not to weapons such as force swords.

If you are making a ranged attack, you must specify *one* of these two options before you attack:

- **Determined**: Make a single attack at +1 to hit.
- **Suppression Fire**: Take the *entire* turn to spray an area with automatic fire. This is a full-turn maneuver, and you can only choose this option if your weapon has RoF 5+. See *Suppression Fire* (p. 409).

**Movement**: You may move up to half your Move, but you can only move forward.

**Active Defense**: You may make no active defenses at all from the point you take this maneuver until your next turn. If someone attacks you after you make an All-Out attack, all you can do is hope he misses – you can't dodge, parry, or block!

## MOVE AND ATTACK

Move as described for the Move maneuver (p. 364), but during or after your move, make a single, poorly aimed attack – either unarmed or with a ready weapon.

You attack as described for the Attack maneuver (above), but at a penalty. If you are making a ranged attack, you have a penalty of -2 or the weapon's Bulk rating, whichever is worse – and if you took an Aim, you lose all of its bonuses. If you are
making a melee attack other than a slam (p. 371), you have a flat -4 to skill, and your adjusted skill cannot exceed 9.

**Movement:** As described under the Move maneuver – but since you are trying to do two things at once, you are -2 on any rolls the GM requires to avoid falling, tripping over obstacles, etc.

**Active Defense:** Dodge or block only. You cannot parry and you may not retreat (see *Retreat*, p. 377).

### All-Out Defense

This is the maneuver to choose when you’re beset by foes – especially foes who like All-Out Attacks! You must specify one of the following two options:

- **Increased Defense:** Add +2 to one active defense of your choice: Dodge, Parry, or Block. This bonus persists until your next turn.
- **Double Defense:** Apply two different active defenses against the same attack. If you fail your defense roll against an attack, you may try a second, different defense against that attack. For instance, if you fail a block, you may try a dodge or a parry. If you try a parry (armed or unarmed) with one hand and fail, a parry using the other hand does count as a “different defense.”

**Movement:** If you choose Increased Dodge, you may move up to half your Move. Otherwise, the only movement you may take is a step.

**Active Defense:** You may choose any legal active defense, with bonuses as described above.

### Concentrate

You **concentrate** on one primarily mental task (even it has a minor physical component, like operating controls, gesturing, or speaking). This may be casting a magical spell, using a psi ability, making a Sense roll to spot an invisible warrior, making a Leadership roll to give orders, making an Electronics Operation roll to operate a sensor, or any similar action, including most IQ-based skill rolls. This is a full-turn maneuver.

Some activities (e.g., casting spells) require you to take the Concentrate maneuver for multiple seconds. If you are forced to use an active defense, knocked down, injured, or otherwise distracted before you finish, you must make a Will-3 roll. On a failure, you lose your concentration and must start over.

**Movement:** Step.

**Active Defense:** Any. However, it interferes with concentration as noted above.

### Ready

Take a Ready maneuver to pick up or draw any item and prepare it for use; e.g., to pull a sword from its sheath or a gun from its holster, or to reload a firearm. In some cases, you may also need a Ready maneuver to regain control of an un wieldy weapon after a swing, or to adjust the reach of a long weapon – see the *Melee Weapon Table* (p. 271).

You can use a Ready maneuver to perform physical actions other than fighting: opening or closing a door, picking a lock, digging, lifting, etc. Continuing activities may require multiple, consecutive Ready maneuvers; see *Other Actions in Combat* (p. 382).

Finally, a Ready maneuver lets you switch an advantage "off" or "on" if it is not always on and does not require an Attack or Concentrate maneuver to use.

For more information, see *Readying Weapons and Other Gear* (p. 382) and *When Is a Weapon Ready?* (p. 382).

**Movement:** Step.

**Active Defense:** Any.

### Wait

Do nothing unless a particular event you specified in advance occurs before your next turn; e.g., a foe moves into range. If that happens, you may transform your Wait into an Attack, Feint, All-Out Attack (you must specify the option before acting), or Ready maneuver. If you are reacting to someone else, this interrupts his turn, but he can resume it after you’ve acted.

You must specify exactly what your action will be when you take the Wait maneuver, and what will trigger it. For instance, “I’ll make an All-Out Attack (Determined) with my sword on the first orc to move toward me.”

You may take a Wait with a ready ranged weapon; this is known as “covering” a target or area. If so, you must specify the zone that you are covering with that weapon. There is no penalty to cover a one-yard area. For larger areas and additional rules, see *Opportunity Fire* (p. 390).

You can use the Wait maneuver for any “reflex action” you want to plan in advance, provided you specify both the response and the action that will trigger it. This can include holding a knife at a hostage’s throat, or even a noncombat action (e.g., “If Dora sees any orcs, she will pull this rope immediately – otherwise, she does nothing.”). An action only qualifies as a “reflex” if you could do it in a single motion. The GM’s decision is final.

Finally, you can use Wait to coordinate actions with slower friends.

**Stop Thrust:** If you have a ready thrusting weapon, you can use a Wait to brace your weapon to receive a possible enemy charge. Simply state, “I brace for a stop thrust.” You can convert your Wait into an Attack or All-Out Attack against any one foe that moves one or more yards toward you to make a melee attack (armed or unarmed, including a slam or a grapple) or evade (see *Evading*, p. 368). You strike first if you have the longer reach. If you hit and your foe fails to defend, add +1 to thrust damage for every two full yards your attacker moved toward you.

**Movement:** None until your Wait is triggered. At that point, you may move as allowed by the maneuver you specified (Attack, Feint, All-Out Attack, or Ready).

**Active Defense:** You may defend normally while you are waiting or after your Wait is triggered. But if you defend while taking a Wait, you may not transform your Wait into an All-Out Attack; you must convert your Wait into an Attack instead.

**Movement:** Any. However, it interferes with concentration as noted above.
Basic movement does not require a game board. Instead, the GM should have a general idea of the environment, and mentally keep track of relative distances between combatants or objects – possibly referring to maps, notes, or diagrams. Should the players ask about reach or distance (“I want to run up and swing at him... how far away is he?”), the GM’s judgment is final.

Since movement and facing issues are in the GM’s head, it’s up to the GM how much detail to give the players. The GM might carefully keep track of every yard of movement, taking notes on paper... or he might only worry about exact distances when they are of vital importance. Most GMs will want to adopt a middle ground. For example:

GM: “You see Indigo Joe 90 yards north of you. He’s at the edge of the cemetery, crouched behind a tombstone, aiming his laser rifle at Kim.”
Player: “Damn, he spotted us. Is there any cover nearby? I want to run toward it.”
GM: “An outcropping of rock starts 7 yards to your northwest, and there are some trees about 10 yards to the east. Your helicopter is parked 10 yards behind you, if you want to fall back.”
Player: “No way! Kim will use a Move and Attack. She runs her full Move toward the rocks, while firing at Indigo Joe with her Gauss rifle.”
GM: “Fine. You have Move 5? Okay, you’re now 2 yards from cover. Now it’s Joe’s turn. He fires an aimed shot...”

The GM should always provide enough detail to give the players tactical choices, but not so much as to overwhelm them. If things get confusing, a sketch map with a few notes can often help. Groups that desire more detail than that should consider using the tactical combat system in Chapter 12 – or at least adopting some of those rules to add extra detail to the guidelines given here.

Here are a few “rules of thumb” for movement and combat. See Mounted Combat (p. 396) and Vehicles (p. 462) for notes on mounted and vehicular combat, respectively.

**MOVEMENT**

A combatant can move a maximum number of yards equal to his *full* Move score if he took a Move or Move and Attack maneuver. He can move up to *half* his Move if he chose an All-Out Attack or All Out Defense (Increased Dodge) maneuver.

Obstacles and bad footing will generally slow movement. The GM decides how many yards of movement a fighter must give up to cover one yard of difficult terrain or to cross a given obstacle. For instance, tangled brush might cut Move in half, while climbing over a fallen body might cost an extra yard of movement.

You can move while in almost any posture, but you only get your full Move if standing. You have 1/3 your Move while crawling or kneeling – and you have a flat Move 1 while lying down (belly crawl or rolling). You cannot move *at all* while sitting!
**STEP**

Most maneuvers allow you to take a step, either before or after another action. You may step a distance equal to 1/10 your Move, but never less than one yard. Round all fractions up. Thus, Move 1-10 gives a one-yard step, Move 11-20 gives a two-yard step, and so on.

If you are capable of steps greater than one yard, you may break up your movement in a turn. For instance, if you had a two-yard step, you could move one yard, make an attack, and move another yard during an Attack maneuver.

You can use a step to go from a kneeling to a standing posture (or vice versa) instead of moving. This requires your entire step, no matter how far you could normally move.

You may always turn to face a different direction as part of any step (or as the step, if you just want to change your facing).

**SPACING**

A human-sized fighter needs about one yard (3') of space; thus, two warriors could move down a passage two yards wide shoulder-to-shoulder – or hold it against a foe. A doorway is about one yard wide, so a single person could hold it. All this assumes room to attack and defend. Noncombatants could be packed in much more tightly, but they would have no room to react.

**MOVING THROUGH OTHER CHARACTERS**

You can always move through space occupied by your allies in combat, and you can run around an adversary who does not completely block your path (see Spacing, above). But if the GM rules that the only way past an opponent is through him, you must either bowl him over (see Slam, p. 371) or “evade” him.

**Evading**

“Evading” is moving through ground occupied by an opponent without trying to knock him down. You can attempt this as part of any maneuver that allows movement, provided you can move fast enough to go past your foe – not just up to him.

First, ask if your foe is trying to stop you. If he chooses to let you past, you “evade” him automatically – no roll is needed. If your foe wants to stop you, roll a Quick Contest of DX. Modify your DX as follows:

-5 if your foe is standing up.
-2 if your foe is kneeling.
+2 if you are approaching your foe from his right or left side.

+5 if you are approaching your foe from behind.
+5 if your foe is lying down.

If you win, you evade him and are free to move on. If you lose or tie, he got in your way and stopped you.

You cannot evade anyone while you are being grappled (see Grappling, p. 370). You cannot evade a foe if there is no logical way you could avoid hitting him, either (GM’s decision) . . . but note that huge creatures can step over smaller ones, while small creatures can duck between the legs of larger ones!

On the other hand, if you can use an advantage such as Flight or Super Jump to move up and over the foe’s reach in the vertical plane, you can evade him automatically!

**CROUCHING**

If you are in a standing position, you can elect to crouch at the beginning of your turn, as part of any maneuver. If you don’t move, or if you only step, you may also crouch after performing another action such as attacking or readying. However, you may not move more than a step and then crouch at the end of your movement to avoid attacks – not in one second! But if you are already crouching, you may leave your crouch at any time as a free action.
An “attack” is an attempt to hit a foe or other target. If you execute an Attack, All-Out Attack, or Move and Attack maneuver (or convert a Wait into any of these), you may try to hit a foe. You can only attack with a weapon if it’s ready (see Ready, p. 366).

The GM always has the option of ruling, for any reason having to do with the situation, that some fighters cannot attack certain opponents. For instance, eight attackers could not hit one human-sized foe at the same time. (Even three or four attackers at once would be unlikely, unless their victim had no allies.)

There are two basic types of attacks: melee attacks (pp. 369-372) and ranged attacks (pp. 372-374). Your target must be within reach if you’re making a melee attack, or within range if you’re making a ranged attack. Resolving either type of attack takes three die rolls:

1. First is your attack roll. If your attack is successful, your attack was a good one.
2. Now your foe must make a defense roll to see if he can defend against your blow. If he makes this roll, he evaded or stopped the attack, and is not hit.
3. If he misses his defense roll, your blow struck home and you roll for damage.

Some advantages (e.g., Extra Attack) and combat options (see All-Out Attack, p. 365, and Rapid Strike, p. 370) let you attack more than once. Resolve such attacks one at a time.

**Melee Attacks**

When you take a maneuver that lets you make a melee attack, you must specify who you are attacking, and with what weapon. You can make a melee attack using any ready melee weapon (including a natural weapon such as a kick, bite, or punch) against any target that is within reach.

You can use some weapons in more than one way; e.g., you can swing or thrust with a shortsword. Such weapons have multiple lines on the Melee Weapon Table (p. 271). When you attack with a weapon like this, you must indicate how you are using it before you roll.

**To Hit**

Figure your adjusted chance to hit by:

1. Taking your base skill with the weapon or unarmed attack you are using.
2. Applying all conditional modifiers for your maneuver, situation, posture, and the target’s visibility. A detailed list appears under Melee Attack Modifiers (p. 547).

The result is your effective skill. A roll of this number or less is a successful attack roll. It will hit, unless the target succeeds with an active defense.

**Ready Weapons**

A one-handed weapon is ready if it’s being held in your hand. A two-handed weapon is ready if you are gripping it with both hands. Some unwieldy weapons (e.g., the great axe) become unready after each attack unless you are extremely strong; see the Melee Weapon Table to learn which weapons are unwieldy, and their ST requirements (always marked ‡).

To draw a new weapon from a sheath, scabbard, or sling, or to ready an unwieldy weapon that became unready after an attack, you must take a Ready maneuver (p. 366).

A natural weapon (punch, kick, etc.) is always ready unless the body part in question is occupied or restrained; e.g., you can’t punch if you are holding a weapon with the same hand, or bite while wearing a full-face helmet or gripping something with your teeth.

**Reach**

A melee weapon can only attack a target that is within its reach (measured in yards), as given on the Melee Weapon Table. Most weapons have a reach of 1, which means you must be adjacent to your target (that is, within one yard of him). Reach plays a much larger role if using a game board; see Chapter 12.

**Melee Attack Options**

Before making a melee attack, you may specify some additional options.

**Hit Location**

It is assumed that you are attacking the target’s center of mass (the torso, on a human), unless you specify otherwise. If you wish to target another body part (e.g., the head), see Hit Location (p. 398). If you choose to attack his weapon, see Striking at Weapons (p. 400).

**Deceptive Attack**

You may designate any melee attack as “deceptive” before you roll to hit. A Deceptive Attack is intended to get past an opponent’s defenses through sheer skill. You can use this option to represent any number of advanced fighting techniques.
For every -2 you accept to your own skill, your foe suffers a -1 penalty on his active defenses against this attack. You may not reduce your final effective skill below 10 with a Deceptive Attack, which normally limits it to skilled fighters.

The GM may opt to speed play by limiting Deceptive Attacks to a flat -4 to skill, giving the target -2 on his active defenses.

**Rapid Strike**

A Rapid Strike is a melee attack executed swiftly enough that you get one extra attack. You must take an Attack or All-Out Attack maneuver, and you must use a ready weapon to make the extra attack. Make two attacks, both at -6 to skill. You can target multiple opponents this way.

If you already have multiple attacks, for whatever reason, you can replace one of them (and only one!) with two attacks at -6.

**Unarmed Combat**

Sometimes you have to fight without weapons, or with improvised weapons. This is **unarmed combat**. Anyone can engage in unarmed combat, but certain skills make you a more effective unarmed fighter. For this purpose:

- **Striking skills** are Boxing (p. 182), Brawling (p. 182), and Karate (p. 203).
- **Grappling skills** are Judo (p. 203), Sumo Wrestling (p. 223), and Wrestling (p. 228).

**Striking**

See the **Melee Weapon Table** (p. 271) for the reach, damage, etc., of punches, kicks, bites, and other unarmed strikes. For additional options, see **Sample Combat Techniques** (p. 230) and **Special Unarmed Combat Techniques** (p. 403). And see **Hurting Yourself** (p. 379) for the effects of striking an armored target barehanded . . .

**Grabbing**

You can grab something a foe is holding, like a weapon. To do so, you must have an empty hand (but some weapons, such as whips, can also grab). Make an attack using DX or a grappling skill, with the usual penalty to hit the hand (-4). Your opponent defends normally.

If you hit, you’ve grabbed hold of your foe’s weapon. On subsequent turns, you may try to wrest it from him. Each attempt is a full-turn maneuver. Roll a **Regular Contest of ST**. If you **win**, you take his weapon away. If you lose, you lose your grip on his weapon.

**Grappling**

“Grappling” is an attempt to grab your foe’s body. You must have at least one empty hand. On a game board, you must also move into your foe’s hex (“close combat”).

Each attempt requires an Attack, All-Out Attack, or Move and Attack maneuver. Roll against basic DX or a grappling skill to hit. Your foe may defend normally – he can parry, dodge, or block. You may Evaluate or Feint beforehand to improve your odds of success.

Grappling does no damage, but if you successfully hit, the foe has -4 to DX as long as you’re holding on. He may not move away until he breaks free (see **Actions After Being Grappled**, p. 371) or you let go. Exception: If you grapple a foe of more than twice your ST, you do not prevent him from moving away – you’re just extra encumbrance for him!

You may grapple with any or all of your arms. If you grapple with more than two arms, each arm beyond the first two gives a bonus of +2 to hit. An arm committed to grappling cannot make unarmed parries until you let go. Letting go is a free action on your turn.

If you are holding onto your foe with all your arms, the only further attacks you can make are those listed under **Actions After a Grapple**, below.

**Posture:** To grapple a prone, kneeling, or sitting opponent, you must kneel or lie down yourself, unless his Size Modifier is two or more greater than yours. You may do this as part of the “step” component of an Attack maneuver.

**Hit Location:** The rules above assume that you are grappling the torso. To grab another body part, apply half the penalty given under Hit Location (p. 398) to your roll; see Grappling and Hit Location, p. 400. If you hit, your foe has -4 to DX only when using that body part. You could grab a weapon arm or hand (to disarm your victim), a leg (to trip him), or the neck (to strangle him). If you grab an arm or hand, you cannot snatch a weapon away, but you can force your foe to drop it by winning a **Regular Contest of ST** – roll once per turn, as explained under **Grabbing** (above). For a related technique, see **Arm Lock** (p. 230).

**Actions After a Grapple**

Once you have grappled a foe, you may attempt the following moves on subsequent turns (provided your opponent does not break free!). Each action requires an Attack or All-Out Attack maneuver.

**Takedown**

This is an attempt to bear your opponent to the ground. You may only try this on a standing foe. Roll a **Quick Contest**, with each contestant using the highest of ST, DX, or his best grappling skill. If you are not standing, you have a penalty equal to the usual penalty to hit for your posture. If you **win**, your victim falls down next to you (on a game board, he falls in your hex and any adjacent hex of your choice). If he was grappling you, he loses his grip. If you lose, you suffer the same effects! On a tie, nothing happens.

**Pin**

You may only attempt a pin if your foe is on the ground **and** you are grappling his torso. Roll a **Regular Contest of Strength**. The larger fighter gets +3 for every point by which his Size Modifier exceeds that of his foe. The fighter with the most free hands gets +3. If you **win**, your foe is pinned and helpless. You must stay there to hold him down, but you can free one of your hands for other actions. If you lose or tie, nothing happens.

**Choke or Strangle**

You must have grappled your foe by the neck. You must normally use your hands, and can’t do anything else with them (e.g., parry) while holding on – but if you have the **Constriction** Attack advantage (p. 43), you can use your body instead. Roll a Quick Contest: your ST vs. the higher of your foe’s ST or HT. You are at -5 if you use only one hand, but at +2 per hand
after the first two. If your Size Modifier exceeds your foe’s, you can grapple and squeeze his torso instead, in which case you roll at -5 unless you have Constriction Attack. If you win, your foe takes crushing damage equal to your margin of victory. DR protects normally. Multiply injury to the neck by 1.5. If any damage – even blunt trauma (p. 379) – penetrates the victim’s DR, you also start to suffocate him! On his next turn and every subsequent turn until he escapes, he loses 1 FP; see Suffocation (p. 436).

Choke Hold
If you have Judo or Wrestling skill, you may try to apply a hold that can incapacitate without crushing the throat or torso. See Choke Hold (p. 404).

Arm Lock
If you have Judo or Wrestling skill, you may try to apply a lock to restrain or cripple your opponent’s arm. See Arm Lock (p. 403).

Neck Snap or Wrench Limb
If you grappled your foe’s neck or skull, or a limb or other extremity, you can twist. See Neck Snap or Wrench Limb (p. 404).

Other Actions
You can bite or use a Striker (provided it has reach C) even if all your hands are busy. If you’re not using a hand to grapple your foe, you can use it to Attack or All-Out Attack (either unarmed or with a reach C weapon), or to take a Ready maneuver. You cannot Aim, Feint, Concentrate, Wait, or make ranged attacks unless you’ve pinned your foe. You may also perform the following free actions:

- **Release your grip.** Let go of the foe, if you are grappling or pinning him. Or you can release just one hand – but this makes it easier for him to escape.
- **Throw away a ready weapon.** This automatically succeeds and takes no time. You may do this to get a useless weapon out of your way, or to deprive the foe of a chance to grab a useful weapon (e.g., a blackjack) from you.
- **Drag or carry your victim.** If you’ve pinned your foe, you can move or step normally, dragging or carrying him; see Lifting and Moving Things (p. 353) for how much you can lift or drag. He counts as encumbrance, reducing your Move. If you haven’t pinned him, moving away from him means you automatically release your grip unless you have at least twice his ST. If you’re that strong, you can pull or carry him with you!

Slam
You can deliberately collide with an opponent. This requires an Attack, All-Out Attack, or Move and Attack maneuver. Roll against DX, Brawling, or Sumo Wrestling to hit. Note that the -4 to hit and effective skill cap of 9 for a Move and Attack do not apply to slams.

Your foe may block, dodge, or parry (but your body counts as a heavy weapon; see Parrying Heavy Weapons, p. 376). If your foe dodges, you must move at least two yards past him if you have enough movement. If you would hit someone else, see Hitting the Wrong Target (p. 389).

If you hit, you and your foe each inflict dice of crushing damage on the other equal to (HP × velocity)/100. “Velocity” is usually just the number of yards you moved this turn – but in a head-on collision, add the distance your foe moved toward you on his last turn (that is, use relative velocity).

If damage is less than 1d, treat fractions up to 0.25 as 1d-3, fractions up to 0.5 as 1d-2, and any larger fraction as 1d-1. Otherwise, round fractions of 0.5 or more up to a full die. You can use All-Out Attack (Strong) to increase your damage!

If your damage roll equals or exceeds that of your foe, he must make a DX roll. If he fails, he falls unconscious, you are automatically free! If you successfully break free, you may immediately move one yard in any direction.

**Actions After Being Grappled**
If you have been grappled, you cannot take a Move maneuver unless you have at least twice your foe’s ST. Aim, Feint, Concentrate, and Wait maneuvers – and ranged attacks – are completely impossible. If you are pinned, you can’t take any maneuver that requires physical movement! Otherwise, you can do the following:

**Attack or All-Out Attack**
You can take either maneuver, with certain limitations. You cannot use any limb that has been grappled – or bite, if your neck or head was grappled. You’re limited to unarmed attacks (striking or grappling) or attacks using weapons with reach C. You can stab with a dagger, but not swing a sword!

**Ready**
You can Ready an item if you have a hand free, but you must make a DX roll. Failure means you drop the item. Ready maneuvers to switch advantages off and on succeed automatically.

**Break Free**
If you are grappled, you cannot move away until you break free by winning a Quick Contest of ST. Your foe has +5 if he is grappling you with two hands. If he has you pinned, he rolls at +10 if using two hands or at +5 if using only one, and you may only attempt to break free once every 10 seconds. If either of you has three or more arms, each arm beyond the first two gives +2. If your foe is stunned, he rolls at -4; if he falls unconscious, you are automatically free! If you successfully break free, you may immediately move one yard in any direction.

**Parrying Heavy**
If your opponent dodged and you went past him and hit a solid obstacle, apply your damage roll to yourself (and to the obstacle, if it matters).

You can also slam with a vehicle or mount. Roll against your vehicle-operation skill to hit with a vehicle, or Riding skill to hit with a mount. Figure damage based on the HP of your vehicle or mount.

For additional rules and special cases, see Collisions and Falls (p. 430).
**Ranged Attacks**

A “ranged attack” is any attack with a weapon used at a distance, from a thrown rock to a laser rifle. This includes Missile spells and the Affliction, Binding, and Innate Attack advantages (unless given the Aura, Malediction, or Melee Attack modifiers). Most other spells and advantages are *not* considered ranged attacks.

**Range**

You can only make a ranged attack on a target that falls within your weapon’s *range*. To find this, see the relevant weapon table or advantage or spell description. Most ranged attacks list Half Damage (1/2D) range and Maximum (Max) range, in yards. Your target must be no farther away than Max range; 1/2D range only affects damage.

A few weapons have a *minimum* range, as they lob projectiles in a high arc, or have fusing or guidance limits. When using a weapon like this, your target can’t be any closer than the minimum range.

**To Hit**

Figure your adjusted chance to hit by:

1. Taking your base skill with your ranged weapon.
2. Adding your weapon’s Accuracy (Acc) if you preceded your attack with an Aim maneuver.
3. Applying the target’s Size Modifier (SM). See Size Modifier (p. 19).
4. Modifying for the target’s *range and speed* (done as a single modifier), from the Size and Speed/Range Table (p. 550).
5. Modifying for circumstances (rapid fire, movement, darkness, cover, etc.), including any special conditions determined by the GM. See Ranged Attack Modifiers (p. 548) for a summary.

The result is your *effective skill*. A roll of this number or less is a successful attack roll. It will hit, unless the target succeeds with an active defense.

**Accuracy and Aimed Fire**

All ranged weapons have an Accuracy (Acc) statistic. This is the bonus you get if you take one or more Aim maneuvers immediately before you attack.

When you Aim, you can receive other bonuses for extra seconds of aim, bracing your weapon, or using a scope or a laser sight. These benefits are discussed under *Aim* (p. 364) and summarized under Ranged Combat Modifiers (p. 548). The sum of Acc and all extra aimed-fire bonuses can never exceed twice the base Acc of the attack.

**Size Modifier**

A human-sized target has a Size Modifier (SM) of 0; there is no bonus or penalty to hit. Larger targets have a positive SM, while smaller targets have a negative SM. Add SM to your skill. The SM of a character or a vehicle appears on its character sheet or vehicle description. For other objects, use the Size and Speed/Range Table (p. 550).

**Target’s Range and Speed**

A distant target is harder to hit. As a rule of thumb, a target up to 2 yards away is close enough that there’s no penalty to hit. At 3 yards, you have -1 to hit; at up to 6 yards, -2; at up to 10 yards, -3; at up to 10 yards, -4; and so on, with each approximately 50% increase in range giving a further -1 to hit.

Consult the Speed/Range column of the Size and Speed/Range Table (p. 550) to find the exact penalty. For ranges that fall between two values on the table, use the larger penalty. For very distant targets, the table also provides the equivalent range in miles.

*Example:* Infinity Patrol agent Jenny Atkins is shooting on the firing range. The target is 17 yards (50’) away. This rounds up to 20 yards, for -6 to hit.

A fast-moving target is also harder to hit. Consult the same column of the table, but use speed in yards per second (2 mph = 1 yard/second) instead of range in yards to find the penalty. If the target is both distant and fast moving, add range (in yards) to speed (in yards per second), and look up the total in the Speed/Range column to find the penalty to hit. (*Do not* look up the range and speed penalties separately and add them together! Great range mitigates the effects of speed, and vice versa.)

*Examples:* Agent Atkins fires her pistol at a Centrum spy who is making a getaway on a speeding motorcycle. Her target is 50 yards away and...
traveling at 60 mph, or Move 30. This is a speed/range of 50 + 30 = 80. Per the Size and Speed/Range Table, this gives -10 to hit.

**Ranged Attacks on Human Targets**

When using a ranged weapon against a target moving at human speeds – anything up to Move 10 – you may simplify the calculation by using just a range modifier and neglecting speed (unless the target is flying, sprinting, or something similar). Assume that the target's ability to take a dodge defense adequately represents the effects of movement.

**THROWN WEAPON ATTACKS**

“Thrown weapons” are weapons you must physically hurl at the target: rocks, hand grenades, ninja stars (shurikens), etc. You can also throw certain melee weapons, such as hatchets, knives, and spears. See the Muscle-Powered Ranged Weapon Table (p. 275) for statistics and special rules. See Chapter 13 for the effects of grenades and incendiaries.

Treat a thrown weapon just like any other ranged attack, with a few special rules:

- Once you throw a weapon, it's no longer ready! Hit or miss, your weapon is now somewhere else. If you want to attack again, you'll have to go fetch your weapon (from the ground . . . or your foe's body) or ready a new one.
- The range of a thrown weapon is usually a multiple of your ST; e.g., "STx2." This is given on the Muscle-Powered Ranged Weapon Table for many common thrown weapons. To determine range (and damage) for anything not listed there, see Throwing (p. 355).
- A thrown weapon travels fairly slowly. Your target has the option of using a block or a parry active defense instead of a dodge. Success by 5+ (or critical success) with an unarmed parry means your target has caught the weapon!

**MISSILE WEAPON ATTACKS**

“Missile weapons” are ranged attacks other than thrown weapons: bows, firearms, missile spells, ranged Innate Attacks, and so on. They fall into two broad categories.

**Muscle-Powered Missile Weapons:**

These include bows, slings, and crossbows. As with thrown weapons, your range and damage are determined by your ST – or in the case of a bow or a crossbow, by the weapon’s ST. See the Muscle-Powered Ranged Weapon Table (p. 275) for details.

**Firearms:** These include guns, beam weapons, and self-propelled projectiles. See the Firearms Table (pp. 278-280) for statistics and special rules for all types of high-tech missile weapons – from black-powder weapons through contemporary guns and on to science-fiction weapons such as lasers.

**Rate of Fire**

All missile weapons have a Rate of Fire (RoF) statistic. If RoF is 1, the weapon can fire one shot per attack. If RoF is 2 or more, the weapon is capable of firing more than one shot per attack; see Rapid Fire (below).

**Examples:** A bow has RoF 1; it can fire one shot per attack. A .38 revolver has RoF 3; it can fire up to three shots per attack. A machine gun has RoF 10; it can fire up to 10 shots per attack . . .

**Reloading and Shots**

Missile weapons also have a Shots statistic. Once you have fired this many shots, you must reload before you can fire the weapon again.

Reloading requires a number of Ready maneuvers; see Readying Weapons and Other Gear (p. 382). The time required to reload appears in parentheses after the weapon's Shots entry in the weapon tables.

Reloading restores the weapon's full number of shots. If a weapon has only one shot, this represents loading a new one. If it has multiple shots, this represents changing the magazine, belt, etc. The exception to this is multi-shot weapons that have cylinders, hoppers, or internal magazines. Their loading time is designated “i” (for “individually loaded”), and is per shot (unless sped up by some mechanism, such as a speed loader).

**Examples:** A bow has Shots 1(2); it can fire one arrow, after which it takes the archer two seconds to prepare another. A .38 revolver has Shots 6(3); it can fire six shots, after which each shot takes 3 seconds to reload. A machine gun has Shots 200(5); it can fire 200 shots, after which it takes 5 seconds to change the belt.

**Rapid Fire**

Some missile weapons have RoF 2 or more. This means they can fire multiple shots per attack, up to a maximum equal to their RoF. For example, a .38 revolver with RoF 3 could fire 1, 2, or 3 shots per attack. Of course, you can never fire more shots than your weapon currently has remaining, regardless of its RoF.

Rapid-fire weapons use the Recoil (Rcl) statistic, which measures how controllable the weapon is when firing multiple shots. Rcl helps determine the number of hits a rapid-fire attack can inflict. The lower the Rcl, the easier the weapon is to control. Rcl 1 means the weapon is recoilless, like most beam weapons.

If a weapon has RoF 2 or more, you must decide how many shots (up to RoF) you wish to fire before you make your attack roll. Firearms fired at RoF 1-3 are firing one shot per trigger pull; those fired at RoF 4+ are usually firing “full auto” like a machine gun – either in short bursts or continuously.

Firing a large number of shots per attack gives a bonus to hit, as shown on this table:
Rapid fire may score multiple hits from a single attack. A successful attack means you scored at least one hit – and possibly a number of extra hits, up to a maximum equal to the number of shots you fired. To find the number of hits you scored, compare your margin of success on the attack roll to your weapon's Recoil.

An attack scores one extra hit for every full multiple of Recoil by which you make your attack roll. The total number of hits cannot exceed shots fired. For instance, if your attack had Rcl 2, success by 0-1 would mean one hit; success by 2-3, one extra hit; success by 4-5, two extra hits; success by 6-7, three extra hits; and so on.

High-RoF weapons (those with RoF 5+) can also spread fire among multiple targets (see Spraying Fire, p. 409) or fire lots of shots to “suppress” an area (see Suppression Fire, p. 409). Other special rules apply to rapid fire with certain weapons – see Special Rules for Rapid Fire (p. 408).

If you make your attack roll, you have not (yet) actually struck your foe, unless you rolled a critical hit. Your active defense scores the number of shots you fired. To find the number of hits you scored, compare the number of shots you fired. To find the number of hits you scored, compare the number of shots you fired. To find the number of hits you scored, compare the number of shots you fired.

If you are stunned, any active defense roll against an attack is ineffective and the attack struck home. If this occurs, roll for damage.

An active defense roll of 3 or 4 is always successful – even if your effective defense score was only 1 or 2! A roll of 17 or 18 always fails.

Your foe does not get to attempt a defense roll if you rolled a critical hit against him.

Several modifiers apply to active defense rolls; see below for explanations of a few of these. For a complete list of modifiers, see Active Defense Modifiers (p. 548).

Injury and Active Defenses

If you are stunned, any active defense is at -4. Active defenses never take a penalty for shock, however. For more on stunning and shock, see Effects of Injury (p. 380).

Shields and Defense Bonus

If you have a ready shield, add its Defense Bonus (DB) to any Dodge, Parry, or Block roll against an attack that came from in front of you or from your shield side.

Defense Bonus is 1 for a small shield, light cloak, and most improvised shields; 2 for a medium shield or heavy cloak; and 3 for a large shield or force shield. The Shield spell (p. 252) gives a DB of 1-4.

A shield’s DB adds to active defense rolls against melee attacks, thrown weapons, and muscle-powered missile weapons – not against firearms (unless the GM wishes to use the optional Damage to Shields rules, p. 484).

Retreating and Dropping Prone

In some situations, you may give ground or drop prone for a bonus to your Dodge, Parry, or Block score. See Active Defense Options (p. 377).

Dodging

A “dodge” is an active attempt to move out of the perceived path of an attack. This is often the best defense when you’re not skilled with your weapon and you have no shield, when you’re attacked multiple times, or when your foe has such a powerful weapon that you fear parrying or blocking it may destroy your weapon or shield.

Dodge is normally the only active defense you can take against firearms. This does not mean you can actually dodge bullets! A dodge against this kind of attack represents an attempt not to be where you think your opponent will shoot, by weaving or ducking at the right moment.

Your Dodge active defense is Basic Speed + 3, dropping all fractions, less a penalty equal to your encumbrance level (see Encumbrance and Move, p. 17). List Dodge on your character sheet for quick reference.

You may dodge any attack except one that you did not know about! You only get one Dodge roll against a given attack.
If a single rapid-fire attack scores multiple hits, a successful Dodge roll lets you avoid one hit, plus additional hits equal to your margin of success. A critical success lets you dodge all hits you took from that attack.

**Example:** A machine gun gets four hits against you. Your Dodge is 10. You roll an 8, succeeding by 2. You dodge three of the hits; only one bullet strikes you.

You only get one active defense against each attack, unless you use All-Out Defense (Double Defense), but there is no limit to the number of times you may dodge different attacks during your turn.

**Acrobatic Dodge**

If you have put at least one point into theAcrobatics skill, you can try a "fancy" Dodge once during your turn. You may define this as jumping over a sword blow, cartwheeling away, or whatever else you like. Make an Acrobatics roll before you attempt your Dodge roll. (If flying, roll against Aerobatics instead.) On a success, you get +2 to that Dodge roll. On a failure, you get -2.

You can combine this option with a retreat (see Retreat, p. 377).

**Sacrificial Dodge**

You can defend a friend by throwing yourself into the path of an attack against him. To do so, you must be close enough to interpose yourself between your friend and his attacker by taking a step (see Step, p. 368). Announce this after the enemy makes his attack roll but before your friend attempts his defense roll.

Use the ordinary rules for a dodge, except that you cannot combine this with a retreat (see Retreat, p. 377). If you succeed, you are hit by the attack. If you fail, you didn’t move in time, but your friend still gets his normal defense roll. In either case, since you moved, you cannot retreat if you are attacked before your next turn.

**Vehicular Dodge**

An evasively maneuvering vehicle gets a Dodge roll. Instead of Basic Speed + 3, use half the operator’s skill (Driving, Piloting, etc.), rounded down, modified by the vehicle’s Handling statistic. For example, a biker with Driving (Motorcycle)-14 on a motorcycle with Handling +1 would have a Dodge of 8.

**Blocking**

A "block" is an attempt to interpose a shield, cloak, or similar large object between yourself and an attack. This requires a ready shield or cloak. (If you’re strong enough to grab and lift someone, you can block with his body!)

Your Block active defense is 3 + half your Shield or Cloak skill, dropping all fractions. For instance, Shield-11 would give a Block of 3 + (11/2) = 8.5, which rounds down to 8.

In general, you can block any melee attack, thrown weapon, projected liquid, or muscle-powered missile weapon. You cannot block bullets or beam weapons . . . these come too fast to be stopped this way.

You may attempt to block only one attack per turn.
Parrying Heavy Weapons

You cannot use a flimsy rapier to parry a titan's treesized club, the slam of a charging linebacker, or the sword of a giant robot! Heavy weapons are liable to knock your weapon away – or even break it.

The same is true for unarmed attacks from high-ST creatures. For the purpose of these rules, treat a punch, kick, bite, etc. as a weapon with an effective weight of 1/10 the attacker's ST. Use his full ST if he made a slam, flying tackle, pounce, or shield rush!

Your weapon may break if it parries anything three or more times its own weight. (This does not apply to barehanded parries; for damage to limbs when parrying unarmed, see Parrying Unarmed.)

A weapon parrying three times its own weight has a 2 in 6 chance of breaking: it breaks on a roll of 1 or 2 on 1d. Add +1 to these odds per whole-numbered multiple past 3 (a 3 in 6 chance at 4 times weapon weight, a 4 in 6 chance at 5 times, and so on). Weapon quality modifies these odds: +2 if the parrying weapon is cheap, -1 if fine, or -2 if very fine.

If your weapon breaks, the parry still counts unless the odds of breakage exceeded 6 in 6. If so, your weapon offered so little resistance that the parry does not count!

Regardless of the weight of your weapon, if you are parrying unarmed or using a one-handed weapon, you cannot parry a weapon heavier than your Basic Lift – or twice BL, if using a two-handed weapon. Attempts to parry anything heavier fail automatically; whether or not your weapon breaks, the attack sweeps it aside and damages you normally. If your weapon does not break, you drop it; if you are unarmed, you are knocked back one yard (make a DX roll to avoid falling over).

An attacker can also deliberately break or knock away weapons; see Striking at Weapons (p. 400).

Parrying Unarmed

A “parry” is an attempt to deflect a blow using a weapon or your bare hands. You cannot parry unless your weapon is ready – or, if you are unarmed, you have an empty hand.

You can use most melee weapons to parry; see the Parry column of the Melee Weapon Table (p. 271) for special restrictions and modifiers. Some hefty weapons (e.g., axes) are unbalanced: you cannot use them to parry if you've already used them to attack on your turn. (You can still parry with a weapon in your other hand, if you have one.) A few long, well-balanced weapons (e.g., the quarterstaff) get a +1 or +2 bonus to parry due to their ability to keep a foe at bay.

Your Parry active defense with a given weapon is 3 + half your skill with that weapon, dropping all fractions. For instance, Broadsword-13 would give a Parry of 9.

A parry won't stop anything except melee attacks or thrown weapons, unless you have special skills. Exception: If a foe attacks you with a missile weapon and he is within reach of your melee weapon, you may parry. You're parrying the weapon, not the projectile! For example, if an attacker fired a pistol at you from only one yard away, you could attempt to parry barehanded. Success would mean that you slapped his arm or gun aside, causing him to fire wide of your body.

Number of Parries: Once you have attempted a parry with a particular weapon or bare hand, further attempts to parry with that weapon or hand are at a cumulative -4 per parry after the first. Reduce this to -2 per parry if you are using a fencing weapon or have the Trained By A Master or Weapon Master advantage – or to -1 per parry if both conditions are true. This penalty only applies to multiple parries on the same turn; it does not carry over between turns.

Parrying with the Off Hand: You parry with your “off” hand (your left or “shield” hand if right handed; see Handedness, p. 17), or with a weapon held in it, at -4 to skill. Since Parry is calculated off half skill, this gives -2 to Parry. You may ignore this penalty if you have the Ambidexterity advantage (p. 39).

Parrying Thrown Weapons: You can parry thrown weapons, but at a penalty: -1 for most thrown weapons, or -2 for small ones such as knives, shuriken, and other weapons that weigh 1 lb. or less.

Parrying Unarmed Attacks: If you successfully parry an unarmed attack (bite, punch, etc.) with a weapon, you may injure your attacker. Immediately roll against your skill with the weapon you used to parry. This roll is at -4 if your attacker used Judo or Karate. If you succeed, your parry struck the attacker’s limb squarely. He gets no defense roll against this! Roll damage normally.

Parrying With Improvised Weapons

You can parry with anything of suitable size and shape, using the closest weapon skill. A pole or rifle could parry like a staff, a bow like a light club. However, parrying just once with a bow will ruin it as a bow – although it may survive for a few seconds longer as a club! Other fragile objects may be similarly ruined. Most improvised weapons count as "cheap" for breakage; see Parrying Heavy Weapons (box) for what this implies.

Parrying Unarmed

If you are fighting without weapons, or with at least one hand free, you may choose to parry barehanded. Beings that lack hands (like most animals) can't parry unarmed – they can only dodge.

You can use Boxing, Brawling, Judo, or Karate skill – or DX, if higher – to parry with one hand. You can also parry with Sumo Wrestling or
Wrestling skill, but this requires both hands. Your Parry active defense is 3 + half your skill or DX, dropping all fractions.

There's no penalty to parry another unarmed attack. You are at -3 to parry weapons, unless the attack is a thrust or you are using Judo or Karate (in either case, use your full parry). See individual unarmed-combat skill descriptions for other limitations.

A failed parry means you are hit. If you are using hit locations, a failed parry against a weapon means your attacker may choose to hit his original target or the arm you parried with! If your arm suffers more than half your Hit Points in injury, it is commonly crippled (see Crippling Injury, p. 420).

Some unarmed skills (e.g., Judo) give you special options after a successful parry. See individual skill descriptions for details.

**ACTIVE DEFENSE OPTIONS**

You can improve your odds of success with an active defense by choosing one of these options to go along with it.

**Retreat**

"Retreat" is not a separate defense, but an option you may add to any active defense against a melee attack. To exercise this option, you must move away from your attacker: at least one yard, but not more than 1/10 your Move – exactly as for a step (see Step, p. 368).

Retreating gives +3 to Dodge, or +1 to Block or Parry. Exception: If you parry using Boxing, Judo, Karate, or any fencing skill (Main-Gauche, Rapier, Saber, or Smallsword), a retreat gives +3 to Parry, as these forms make superior use of mobility.

Your step back takes place immediately. It is assumed to occur as your attacker's reach, he still gets his attack. If he has multiple attacks (e.g., from an Extra Attack, All-Out Attack, or Rapid Strike), your retreat does not put you beyond the reach of his remaining attacks. However, you get your retreating bonus on all active defense rolls against all of his attacks until your next turn.

If your opponent attacked you with a maneuver that allows a step, but has not yet taken his step, he can choose to follow you by taking his unused step. In effect, he is forcing you back!

You can retreat only once during your turn. In other words, once you retreat, you may not retreat again until after your next turn.

You cannot retreat while in a sitting or kneeling posture, or while stunned. You also cannot retreat if you moved faster than your Basic Move on your last turn (that is, if you were sprinting or using Enhanced Move).

**Dodge and Drop**

When under fire, hit the dirt! You may drop to the ground while dodging, earning a +3 bonus to Dodge. This is a "dodge and drop." It is similar to a retreat, but only effective against ranged attacks. It also has a drawback: it leaves you prone on the ground.

Like a retreat, a dodge and drop applies to all of your defenses against one foe for one turn. Any cover you drop behind does not count against the initial attack that inspired the dodge and drop, but is effective against subsequent attacks directed at you.

**Sacrificial Dodge and Drop:** You can use dodge and drop in conjunction with sacrificial dodge (p. 375) to protect a friend who is no more than a step away from you. If you succeed, you both fall prone and you take the hit... unless you succeed by 3 or more, in which case neither of you is hit! You can also use a sacrificial dodge and drop to throw yourself on an explosive (e.g., a hand grenade). If you succeed, treat the blast as a contact explosion (see p. 415).

**Diving for Cover:** You may also attempt a dodge and drop if you are within the area of effect of an explosion, cone, or area-effect attack and there is cover (such as a trench) only a step away. Success means you reach it in time; failure means you don't. Even if there is no cover handy, an extra yard or two of distance from a blast can still help, since explosive damage declines with distance. If you succeed, you are a step farther away; if you fail, you suffer the effect before you make your step.

**Flying or Swimming:** Dodge and drop is possible only if a step would take you below concealing terrain (e.g., a flyer dropping below a hillcrest). You don't end up prone. You can still dive for cover to increase your distance from an explosion, etc.

**DAMAGE AND INJURY**

If your attack roll succeeds and your target fails his defense roll (if any), you hit him! If your attack is one that can do damage, you must now make a "damage roll." This tells you how much basic damage you deal to your target.

Your weapon (and, for muscle-powered weapons, your ST), or your natural or Innate Attack, determines the number of dice you roll for damage. If your target has any Damage Resistance (DR) – from armor, the Damage Resistance advantage (p. 46), protective magic spells, etc. – he subtracts this from your damage roll. If your attack has an armor divisor (see pp. 102, 110), this modifies your target's DR.

If your damage roll is less than or equal to your target's effective DR, your attack failed to penetrate – it bounced off or was absorbed. A cutting, crushing, impaling, or piercing attack can sometimes cause damage without penetrating, however; see Flexible Armor and Blunt Trauma (p. 379).

If your damage roll exceeds your target’s DR, the excess is the penetrating damage. If your foe has no DR, the entire damage roll is penetrating damage.

Once you know the penetrating damage of your attack, apply the wounding modifier for damage type (this matters only for cutting, impaling, and certain types of piercing damage; see p. 379). This gives the injury the foe suffers, which is subtracted from his Hit Points.
Example: Your “basic damage” with your sword is 2d+1 cutting. You roll 2 dice, add 1, and do 8 points of basic damage. Your foe has DR 3, so your penetrating damage is 5 points. You then apply the x1.5 wounding modifier for cutting attacks, resulting in 7 points of injury (always round down). Your foe loses 7 HP.

**Damage Roll**

You usually make your own damage rolls, and the GM rolls for NPCs. Damage rolls are expressed as a number of dice, sometimes with a modifier; e.g., “6d-1” or “1d+2.” A negative modifier can’t reduce damage below 0 if the attack does crushing damage, or below 1 if it does any other type of damage.

High-damage attacks may express damage as a number of dice with a multiplier. For instance, “6dx3” means “roll 6d and multiply the total by 3.” If those six dice came up 21, you would do 63 points of damage. This is just a quick way to roll lots of dice.

The result of the damage roll (after any additive or multiplicative modifiers, as explained above) is the hit’s “basic damage.”

**Half Damage (1/2D) for Ranged Weapons**

If a ranged weapon has two range statistics, the first is its Half Damage (1/2D) range, in yards. If the target is at or beyond 1/2D range, divide basic damage by 2, rounding down. (This is a simplification! Realistically, most weapons lose striking power gradually as air resistance slows them down, but a detailed calculation would be unplayable.)

Some ranged weapons (e.g., grenades) do not suffer a reduction in damage; these do not list a 1/2D range. The damage of an attack modified with Follow-Up (p. 105) is never halved, either – although its “carrier” attack is subject to 1/2D effects as usual.

Finally, if an attack has a 1/2D range but requires a resistance roll to avoid an affliction of some sort, add +3 to the resistance roll instead of halving damage (if any).

**Damage Resistance and Penetration**

Damage Resistance (DR) rates the degree of protection that natural or worn armor, a force field, tough skin, etc. affords against damage. Objects and vehicles have their own DR values that protect against any damage they suffer – and if you take cover behind or inside them, their DR also protects you.

Subtract DR from basic damage. The result is the “penetrating damage” that punched through or deformed the armor enough to cause a significant injury. For instance, if you are hit by an attack that inflicts 6 points of basic damage and you’re wearing mail with DR 4, you take 2 points of penetrating damage.

In general, DR from multiple sources is additive; e.g., if you have a natural DR of 2 and put on a tactical vest with DR 15, your total DR is 17. Exceptions will always be noted.

The DR of armor often varies by body part. If you are not using the hit location rules (see Hit Location, p. 398), just assume that any hit strikes the torso, and apply its DR.

Finally, note that DR from certain sources may provide differing degrees of protection against different damage types.

For more on DR, see Damage Resistance (p. 46) and Armor (p. 282).

**Armor Divisors and Penetration Modifiers**

An “armor divisor” indicates that an attack is especially good (or bad) at penetrating Damage Resistance. Armor divisors appear on weapon tables as numbers in parentheses after damage dice; e.g., “3d(2) pi” means 3d piercing damage with a (2) armor divisor.

A divisor of 2 or more means that DR protects at reduced value against the attack. Divide the target’s DR by the number in parentheses before subtracting it from basic damage; e.g., (2) means DR protects at half value. Round DR down. Minimum DR is 0.

**Knockback**

When you hit someone very hard, you may knock him away from you! This is called “knockback.” Only crushing and cutting attacks can cause knockback. A crushing attack can cause knockback regardless of whether it penetrates DR. A cutting attack can cause knockback only if it fails to penetrate DR.

Knockback depends on basic damage rolled before subtracting DR. For every full multiple of the target’s ST-2 rolled, move the target one yard away from the attacker. For instance, a man with ST 10 would be knocked back one yard per full 8 points of basic damage. If the target has ST 3 or less, knockback is one yard per point of basic damage! If the target has no ST score at all (like a wall), or is not resisting, use its HP instead.

Anyone who suffers knockback must attempt a roll against the highest of DX, Acrobatics, or Judo. If he is knocked back more than one yard, he rolls at -1 per yard after the first. Perfect Balance (p. 74) gives +4 to this roll. On a failure, he falls down.

If you knock your foe into something solid, the result – including damage to him and whatever he hit – is as if he had collided with it at a speed equal to the yards of knockback. See Collisions and Falls (p. 430).

“Knockback Only”: Some attacks – a jet of water, a shove (p. 372), etc. – do knockback but no damage. Roll the listed damage and work out knockback as usual, but no actual injury occurs (unless the target collides with something!).
Some divisors are fractions, such as (0.5), (0.2), or (0.1). DR is increased against such attacks: multiply DR by 2 for (0.5), by 5 for (0.2), and by 10 for (0.1). In addition, treat DR 0 (e.g., bare skin) as if it were DR 1 against any fractional armor divisor.

There are several other “penetration modifiers” that affect the protection required to stop a given attack – see Blood Agent (p. 110), Contact Agent (p. 111), Follow-Up (p. 105), Respiratory Agent (p. 108), and Sense-Based (pp. 109, 115). These are often found on Afflictions and toxic attacks. See Special Penetration Modifiers (p. 416) for details.

Flexible Armor and Blunt Trauma

Flexible armor such as a leather jacket, mail hauberk, or a modern ballistic vest is much lighter than rigid armor, but it doesn’t absorb the full force of the blows it stops. An attack that does crushing (cr), cutting (cut), impaling (imp), or piercing (pi-, pi, pi+, pi++) damage may inflict “blunt trauma” if it fails to penetrate flexible DR.

For every full 10 points of cutting, impaling, or piercing damage or 5 points of crushing damage stopped by your DR, you suffer 1 HP of injury due to blunt trauma. This is actual injury, not basic damage. There is no wounding multiplier.

If even one point of damage penetrates your flexible DR, however, you do not suffer blunt trauma.

If you layer other DR over flexible DR, only damage that penetrates the outer layer can inflict blunt trauma.

Corrosion

An attack that inflicts corrosion (cor) damage – acids, disintegration beams, etc. – destroys one point of the target’s DR per 5 points of basic damage rolled. This affects armor first, then natural DR. This reduces DR against future attacks, not against the attack that burned off the DR! Natural DR lost by living beings heals at the same rate as lost HP.

Overpenetration and Cover

Some attacks are powerful enough to pass right through cover, a shield, or a victim, and damage someone on the other side. It’s usually too much trouble to worry about this, but if it becomes important (e.g., shooting through a door, or a bystander behind your target), see Overpenetration (p. 408).

Hurting Yourself

Any time you strike unwarmed (with bare hands, feet, fangs, etc.) and hit a target with DR 3+, you may hurt yourself! For every 5 points of basic damage you roll, you take one point of crushing damage, up to a maximum equal to the DR of the target you hit. Apply this damage to the body part you used to attack, if you are using hit locations. Your own DR protects against this damage. Exception: This rule does not apply if the target’s DR has the Tough Skin limitation (see Damage Resistance, p. 46).

Example: Filthy Pierre is struck by an axe, which does cutting damage. His attacker’s basic damage roll is 7, but Pierre is wearing DR 2 leather armor, so he suffers 5 points of penetrating damage. Multiplying by 1.5 for cutting damage, Pierre ends up losing 7.5 HP, which rounds to 7 HP – a nasty wound!

Note that blunt trauma injury has no wounding modifier.

Where you were hit may further affect the wounding modifier; see Hit Location (p. 398). The rules above assume a hit to the torso or face.
Injury to Unliving, Homogenous, and Diffuse Targets

The Wounding Modifiers and Injury rules assume a human, animal, or other ordinary living being. Machines, corporeal undead, swarms, and other unusual entities are much less vulnerable to certain damage types:

Unliving: Machines and anyone with Injury Tolerance (Unliving) (p. 60), such as most corporeal undead, are less vulnerable to impaling and piercing damage. This gives impaling and huge piercing a wounding modifier of $x1$; large piercing, $x1/2$; piercing, $x1/3$; and small piercing, $x1/5$.

Homogenous: Things that lack vulnerable internal parts or mechanisms – such as uniformly solid or hollow objects (e.g., melee weapons, shields, and furniture), unpowered vehicles, trees, and walls – are even less vulnerable! This includes animated statues, blobs, and anything else with Injury Tolerance (Homogenous). Impaling and huge piercing have a wounding modifier of $x1/2$; large piercing, $x1/3$; piercing, $x1/5$; and small piercing, $x1/10$.

Diffuse: A target with Injury Tolerance (Diffuse) is even harder to damage! This includes swarms, air elementals, nets, etc. Impaling and piercing attacks (of any size) never do more than $1$ HP of injury, regardless of penetrating damage! Other attacks can never do more than $2$ HP of injury. Exception: Area-effect, cone, and explosion attacks cause normal injury.

Example: Edmund Zhang empties his 9mm machine pistol ($2d+2$ pi damage) at an approaching zombie. He hits three times. After subtracting the zombie’s DR 1, he scores 8 points of penetrating damage with the first bullet, 7 with the second, and 10 with the third. The zombie has Injury Tolerance (Unliving), so the usual $x1$ wounding modifier for piercing damage drops to $x1/3$. Rounding down, the three bullets inflict $2$ HP, $2$ HP, and $3$ HP of injury. The zombie had $24$ HP, so it has $17$ HP left. Undaunted, it shambles forward. Edmund should have brought an axe or a flamethrower!

Effects of Injury

If you are injured, subtract the points of injury from your Hit Points. Usually, you are still in the fight as long as you have positive HP; see General Injury: Lost Hit Points (p. 419) for details. The most important effects are:

- If you have less than $1/3$ of your HP remaining, you are reeling from your wounds. Halve your Basic Speed and Move (round up), which also reduces your Dodge.
- If you have zero or fewer HP left, you are hanging onto consciousness through sheer willpower and adrenaline – or are barely holding together, if you’re a machine. You must roll vs. HT each turn to avoid falling unconscious. If you pass out, see Recovering from Unconsciousness (p. 423) for how long it will take to recover.
- If you go to fully negative HP (for instance, -10 if you have 10 HP), you risk death! You must make an immediate HT roll to avoid dying. You must make another HT roll to avoid death each time you lose an extra multiple of your HP – that is, at $-2$ HP, $-3$ HP, and so on. If you reach $-5$ HP, you die automatically. See Death (p. 423).

The sudden loss of HP can have additional effects:
**Special Damage**

Certain attacks have “special effects”: poison, electrical shocks, stunning, setting the victim on fire, etc. See the weapon tables, specific attack enhancements in Chapter 2, and the relevant sections of Chapters 13 and 14 for details.

**Critical Hits and Misses**

“Critical hits” and “critical misses” are critical successes and failures (see Degree of Success or Failure, p. 347) on rolls to attack or defend in combat.

**Critical Hits**

A “critical hit” is an especially lucky or good blow. It automatically hits home – your foe does not get an active defense roll!

Whenever you roll a natural 3 or 4 when attacking, you get a critical hit and you roll on the Critical Hit Table (p. 556). If you have high skill or a particularly good shot at your foe, you will get critical hits more often. With an effective skill of 15+, any roll of 5 or less is a critical hit; with an effective skill of 16+, any roll of 6 or less is a critical hit. Bonuses to hit (e.g., for All-Out Attack or a large target) do make critical hits more likely, while penalties (e.g., for a difficult target) make critical hits less likely.

**Example:** Louis LeBlanc needs to roll 15 or less to hit Filthy Pierre. He rolls a 5. That’s a critical hit for him! (A 3 or 4 would be a critical hit for anyone!) Because this is a critical hit, Pierre gets no defense roll. The blow automatically hits!

A critical hit is often the only way for an unskilled character to injure a superior opponent in a fair fight or get through heavy armor with a light weapon. Once in a while, everybody gets a lucky shot. But note that the most likely result on the table is “no extra damage.” Even if you get lucky and hit a superior foe, your blow might not be especially hard . . .

**Critical Success on Defense Rolls**

If you get a critical success on a defense roll against a melee attack, then your foe goes immediately to the Critical Miss Table (p. 556). You “faked him out,” knocked his weapon from his hand, or otherwise defended very well!

A critical success on a defense roll against a ranged attack has no special effect, with one exception: if the attack was a thrown weapon, a critical success on a bare-handed parry lets you catch the incoming weapon without hurting yourself, if you so desire.
Example of Combat

Louis LeBlanc's weapon is a shortsword. He is standing two yards from his foe, Filthy Pierre. On his turn, Louis takes the Attack maneuver, steps one yard toward Pierre, and strikes!

Louis has Shortsword-15, and there are no adverse conditions that would give him a skill penalty; therefore, he needs to roll 15 or less to hit. He swings and rolls a 13, so he hits.

Pierre has a Dodge of 8, Shield-12 (giving him a Block of 9), and Shortsword-11 (giving him a Parry of 8). His Block is his best defense, so he'll use it whenever he can. Pierre's small shield gives a +1 Defense Bonus (see Shields, p. 287); this increases all of his defenses by 1.

Pierre's Block defense is therefore 9 + 1, for a total of 10 . . . or 11, if he retreats. If he blocks and retreats, and rolls 11 or less, he can defend against the accurate blow that Louis just threw. But he gets a 12. Too bad! He's hit.

Although the combat calculations may seem complex at first, they are simple in play! The attacker rolls against the defender's skill, as shown on his character sheet. The defender adds up his defenses, as shown on his character sheet, and rolls against the total. That's it!

To continue the example: Louis is attacking Pierre. His blow was good, and Pierre failed to defend. So the blow got through.

Now Louis rolls for damage. Louis' player has already figured how much damage he does with a shortsword and written it on his character sheet. He has ST 11, so his swing does 1d+1 damage. He rolls one die and gets a 4. Adding one point yields a 5, so Pierre takes 5 points of basic damage.

However, Pierre is wearing cloth armor, which has DR 1. This subtracts a point from Louis' damage roll – only 4 points of damage penetrate Pierre's armor.

A shortsword is a cutting weapon, with a x1.5 wounding modifier. This multiplies the penetrating damage . . . so Pierre takes a 6 HP wound! That blow could knock a lesser man down. Sad but true . . . one good sword blow can settle a fight.

The GM subtracts 6 from Pierre's HP. Luckily for Pierre, this is not more than half of his original 12 HP, so he does not have to roll to see if he is knocked down or stunned. However, if he attacks on his next turn, he will have a shock penalty equal to the HP he lost or -4, whichever is the lower penalty. Since he lost 6 HP, he's at -4 to skill.

And the fight continues.

Critical Misses

The opposite of a “critical hit” is a “critical miss.” You suffer a critical miss when you fail badly on an attack or defense roll. You might break your weapon, throw it away, or even hit yourself!

A roll of 18 is always a critical miss. A roll of 17 is a critical miss unless your effective skill is 16 or better; in that case, it is an ordinary miss. A melee attack (but not a ranged attack) or defense roll that fails by 10 or more is also a critical miss.

If you get a critical miss on an attack or a parry, roll on the appropriate Critical Miss Table (p. 556). Apply the result immediately. If you critically miss a dodge, you lose your footing and fall prone (no effect if already prone). If you tried to block, you lose your grip on your shield and must take a turn to ready it before you can use it to block again.

A firearm may also malfunction on a bad roll; see Malfunctions (p. 407). A malfunction has “priority” over a critical miss: if both would occur, only the malfunction takes place.

Other Actions in Combat

Combatants can perform actions other than attacking and moving. Physical actions usually require Ready maneuvers, while mental ones call for Concentrate maneuvers.

Readying Weapons and Other Gear

A “ready” item is one that is in hand, ready for action. A weapon or other device is unready if in a holster, scabbard, pocket, belt, or pack; on the floor or a table; etc.

It generally takes a single Ready maneuver to ready an item that is on your belt, in a pocket, in a scabbard or holster, or slung over your back.

If you stand still, a single Ready maneuver also lets you ready an item from a table, wall rack, etc., provided it is within your reach (normally one yard).

A single Ready maneuver lets you accept one item that another person is holding out to you. He must be close enough to reach you (one yard, for a human), and he must have taken a Ready maneuver on his turn in order to hold out the item for you. You must both stand still. Note that you cannot exchange two items simultaneously. Each object exchanged requires a separate Ready maneuver on the part of each person involved. (Recall that these rules are for combat; obviously two people walking down the street can hand things back and forth at will.)
Some additional rules:

**Picking something up from the ground.** You must be kneeling, crawling, sitting, or lying down to do so, unless you have arms with a two-yard reach! If you are standing, you must first take a Change Posture maneuver to kneel, sit, etc.

**Readying a weapon.** You can only attack or parry with a weapon that is in your hand and ready to use. You must “ready” some weapons again after each attack! For instance, you must ready a poleaxe after each swing, because its momentum carries it away. See the weapon tables in Chapter 8 to learn which weapons require readying after use.

**Reloading a weapon.** This requires several consecutive Ready maneuvers. The number of Ready maneuvers required appears in parentheses after the weapon’s Shots statistic. For example, a longbow requires two Ready maneuvers: one to ready the arrow by removing it from your quiver, and one to ready the bow by placing the arrow to the string and drawing it. That takes two turns. On the third turn, you can Aim or Attack.

**Readying a shield or cloak.** If a shield or cloak is on the ground, or slung on your back, it takes a number of Ready maneuvers equal to its Defense Bonus to prepare it for combat. It takes the same amount of time to don your cloak or sling your shield again – but you can drop it on the ground with a single Ready maneuver (not a free action!). For the purpose of readying, treat a buckler as a weapon, not as a shield.

**Long actions.** Many physical actions take more than one second to complete. In combat, choose the Ready maneuver each turn until you are finished. This is not a specific maneuver, but a “generic” choice that lets you do one second’s worth of any multi-second action. The GM decides how many turns each action takes; see Typical Long Actions (p. 383) for examples. Some things (like piling up rocks to stand on) can be interrupted in the middle if necessary, to take any necessary maneuver or other action. Other things (like ritual magic) can’t be interrupted; if you stop in the middle, you must start over.

If an action takes a long time, you can help the GM keep track of events by counting the seconds each time you announce the maneuver. For instance, to reload a weapon, you would say, “Reloading my gun – one second” on your first turn, and, “Reloading my gun – two seconds and finished” on your second turn.

## Typical Long Actions

See the table above for the duration of typical long actions. You must take a Ready maneuver each second.

The times required for long actions are realistic, but they can also sideline a player – for instance, if his character rummages through his backpack. If the GM deems it dramatically appropriate, he may let PCs shave off a few seconds by making a successful DX or IQ roll, at the cost of failure having other problems (e.g., dropping the backpack and spilling its contents).

This completes the combat system. Get out there and fight!

When you are comfortable with these rules, you can proceed to Chapter 12, Tactical Combat, if you wish to use a hex grid for more precise resolution of battles. GMs may also consult Chapter 13 for advanced rules concerning factors that might not come into play in every battle: hit locations, mounted opponents, surprise attacks, and various exotic weapons. See also pp. 462-470 for rules for vehicles, pp. 455-461 for rules for animals, and p. 547-559 for the collected combat tables.
These rules let you resolve combat using counters or figures on a hexagonal grid. They assume you have already mastered the combat system in Chapter 11, and cover only the exceptions and special cases that arise when using that system on a map.

**Figures**

You need a marker or miniature figure to represent each combatant. This can be metal, plastic... even cardboard. These rules assume one-inch hexes, or a 50mm scale, for maps— but 25mm figures are easier to handle. Of course, you need not use figures! Any counter will do, as long as it has a “front” to indicate facing and some way to show when the fighter it represents is prone.

Gamers who want the fun of detailed figures at the cost of cardboard counters should consider Cardboard Heroes, SJ Games’ line of upright cardboard figures.

**The Combat Map**

Tactical combat uses a “combat map” marked off in hexagons, or hexes. Each one-inch hex on the map represents an area one yard across. At the start of combat, pick a suitable map, typically one you have drawn on a blank sheet of hexagonal paper.

**Hexes**

One hex on the combat map represents one yard of distance. It is also the basic unit of movement: each hex a fighter moves represents one yard of movement. The number of hexes you can move on your turn depends on your Move score and your maneuver (see Maneuvers in Tactical Combat, p. 385).

Each human-sized or smaller fighter must occupy one hex. Exceptions include close combat (see Close Combat, p. 391), swarms (see Swarm Attacks, p. 461), and situations in which people are crowded together but not fighting (you could cram up to four ordinary-sized humans into a single hex, if they were friendly).

You need not use figures! Any counter will do, as long as it has a “front” to indicate facing and some way to show when the fighter it represents is prone.
A human-sized fighter who is lying down or who has the Horizontal disadvantage occupies two hexes; see Change Posture (below). Larger fighters also occupy more than one hex; see Multi-Hex Figures (p. 392).

Treat a fractional hex (e.g., one cut in half by a wall) as if it were a full hex: you can move through it and occupy it without penalty, unless the GM rules otherwise. You can also move through an ally's hex, although the movement cost is higher. You cannot move through or occupy a hex completely filled by a solid barrier (e.g., a pillar).

**Facing**

You must “face” toward one of the six hexes adjacent to your hex at all times. Your facing defines your front, right, left, and back hexes (see illustration).

Your front hexes are the hexes you can see into and easily move into. You can move into any adjacent hex – but sideways and backward movement is slower.

For a right-handed fighter, the right side is the “weapon side” and the left side is the “shield side.” For a left-handed fighter, these are reversed.

**Maneuvers in Tactical Combat**

Tactical combat uses the maneuvers described in Chapter 11 under Maneuvers (p. 363), but some of these have additional complications on a hex grid. Several of these notes refer to “movement points”; see Movement in Tactical Combat (p. 386) for details.

**Move**

You receive movement points equal to your Move.

**Change Posture**

If a human-sized fighter lies prone or has the Horizontal disadvantage, he takes up two hexes. If you lie down or are knocked prone, your lower half occupies the hex you were standing in and your upper half can occupy any adjacent hex. If you get up from a prone posture, you may choose to get up into either of your hexes.

**All-Out Attack**

You must move first and then attack – not vice versa. You may remain stationary, turn in place, or move forward. If you choose to move forward, you may move up to two hexes or expend movement points equal to half your Move (round up), whichever is more. You may not change facing at the end of your move.

**Move and Attack**

You receive movement points equal to your Move.

**All-Out Defense**

If you choose the Increased Dodge option, you may use movement points equal to half your Move (round up).

**Ready**

You can pick up an item that is in your own hex or any hex within your reach (usually one hex).

**Wait**

The greater precision of tactical combat on a hex grid allows many more options with this maneuver; see Wait Maneuver Strategy (below) and Opportunity Fire (p. 390). If you are waiting with a melee weapon, your weapon’s reach is crucial: a long weapon lets you strike a charging foe before he can get to you!

---

**Wait Maneuver Strategy**

The Wait maneuver can be very useful in a tactical situation where you want to block a fleeing foe – or to protect someone behind you.

If you have taken a Wait maneuver, you can attack at any time – even in the middle of someone else’s movement! If you did not move at all on your turn, you may take a step (see The “Step” in Tactical Combat, p. 386) and then strike. If your foe is still standing after your blow falls, he may continue his movement.

This is the best way (and almost the only way) to keep a faster foe from running past you on a clear field. If you take another maneuver (for instance, to fight with someone else), you are distracted – and, on a one-second time scale, a faster foe should be able to run past you! But if you are waiting for him, you’ll have a chance to intercept him, or hit him, as he tries to go by.
MOVEMENT IN TACTICAL COMBAT

In tactical combat, movement is measured more precisely, on a hex-by-hex basis, and a fighter’s facing becomes very important.

Movement Points

An easy way to keep track of movement is to assume that a Move or Move and Attack maneuver gives you a number of “movement points” equal to your Move score; e.g., Move 5 would give you 5 movement points to use during a Move or Move and Attack. An All-Out Attack or All-Out Defense (Increased Dodge) maneuver gives half as many movement points, rounded up; e.g., Move 5 would give 3 movement points during these maneuvers.

Thus, you can change direction while moving “forward.” Three consecutive hexes of “forward” movement let you run in a half-circle and end up facing the opposite direction (see illustration below).

In these diagrams, a red arrow indicates a figure and its facing. A yellow arrow indicates movement.

Backward and Sideways Movement and Facing

If you take a Move, Move and Attack, or All-Out Defense (Increased Dodge) – but not an All-Out Attack – and don’t want to move forward, you can move backward (A) or sideways (B), keeping the same facing (see the illustration to the right). Each sideways or backward hex costs two movement points.

MOVEMENT AND FACING

Movement and facing interact when you move as part of a Move, Move and Attack, All-Out Attack, or All-Out Defense (Increased Dodge) maneuver.

Forward Movement and Facing

It costs one movement point to enter each hex when moving forward. A “forward” move is a move into one of your three front hexes. If you go straight ahead, your facing will not change; otherwise it will change by one hex-side: you must turn to face the hex as you enter it (see illustration above).
You can also “sidestep” into a front hex (C) while keeping your original facing. This is allowed during an All-Out attack (as well as on a Move, etc.). It also costs two movement points.

**Facing Changes and Movement**

At the end of your turn, if you took a Move or Move and Attack maneuver and used no more than half of your movement points – or if you chose the All-Out Defense (Increased Dodge) maneuver – you may turn to face in any direction.

If you took a Move or Move and Attack and used more than half of your movement points, you may change your facing by one hex-side.

You may also change facing before or during your movement on a Move, Move and Attack, or All-Out Defense (Increased Dodge) maneuver, but this costs movement points. Each hex-side of facing change counts as one yard of movement; e.g., turning 180° costs three movement points.
Attacks work as described in Chapter 11, with the difference that a hex grid permits precise determination of range, facing, arc of vision, and area of effect. This calls for a few extra rules – especially for combat in the same hex as your foe (see Close Combat, p. 391).

MELEE ATTACKS

Normally, you can only attack into your front hexes. The distance at which you can attack depends on your weapon’s “reach.”

Reach of a Weapon

A melee weapon’s “reach,” as given on the Melee Weapon Table (p. 271), defines the hexes into which you can attack with it, as follows:

Reach C (“Close”): You can strike only at targets in your own hex.

Reach 1 (1 yard): You can strike into any hex marked “Front” in the diagram below.

Reach 2 (2 yards): You can strike into any hex marked “2” in the diagram below.

Reach 3 (3 yards): You can strike into any hex marked “3” in the diagram below.

Most melee weapons have a one-yard reach, and can hit only your three front hexes.

Some weapons have more than one reach. For instance, a knife can slash at “close” and one-yard reach. With a spear, you can have a reach of either one or two yards, depending on how you hold it. Larger pole weapons can have a reach of one, two, or three yards!

Attacking Through an Occupied Hex

You can attack “through” someone else in melee if you are using a weapon with a reach of two yards or more. You may attack through a friend at no penalty (this is a basic part of your training with any long weapon). If you attack through an enemy’s hex, the penalty is -4. If your attack passes along a line between two hexes, there is no penalty unless both hexes are occupied. If they are, treat the situation as a single occupied hex – friendly, unless foes occupy both hexes.

Wild Swings

A Wild Swing is a melee attack against a foe to your side (left or right) or back, or against a foe you can’t see. It’s unlikely to hit, but sometimes it’s better than nothing.
A Wild Swing is at -5 to hit or the current visibility penalty, whichever is worse, and your effective skill cannot exceed 9 after all modifiers. You cannot target a particular part of the foe's body; if using hit locations, roll randomly.

A Wild Swing need not be a swing – it could be a thrust. However, you cannot make a “wild thrust” at a distance of more than one yard.

You can combine a Wild Swing with an All-Out Attack, but you may not choose the “Determined” option to get +4 to hit to offset the Wild Swing penalty. You can also make a Wild Swing during a Move and Attack; use the more severe penalties of the two.

**Ranged Attacks**

Ranged combat on a hex grid also requires a few additional rules.

**Arc of Vision**

If you have a ranged weapon, you can attack into any of the white hexes in the diagram above. If you have Peripheral Vision (p. 74), you can attack into any of the white or gray hexes. And if you have 360° Vision (p. 34), you can attack into any of the white, gray, or black hexes. In all three cases, the hexes you can attack into define your “arc of vision.”

**Shooting Blind**

If you have a ranged weapon, you may attack someone outside your arc of vision – or in total darkness, or while blinded – by “shooting blind.” Use the rules for Wild Swings (above), but the penalty is -10 and your effective skill cannot exceed 9 after all modifiers. (As Murphy’s Law predicts, you are often less likely to hit your target than anyone else in the vicinity; see Hitting the Wrong Target, below.)

**Firing Through an Occupied Hex**

You can target an enemy if you can draw a straight line between *any* part of your hex and *any* part of his without passing through a solid obstacle. Use a straightedge (such as a ruler) to determine this. However, if your chosen straight line passes through an occupied hex, the occupants of that hex are “in the way.” You may hit them if you miss your intended target – see Hitting the Wrong Target, below.

Anyone in the way (friend or foe) gives you a -4 penalty. If your attack passes through several occupied hexes, apply this penalty for each person in the way!

If your attack passes along a line between two hexes, there is no penalty unless both hexes are occupied. If they are, treat it as a single hex penalty (-4).

Someone lying down is never “in the way” unless you, too, are on the ground. Someone kneeling or sitting is not in the way unless either you or your target is also kneeling or sitting.

These rules assume human-sized or smaller combatants. A fighter with a Size Modifier 2 or more greater than yours (3 or more if he’s kneeling or has the Horizontal disadvantage, 4 or more if he’s prone) completely blocks your line of sight – you can’t shoot past him – unless you’re higher up.

**Hitting the Wrong Target**

If you attack with a ranged weapon and miss, you may hit someone else. You must check for this if you fail your attack roll.

You may hit *anyone* – friend or foe – if he was in your line of fire. To determine this, check the line along which you attacked. Any hex this line passes through is “in the way.” Combatants who are kneeling or lying down are not in the way unless you, too, are at their level.

Because hitting the wrong target is a matter of pure chance, your attack roll against each possible target is the same: a flat 9 or the number you would have had to roll to hit him on purpose, whichever is worse.
Roll first for the target closest to you. If you miss, or if that target dodges, roll for the next target. And so on. Keep rolling until you hit, or someone blocks or parries your attack, or you run out of targets. If your attack went along a line between two occupied hexes, roll randomly to see which one you check first.

Anyone (friend or foe) gets the same defense against this attack that he would have had had your attack been intentional.

### Opportunity Fire

If you have a ranged weapon, you may watch a specified area and attack as soon as a target presents itself. This is called “opportunity fire.”

To use opportunity fire, you must take the Wait maneuver. You must stand still and watch for a target in a specified area. You must face the area you are “covering.” You may do nothing else.

<table>
<thead>
<tr>
<th>Hexes Watched</th>
<th>Attack Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>3-4</td>
<td>-2</td>
</tr>
<tr>
<td>5-6</td>
<td>-3</td>
</tr>
<tr>
<td>7-10</td>
<td>-4</td>
</tr>
<tr>
<td>11+</td>
<td>-5</td>
</tr>
</tbody>
</table>

You may also specify a single straight line, and say that you will fire at the first target that crosses the line. The penalty for this kind of opportunity fire is only -2.

When you attack, apply the appropriate penalty above as well as all relevant ranged-combat modifiers. You cannot claim any of the bonuses listed for the Aim maneuver (p. 364).

**Exception:** If you watch a single hex (only), you can Aim and Wait. Each second you wait for a target also counts as an Aim maneuver, and you will get the normal bonus for that amount of aiming when you finally attack.

The GM should make sure that players carefully specify the area they are watching for opportunity fire. In conflicts between PCs, the players should tell the GM in secret so that their opponents do not know where they are planning to fire.

**Target Discrimination:** Normally, when you take opportunity fire, you must attack the first target that appears in the designated area – friend or foe! You are free to specify that you are not attacking automatically, usually to avoid shooting a friend. If so, the GM will make a Vision roll for you when a target appears and tell you whether you think it is friend or foe. However, you have an extra -2 to hit because of the time you spent deciding.

### Defending in Tactical Combat

Active defenses work as described in Chapter 11, with a few additional rules.

**Defending Against Attacks from the Side**

Against an attack that comes from one of your side hexes, you defend at -2 unless you have Peripheral Vision (p. 74) or 360° Vision (p. 34). Regardless of those advantages:

- If you have a shield, you cannot block an attack that comes from your weapon side, only one that comes from your shield side.

- If you have a one-handed melee weapon, you cannot parry an attack that comes from the other side of your body, only one that comes from the same side, unless your weapon arm has the Extra-Flexible enhancement or you possess the Double-Jointed advantage.
“Runaround” Attacks
A fast-moving fighter can sometimes start in front of a foe and run behind him to strike from his back hex. Against a true attack from behind, no active defense is possible, because the victim did not know the attack was coming. If the attacker starts in front and runs behind, outmaneuvering his victim through sheer speed, the victim does know he’s being attacked. Treat it as a side attack: -2 to active defenses, unless the victim has compensating advantages.

Defending Against Attacks from the Back
Against an attack that comes from your back hex, you cannot defend at all unless you have Peripheral Vision (which lets you defend at -2) or 360° Vision (which lets you defend at no penalty). Even if you have one of those advantages, you have an extra -2 to parry an attack from behind, and cannot block at all, unless your weapon or shield arm has the Extra-Flexible enhancement or you have the Double-Jointed advantage.

Retreating
A retreat takes you one step – normally one hex – directly away from the foe you are defending against. You cannot retreat into an occupied hex. You may change facing by one hex-side, if you wish, as you retreat.

“Close combat” is any situation in which you occupy the same hex as your foe or try to move through his hex. Use the rules given under Evading (p. 368) and Unarmed Combat (p. 370) in Chapter 11, but with the additions below.

Entering a Foe’s Hex
You may move or step into an enemy’s hex using any maneuver that allows you enough movement to enter that hex. You are in “close combat” as soon as you enter an opponent’s hex, regardless of your maneuver or that of your foe.

If you take a Move, Move and Attack, or All-Out Attack maneuver, you can always run into a foe’s hex and stop there, facing him. If you do not wish to stop, you must attempt to evade (p. 368) or slam (p. 368) your foe – your choice, within the limits of your maneuver.

When you enter an enemy-occupied hex, you occupy half the hex. You have the half of the hex from which you entered; he has the other half. To enter any of your front hexes on the enemy’s side, you have to “move through” him by evading.

Leaving a Foe’s Hex
If you start your turn in a foe’s hex and he isn’t grappling you, you can move out of the hex through any of the three hexes on your side of the hex. If you do this using a Move or Move and Attack, you must spend movement points to change facing, sidestep, or step backward. To use forward movement to leave through one of the three hexes on your foe’s side, you must evade him (see above).

If you take a maneuver that allows a step, you can step out of the hex and attack, feint, etc. with a one-hex reach weapon – or you can make a close-combat attack and then step out – but your step can only take you into one of the three hexes on your side of the hex.

Evading in Tactical Combat
To evade a foe, you must have enough movement points not only to enter his hex, but also to leave his hex! If your movement ends in his hex, you cannot evade on that turn.

If your foe has grappled you, you may still choose a maneuver on your turn, but you cannot leave the hex until you break free (see Actions After Being Grappled, p. 371).

Weapons for Close Combat
You can only use small, easily managed weapons in close combat. You can attack with any melee weapon with reach “C.” If using a ranged weapon, ignore the usual speed/range penalty and apply the weapon’s Bulk statistic as a penalty to hit.

Readying in Close Combat
You must make a DX roll to ready a weapon in close combat. If you fail, you still take a Ready maneuver but you accomplish nothing. If you have the Fast-Draw skill, you must make two rolls: the DX roll above and a Fast-Draw roll to get your weapon quickly. If you fail the Fast-Draw roll, you ready the weapon but it takes a full Ready maneuver.
DEFENSE IN CLOSE COMBAT

You can dodge normally in close combat. You can only parry using an empty hand or a weapon with reach “C” (e.g., a knife). You cannot block at all!

You can retreat (see p. 377) in close combat, if you aren’t being grappled. Simply step out of close combat and into any of the three hexes on your side of the close-combat hex. This gives the usual bonus to your active defense roll.

Shields in Close Combat

A shield becomes a potentially deadly nuisance in close combat. It still provides its Defense Bonus, but it hampers you while you wear it.

Any attack you make in close combat – except for the initial slam, attack, etc. when you first move into the foe’s hex – has a penalty equal to the Defense Bonus of your shield! Any DX roll you attempt in close combat after your first turn of close combat has the same penalty.

It takes a one-turn Ready maneuver and a successful DX roll to get rid of your shield in close combat.

MULTIPLE CLOSE COMBAT

Any number of people may participate in close combat in the same hex. This is easy to depict with flat counters, but it can be difficult to show with 3D figures – especially if some fighters are standing and others are lying down. A good compromise is to allow a fighter to declare himself in close combat with an opponent while still in an adjacent hex.

Up to two fighters may combine their efforts in a takedown attempt against a single foe; up to three may work together in a pin attempt against a single foe. In either case, use the ST, DX, or grappling skill of the attacker with the best score, and add 1/5 (round down) of the score of each of his helpers.

MULTI-HEX FIGURES

Giants, large animals, monsters, vehicles, etc. often occupy more than one hex. It can be helpful to make multi-hex counters or, if using figures, to cut cardboard bases of the appropriate size.

The head or front of a multi-hex figure controls its movement. Handle distance moved, direction of movement, and facing exactly as if the creature’s head were a normal one-hex figure. The rest of the body follows. This might mean, for instance, that a dragon’s head moves only 3 hexes while its tail sweeps through 10. That’s all right – and it’s a good way for the dragon to knock people over.

A multi-hex figure cannot fit through a map space narrower than its widest point. However, the GM should be lenient in allowing large figures to overlap walls and the like. Remember that when a hex is cut by a straight wall, etc., a partial hex counts as a full hex.

Arc of Vision

The head of a multi-hex creature determines its arc of vision. This does mean that much of a large creature’s body may fall outside its own arc of vision! However, many large creatures also have Peripheral Vision (p. 74).

Front, Side, and Back Hexes

Each multi-hex creature has front, right, left, and back hexes, corresponding to those of a human (see illustration).

Slam and Overrun

When a figure two or more hexes in size moves through a smaller one, treat it as a slam (see Slam, p. 371). This gives the small figure a chance to get out of the way. If it fails to do so, it will probably be knocked down! The larger figure can keep right on moving unless it is itself knocked down.
SURPRISE ATTACKS AND INITIATIVE

When the PCs surprise a group of adversaries, or vice versa, the surprised party may not be able to react immediately. In this case, the attackers should get one or more “free turns.” The GM is responsible for determining when the attackers have achieved surprise.

Adventurers, guards, etc. rarely suffer total surprise unless they are actually asleep. But total surprise would be appropriate if a group of werewolves came charging through the door of the local library. (In fact, such an extreme case might justify a Fright Check – at least for the librarian.)

A character with Combat Reflexes is rarely surprised, and will never “freeze.” He also gets +6 on all IQ rolls to recover from surprise. Note that many wild animals have Combat Reflexes – see Chapter 16 for examples.

When the defenders are taken completely by surprise, they “freeze.” The GM rolls 1d. This is the number of seconds that pass before the defenders can react at all. Until that time is up, they are mentally stunned and must take the Do Nothing maneuver. Exception: Those with Combat Reflexes never freeze, and treat total surprise as partial surprise.

These advanced combat rules cover less-common tactical situations, or offer additional detail. They are modular – the GM decides which rules are in force in a given situation.

Total Surprise

After the initial “freeze” ends, each defender must roll against his basic IQ at the start of his turn until he recovers. On a success, he must take Do Nothing that turn, but can act normally for the rest of the combat. On a failure, he is still mentally stunned; he may roll again at the start of his next turn. A low-IQ character, taken totally by surprise, could miss the whole combat!

Partial Surprise

This may occur when the defenders were expecting trouble . . . or when each party surprised the other! The GM should require each side to roll for initiative.

To determine who gets the initiative, the leader of each side rolls 1d. A leader with Combat Reflexes gets +2, or +1 if he doesn’t have Combat Reflexes but someone else on his side does (this bonus is not cumulative for more than one character). The leader with the higher IQ gets +1. Having even one point in Tactics skill gives +1 on initiative rolls; Tactics at level 20+ gives +2. The GM can apply other modifiers as he sees fit; e.g., if he thinks one side was more alert than the other.

If one side is totally leaderless, the GM rolls for them. They get an automatic -2 to initiative. (This does not apply to animals or any other group with IQ 5 or less.)

The side that gets the highest roll gets the initiative, and can move and act normally. Everyone on the other side is mentally stunned, and must make IQ rolls on their turns, as described for total surprise, to snap out of it. However, with partial surprise, there is a +1 bonus to IQ on the second turn, +2 on the third turn, and so on . . . even low IQ characters catch on after a few seconds. Note that animals often have Combat Reflexes, which counteracts their low IQ.

If the initiative roll is a tie, nobody was taken by surprise.
A combat situation where some fighters can’t see their foes affects attacks and defenses.

Attacker cannot see anything. If the attacker is blind or in total darkness, he can make a Hearing-2 roll – or use some other method – to discover his foe’s location. If he fails his Hearing roll, he may attack in a randomly chosen direction (on a map, he must specify the hex). He attacks at -10 (-6 if he is accustomed to being blind). Roll hit location randomly.

Attacker cannot see his foe, but can see his other surroundings. If only the attacker’s foe is invisible, use the rules above, but the attack penalty is only -6.

Attacker cannot see his foe, but knows his location for sure. If the foe is in a single smoke-filled hex or the like, use the rules above, but Hearing roll is required and the attack penalty is only -4.

Defender cannot see his attacker. If the attacker (including his weapon) is invisible but the defender is aware that he is being attacked, he may dodge at -4. If the defender makes a Hearing-2 roll, he may also parry or block – still at -4. If he is completely unaware of his attacker, he gets no defense at all! If the attacker is in smoke or unnatural darkness, but the defender is not, he defends normally, since he can see the weapon coming.

Note also that an unseen fighter can safely try things that a normal fighter could never do – or he may just wait in a corner until his foe is exhausted!

Torches and Flashlights

A torch or flashlight reduces the penalty to attack rolls for darkness. Assume that any such light within line of sight reduces the penalty from -10 (total darkness) to -3. Almost every light source has a limited range or radius – see the item description for details.

Most forms of enhanced mobility have significant effects on combat.

High-Speed Movement

It’s possible to go so fast that you can’t easily stop or change course. Such “high-speed movement” occurs whenever your present velocity exceeds your Basic Move. These rules apply equally to living beings and to fast-moving vehicles.

You may decide to accelerate to high speed at the end of any turn during which you’ve moved your full Basic Move – modified for encumbrance, if any – in one direction, more or less (no more than one 60° turn). You must have taken either a Move or a Move and Attack maneuver that turn, and you must be standing up.

Once you switch to high-speed movement, you move as described under Sprinting (p. 354). You may start the next turn with a velocity up to 20% greater than your Move (at minimum, +1 Move). If you have the Enhanced Move advantage, or are a vehicle with a top speed greater than your Move, you may start your next turn with a velocity up to 100% greater than Basic Move. In all cases, use the high-speed movement rules below.

Velocity

Keep track of your velocity (in yards per second). You can increase it or decrease it at the end of each turn; see Accelerating, below. You must move as fast as your velocity – that is, if your velocity is 17, you must move 17 yards that turn unless something (e.g., bad footing) slows you down.

Maneuvers During High-Speed Movement

If you’re moving at high speed under your own power, you should take either a Move or a Move and Attack maneuver. This applies to a mount, but not to riders or vehicle crew. If you don’t (or if no one is controlling a vehicle), see Losing Control, p. 395.

Direction and Turning Radius

At high speeds, it’s hard to change direction quickly. You must continue to move in a generally forward direction. A major change of direction (up to 60°) is only possible after you’ve moved straight ahead for a distance equal to at least (current velocity/Basic Move) yards, rounded down. This number is your turning radius. For instance, if your current velocity is 13 and you have Basic Move 5, you must move at least 13/5 = 2.6 yards, which rounds to 2 yards, between each change of facing.

Until you have moved a distance equal to your turning radius, you must continue to move forward. If you are using the Tactical Combat rules, you can move into any of your three front...
hexes, but without changing facing. If you have legs or similar, you can roll against DX or Jumping to cross obstacles; otherwise, you collide with anything you can’t maneuver around or which doesn’t dodge out of the way.

Note: These rules are cinematic but easy to use. A more realistic turning radius would be (velocity squared)/10 yards; those who enjoy complexity are welcome to use this.

If your Basic Move is 0, do not use the rules above. You cannot turn at all under your own power! You can only drift. To execute a turn, you must be pushed, towed, etc.

Attacking and Defending

You can fight normally during high-speed movement, subject to the limits of your combat maneuver. You can dodge, but you cannot retreat or dive for cover. The GM should always apply speed modifiers when you’re under attack – or attacking!

Accelerating

If your velocity is less than your top speed at the end of your turn, you can increase it by an amount up to your Basic Move (or more, with some risk – see below). If your deceleration reduces your velocity to Basic Move or less at the end of your turn, you are no longer at high speed, and may use the ordinary movement rules next turn.

Pushing the Envelope

You can try to decelerate by up to Basic Move × 2. You can also attempt to change direction before you’ve moved the requisite distance. Either requires a DX+3 roll – or a vehicle operation skill roll, modified by the vehicle’s Handling statistic, if you are driving a vehicle.

Hasty deceleration requires a roll at -1 per two full yards/second beyond Basic Move by which you cut your speed. For instance, if your Basic Move is 5 and you decelerate by 9 yards/second, you must roll at -2. An earlier turn (or a tighter turn; e.g., 120° instead 60°) calls for a roll at -1 per full increment of Basic Move by which your velocity exceeds your Basic Move. For instance, if you’re moving at 23 yards/second and have Basic Move 3, you must roll at -6.

If you fail, you lose traction and fall or spin out of control – see Losing Control, below.

Tactical Movement

If you are using the tactical movement rules with high-speed movement, your movement points equal your velocity at the start of your turn. You cannot sidestep or step back. Turning radius limits facing changes: a 60° turn is a one hex-side facing change.

Minor obstructions and bad footing cost movement points as usual (see Movement Point Costs, p. 387), and also decelerate you at the end of your turn by an amount equal to the extra movement points paid. For example, if your high-speed velocity is 14 and you run through six yards of mud (+1 movement point per hex), you’ll automatically decelerate to a velocity of 8 at the end of the turn. Add this to any voluntary deceleration. If the total exceeds your Basic Move, roll as described for Pushing the Envelope, above. If it exceeds Basic Move × 2, you lose control automatically.

Losing Control

If you are running on the ground and lose control, you trip. You fall over, skid for 1/4 your remaining movement straight ahead (unless you hit something), and then stop. If you land on the ground and skid to a stop without hitting anything, you suffer damage for a fall at your current velocity; see Falling (p. 431). If you hit something, you suffer (and inflict) collision damage instead; see Damage from Collisions (p. 430).

Optional Rule: Changing Posture in Armor

For enhanced realism, you can let encumbrance level affect the time it takes to perform a Change Posture maneuver. At encumbrance level 0 (None) or 1 (Light), Change Posture takes one second, as usual. At level 2 (Medium), it takes two seconds to change posture – and so on. While you are partway through a posture change, you are considered to be in the old posture. This rule may slow play, but it can also give a realistic edge to lightly armored combatants.
You also lose control if you are knocked out, or take any combat maneuver but Move or Move and Attack, while moving at high speed. For instance, if you were stunned and forced to Do Nothing, you would trip as described above.

Exception: If you are moving on three or more wheels, you're more stable. The GM may rule that you merely decelerate your maximum safe deceleration each turn instead of tripping, unless your loss of control was the result was a critical failure or injury (stunned, etc.).

**High-Speed Flying and Swimming**

Only use Basic Move if you are moving on the ground. Use basic air Move when flying, and basic water Move when swimming (see Move in Other Environments, p. 18). If you lose control in the air or water, you don't trip; instead, you must move your current velocity straight ahead and then decelerate by your maximum safe deceleration. You can do nothing else – this effectively ends your turn!

**Mounted Combat**

Knights, cowboys and Indians, and other adventurers often fight from the saddle. A mount not only provides additional mobility, but its extra height and momentum can make the rider's attacks more effective, while the shock of a mounted charge can panic unprepared opponents. Some mounts even fight in their own right.

With the exception of the occasional camel or elephant, mounted warriors usually ride horses, and these rules assume that. For the differences between horses and various mounts from fantasy and science fiction, see the pertinent animal descriptions.

Ordinarily, a rider can direct a war-trained mount by voice and foot pressure, leaving both hands free for weapon use. However, all Riding rolls are at -3 for "no hands," or -1 if only one hand is on the reins. Riders who need both hands to control their mount may drop what they are holding. It requires a Ready maneuver and DX-3 roll to return a weapon to its scabbard while a mount is bucking; a critical failure means you drop it!

Nonsapient mounts without war training (see War-Trained Mounts, p. 459) are liable to "spook" at danger – especially at the sounds of gunfire and injured animals of their own species! All combat Riding rolls are at -3 for a well-broken mount without war training – and at -6 or worse for one that is not fully broken.

The rider must make a Riding+2 roll to get any mount except a war-trained mount to charge into or over any obstacle, or onto bad footing, or to perform risky maneuvers like jumps, tight turns, etc., unless they're a matter of life and death for the mount! Failure means the mount disobeys; see Spooked Mounts, p. 397.

**Mounting Up**

Mounting a horse or similar creature takes two consecutive maneuvers: Move to jump or climb up, followed by Change Posture to seat yourself. You can leap astride in only one turn if you make a Riding, Acrobatics, or Jumping roll at -3 (no penalty if you are using stirrups) – but on any failure, you fall!

When you are using Tactical Combat, a rider is in the center of a 3-hex mount like a horse, or the front of a 2-hex mount like a gryphon. An elephant or similar mount would have a flat back, and a rider could stand up and move around; traditionally, an elephant carries the driver, or mahout, on its neck, and a howdah, a platform with several fighters, on its back.

**Movement and Maneuvers**

See Riding and Draft Animals (p. 459) for the Move of various mounts. The animal's Basic Move is the pace it can achieve while walking or trotting; its Enhanced Move is for a gallop, and uses the rules under High-Speed Movement (p. 394). Encumbrance penalties apply normally (see Encumbrance and Move, p. 17) . . . but few mounts willingly carry more than Medium encumbrance.

In combat, the mount can take any maneuver, unless it's moving at high speed. Then it is limited to Move or Move and Attack.

The rider can take any maneuver. Use Change Posture to dismount safely from a mount that hasn’t moved, or that has moved only a step. Otherwise, the only way to get off is to jump or fall. To jump off safely, take a Move or Move and Attack maneuver and make an Acrobatics or Jumping roll. On any failure, you fall!
**Falling Off:** If the mount makes a successful DX roll for a difficult action like a jump, tight turn, or hasty deceleration, the rider must make a Riding roll. On a failure, the rider is unseated, even though the mount performed the maneuver. If the mount *fails* its DX roll for a risky action, see result 12 on the Mount Loss of Control Table (below) for effects.

**Spooked Mounts**

If a mount fails a Fright Check, or refuses to perform a particular feat, it will usually shy and buck. The rider must make a Riding roll and take a Ready maneuver every second to regain control.

A critical success calms the mount immediately; three ordinary successes in a row will have the same result.

Three failures in a row, or a single critical failure, means a total loss of control (see below). A long alternation of successes and failures means you spend your time fighting your mount and the mount is spooked (see above); on a critical failure, you lose control (see Mount Loss of Control Table, above). A mounted fighter charges at Move 8 inflicts 2d+3 impaling damage.

**Mount Loss of Control Table**

Roll 2d on the following table if you completely lose control of a mount. Also refer to the appropriate result - without rolling - whenever a rider is thrown, a mount falls, etc.

- **2** - You are thrown from your mount. Take damage for a three-yard fall (adjust this for an unusually tall or short mount). If you remain conscious, you may attempt an immediate Animal Handling-3 roll to call your mount back. If you fail, you may make a repeated attempt every 5 minutes.
- **3** - You lose your grip and fall. Take damage for a two-yard fall; a Jumping or Acrobatics roll will negate this. Otherwise, as 2, above.
- **4** - You drop whatever you were holding. Now roll again!
- **5** - The mount charges directly toward the foe, hazard, etc.
- **6-7** - The mount is exhausted and will not fight, or move at faster than a slow walk (Move 1), until it gets several hours of rest.

**8-9** - The mount seems to settle down, but is now fractious: -1 to all Riding rolls for the rest of this engagement. If you get this result multiple times, the penalty is cumulative.

**10** - The mount charges directly away from the foe, hazard, etc.

**11** - The saddle comes loose. All riding rolls and attack rolls made while riding are at -3 until you dismount and spend 4d seconds tightening the straps. If you’re riding without a saddle, treat as 3, above.

**12** - The mount falls! It must make a DX+1 roll or it breaks a leg. In any case, the rider must roll vs. Riding-2. On a failure, he is unseated and takes damage for a three-yard fall. On a success, he must make another Riding roll, this one at a penalty equal to his Encumbrance, to leap clear of the falling mount. On a success, he leaps clear and takes damage as per 3, above. On a failure, the mount falls on him, inflicting thrust/crushing damage based on its ST, plus the damage for a 2-yard fall.

**Attacks by Mounts**

A war-trained mount can attack if it takes an appropriate maneuver; see Chapter 16 for details. A horse can bite, kick with hooves, or trample; iron horseshoes give +1 to kicking or trampling damage. The rider’s attack is at an extra -2 if the mount attacked on its last turn.

**Panic:** If a mounted fighter charges directly toward an NPC who is unused to facing cavalry (GM’s option), the GM may require him to make a Will roll to stand his ground and fight. If he fails, he’ll try to run instead. Anyone with Combat Reflexes gets +6 to this roll. Those with a SM equal to or greater than that of the mount do not have to roll!

**Cavalry Weapons**

**Melee Weapons:** A rider uses melee weapons at the lower of his Melee Weapon skill or Riding skill. Thus, a trained rider has no penalties to use melee weapons while mounted. If the mount’s velocity is 7 or more relative to the foe, the attack has -1 to hit but +1 damage. Use the same rules when attacking from a motorcycle or similar open vehicle (substitute Driving skill for Riding skill above).

**Lances:** Lance skill appears on p. 204. To couch a lance, a rider must have a saddle and stirrups. A couched lance’s damage depends on the mount’s mass and velocity. Work out damage for a collision between the mount and the target – (mount’s ST) x (distance moved last turn)/100 dice of damage, rounded down – and add the lance’s thrust/impaling bonus of +3. **Example:** A ST 25 warhorse charging at Move 8 inflicts 2d+3 impaling damage.

**Tournament jousting uses blunted wooden lances, specially designed to break if they strike very hard. These inflict the same amount of damage, but it is crushing – and if the damage exceeds 15 points, the lance snaps, limiting damage to 15 points.**

**Using Ranged Weapons While Mounted**

**Attack:** Firing from atop a moving animal tests both marksmanship and riding. Roll against the lower of Riding or ranged weapon skill to hit. If you are firing a noisy weapon (e.g., an unsilenced gun), you must make a Riding roll after each attack. On a failure, the mount is spooked (see Spooked Mounts, above); on a critical failure, you lose control (see Mount Loss of Control Table, above).

**Aim:** You may Aim a ranged weapon while mounted, but if the mount moves more than a step, you suffer the same penalties that you would if firing from a moving vehicle: you can’t benefit from extra turns of Aim, or from telescopic scopes and other targeting systems.

**Tricks:** To turn in the saddle and fire at the foe behind you: -4 to weapon skill, and -1 to any Riding roll made that turn. To hang on the far side of the mount and shoot over it or underneath it: -6 to weapon skill, -3 to any Riding roll. This latter move means your foe’s only targets are your foot, face, eyes, skull, and one hand. But if he attacks and misses by 4 or less, he hits your mount!

**Mounted Defense**

A mount’s only defense is Dodge. Some mounts may have *barding* (see Horse Armor (Barding) Table, p. 286) or natural DR.
A rider can Dodge, Block, or Parry. If he has Riding at 12+, all of these defenses are at normal levels. For a less-skilled rider, reduce active defenses by the difference between 12 and the rider's skill; e.g., someone with Riding-9 would have -3 to all active defenses.

**Height Difference**

A cavalryman on horseback is effectively three feet above a standing foe. See *Combat at Different Levels* (p. 402).

**Mounted Combat Results**

A rider who is stunned must make a Riding roll at -4 or fall off. A rider who suffers any knockback is automatically knocked off unless he has a saddle and stirrups, in which case he gets a Riding roll at -4 per yard of knockback to stay on.

If any attack aimed at a rider misses by 1, it hits the mount unless it makes its active defense roll; the reverse is true for attacks aimed at the mount. Of course, either may be attacked intentionally!

If the mount is hit, the rider must roll vs. Riding, minus the shock penalty suffered by the mount, to keep it from spooking (see p. 397). If the mount is crippled and falls, effects are as per result 12 on the *Mount Loss of Control Table*.

**Multiple Riders**

On a horse-sized or larger mount, a second human-sized or smaller rider can hang on behind the one controlling the mount. The controlling rider has an extra -1 to Riding skill. The passenger uses the lower of the controlling rider's skill or his own ST on any roll to avoid falling off, but does so at -3.

**FLYING COMBAT**

Heroes may fly using advantages (Flight, Telekinesis, etc.), magic spells, antigravity belts, and so forth. A few special rules apply to combat while airborne.

**Aerial Movement**

If the ceiling is high enough, fliers can move over other fliers! Humans normally fly in a horizontal position (so that they can watch the ground and see where they're going); treat them as two-hex figures when using the *Tactical Combat* rules.

**Changing Height**: Vertical movement costs the same as horizontal movement. Moving a yard vertically and a yard horizontally simultaneously (diagonal movement) at 45° costs the same as 1.5 horizontal yards.

**Steps and Retreats**: Use your basic air Move to calculate the distance you can step or retreat during combat (see Step, p. 368); fliers are often fast enough to step 2+ yards. If a flyer retreats as part of an active defense, he can specify that he is doing so vertically.

**Flying Fast**: See *High-Speed Movement* (p. 394). A diving flyer can accelerate faster; add +10 to basic air Move and double top airspeed on any turn spent diving and doing nothing else (a Move maneuver).

**Cannot Hover**: If you are flying under your own power using Flight with the Cannot Hover, Controlled Gliding, or Gliding limitation, you must take a Move or Move and Attack maneuver and move at least 1/4 your top airspeed each turn, or you'll stall and start to fall. You might also stall if you lose control during high-speed movement (p. 394) and suffer sudden deceleration that pushes you below 1/4 your top airspeed. You may recover from a stall by turning your fall into a dive and regaining speed. Roll vs. DX-4 each turn to do so.

**Flight Ceiling**

On Earth, an unprotected human has trouble breathing past 6,000', and needs an oxygen mask or an advantage such as Doesn't Breathe past 20,000'; see *Atmospheric Pressure* (p. 429). On worlds with greater air pressure, higher flight is possible. On worlds with little atmosphere, the reverse is true. If you use wings to fly, you can't fly in a trace atmosphere or a vacuum.

**Aerial Attack and Defense**

There is no penalty to attack or defense rolls in flight. Flyers are normally no less stable than fighters on the ground.

**Attack**: When flyers attack foes on the ground, use the *Combat at Different Levels* rules (p. 402). Weapon reach becomes very important! Don't worry about the relative height of two battling flyers – as long as they're close enough to engage at all.

**Defense**: When a flyer retreats, he can retreat out of the plane of an attack – not merely away from his attacker. If a flyer can hover, and has enough space to move one step up or down, he gets +1 over and above the usual retreating bonus when he retreats. To perform an Acrobat's Dodge (p. 375), use Aerobatics skill.

**Hit Location**

When you strike at an enemy, you can usually choose what part of his body to attack. Some body parts, or “hit locations,” are harder than others to hit in a fight; some are more (or less) vulnerable to specific damage types. There are a few exceptions:

- Completely unaimed attacks – Wild Swings, stabs in the dark, grenade fragments, etc. – cannot deliberately target a hit location. Use *Random Hit Location* (p. 400) instead.
- Attacks that cover a large area – such as an avalanche or a cone of dragon fire – make hit location irrelevant. See *Large-Area Injury* (p. 400).
- Fatigue damage always ignores hit location.

**Deciding Where to Attack**

Where to hit a foe depends on many things – your skill, your foe's armor, and whether you want to kill him! A humanoid target has the locations listed below (see the hit location tables on pp. 552-554 for non-humanoids). Each location gives the penalty to attack rolls to hit that location (in parentheses), followed by any special damage effects.

**Torso (0)**: The chest and abdomen. No penalty to hit, and no effect on damage. This is the default target for attacks: if you don't specify a hit location, you are attacking the torso.
**Vitals (-3):** The heart or lungs (from the front) or the kidneys (from behind). Certain attacks can target the vitals for increased damage. Increase the wounding modifier for an **impaling** or any **piercing** attack to \( \times 3 \). Increase the wounding modifier for a **tight-beam burning** attack (see box) to \( \times 2 \). Other attacks cannot target the vitals.

**Skull (-7):** The part of the head that houses the brain. The skull gets an extra DR 2, the wounding modifier for all attacks increases to \( \times 4 \), knockdown rolls are at -10, and critical hits use the **Critical Head Blow Table** (p. 556). **Exception:** None of these effects apply to toxic damage.

**Eye (-9):** Impaling, piercing, and tight-beam burning attacks can specifically target the eye. Injury over HP/10 blinds the eye; otherwise, treat as a skull hit without the extra DR 2! (As with skull hits, toxic damage has no special effect.)

**Face (-5):** The jaw, cheeks, nose, and ears. Many helmets have an open face, allowing this attack to ignore armor DR! Knockdown rolls are at -5, and critical hits use the **Critical Head Blow Table**. Corrosion damage (only) gets a \( \times 1.5 \) wounding modifier... and if it inflicts a major wound, it also blinds one eye (both eyes on damage greater than full HP).

**Neck (-5):** The neck and throat. Increase the wounding multiplier of crushing and corrosion attacks to \( \times 1.5 \), and that of cutting damage to \( \times 2 \). The GM may rule that anyone killed by a cutting blow to the neck is decapitated!

**Groin (-3):** The lower torso. Jackets and light armor don’t always cover this area. Treat as a torso hit, except that human males (and the males of similar species) suffer double the usual shock from crushing damage (to a maximum of -8), and get -5 to knockdown rolls.

**Arm or Leg (-2):** A good way to disable without killing! Against a living target, reduce the wounding multiplier of large piercing, huge piercing, and impaling damage to \( \times 1 \). Any major wound (loss of over 1/2 HP from one blow) cripples the limb – but damage beyond the minimum required to inflict a crippling injury is lost. **Note:** The penalty to hit an arm with a shield is -4.

**Hands or Feet (-4):** As for an arm or leg, but damage over 1/3 HP in one blow inflicts a crippling major wound (excess damage is still lost). This gives you a chance to cripple the foe with little real damage. However, your foe might just switch hands (or hop) and finish you off! **Note:** The penalty to hit a hand holding a shield is -8.

**Weapon (varies):** The place to strike if you need to take the foe unharmed, if you have to disarm a friend, or if you just want to show off. See **Striking at Weapons** (p. 400).
Grappling and Hit Location

Half hit location penalties (round up) if you are grappling a body part – it’s easier to grab a body part than to strike it. This does not apply to grabbing a weapon!

Random Hit Location

You never have to target a hit location – you can always just strike at “whatever target presents itself.” To do so, attack with no modifier for hit location. If you hit, and your foe fails to defend, roll 3d on the appropriate hit location table to find out where the blow fell; see Hit Location Tables (p. 552). The GM decides what table to use for non-humanoids.

Use random hit location for a Wild Swing (p. 388), shooting blind (p. 389), suppression fire (p. 409), fragmentation damage (p. 414), and any other situation where the GM feels targeting a location is unrealistic. If a random attack comes from directly above, treat “feet” as “hands” and “legs” as “arms.”

Injury Tolerance and Hit Location

The Injury Tolerance advantage (p. 60) can alter the effects of hit location.

- **Diffuse or Homogenous**: Ignore all knockdown or wounding modifiers for hit location. (Eyes and limbs can still be crippled.) All injuries use the wounding modifiers from Injury to Unliving, Homogenous, and Diffuse Targets (p. 380).
- **No Brain**: Hits to the skull get no extra knockdown or wounding modifier. Hits to the eye can cripple the eye; otherwise, treat them as face hits, not skull hits.
- **No Eyes, No Head, or No Neck**: You lack the hit location(s) in question, and your foes cannot target it.
- **No Vitals**: Hits to the vitals or groin have the same effect as torso hits.
- **Unliving**: Hit location has its usual effect, save that piercing and impaling damage to any location other than the eye, skull, or vitals uses the wounding modifiers from Injury to Unliving, Homogenous, and Diffuse Targets.

Targeting Chinks in Armor

You may use a piercing, impaling, or tight-beam burning attack to target joints or weak points in a suit of armor, vehicle, etc. Roll at -8 to hit a chink in the foe’s torso armor, or at -10 for any other location (face, eyes, vitals, arm, etc.), instead of using the usual hit location penalty. If you hit, halve DR. This is cumulative with any armor divisors.

Large-Area Injury

Some attacks affect much or most of the victim’s body – for instance, dragon’s breath, a bomb blast, a huge fire, or immersion in an acid pit. In particular, any damage described as being “area effect” or “cone,” and any external explosion, inflicts large-area injury.

A *melee* attack from an attacker whose Size Modifier exceeds that of his target by seven or more is also a large-area injury – if the attacker is striking unarmed or with a weapon scaled to his body size. (If he wishes to target a hit location, his tiny victim must be pinned or otherwise immobile.)

Damage Resistance protects normally against large-area injury – but if your DR varies by location, your “effective DR” is the average of your torso DR and the DR of the least protected hit location exposed to the attack (which could still be your torso), rounding up. If your DR varies against different attacks, “least protected” refers to the location with the lowest DR against that particular type of attack.

A location protected by cover or masked by the body does not count as “exposed to the attack.” Against an explosion or cone, only locations facing the blast or cone are exposed (e.g., if you’re turned away, your face and eyes aren’t exposed). For damage caused by immersion in a hazardous environment (e.g., fire or acid), only the immersed locations are exposed. Against a true area effect, all locations are exposed.

Don’t modify large-area injury for hit location (that is, treat it as a torso hit) unless only one location is exposed. If a single limb (hand, arm, etc.) is exposed, damage in excess of that required to inflict a major wound is lost.

Hit Location for Non-Humanoids and Vehicles

It is impossible to supply hit location rules for every type of animal or machine. Instead, we provide some guidelines: see Non-Humanoid Hit Location Tables (pp. 552-554) and Vehicle Hit Location Table (pp. 554-555).

Striking at Weapons

You might strike at a weapon because you want to take its user alive . . . or because the weapon is the only thing you can reach, or is less well-armored than its wielder.

State whether you are striking to disarm or to break the weapon, and then roll to hit. You are at -5 to hit a reach “C” melee weapon (e.g., a knife) or a pistol; -4 to hit a melee weapon with reach 1 (broadsword, mace, etc.) or a medium-sized firearm (e.g., a carbine or sawed-off shotgun); and -3 to hit a melee weapon with reach 2+ (spear; greataxe, polearm, etc.) or a rifle. Attempts to disarm are generally at an extra -2, but see next page.
**Defending Your Weapon**

**Dodge:** You can dodge normally to protect your weapon.

**Parry:** You can only parry normally using the weapon that was attacked – and only if it’s ready. If you have a broadsword in one hand and a knife in the other, and your foe targeted the knife, you can’t parry with the sword.

**Blocking:** You **cannot** block an attack on your weapon.

You may combine a dodge or a parry with a retreat to get the usual bonus. The Defense Bonus of a shield provides no benefit whatsoever.

**Knocking a Weapon Away**

A strike to disarm is an attempt to knock or twist the weapon out of your foe’s grasp without damaging it. Only a weapon that can parry can attempt to disarm, which limits disarming to unarmed attacks, melee weapons, and certain thrown weapons. You have an extra -2 to hit unless you use a fencing weapon (main-gauche, rapier, saber, or shortsword).

If you hit and your foe fails to defend, roll a Quick Contest of weapon skills with your foe; if you’re attempting to knock away a missile weapon, your opponent rolls against DX. Either of you may opt to make a ST-based skill roll instead of the standard DX-based one, if that would be better. You get +2 if you use Jitte/Sai or Whip skill (having it is not enough!). Your foe gets +2 if he is using a two-handed weapon.

If you win, you disarm your foe; his weapon flies one yard in a random direction. If your foe wins or ties, he keeps his weapon, but it will be unready unless he won by 3 or more.

If you roll a critical failure, you are the one disarmed!

**Breaking a Weapon**

You can instead target a weapon with the intent to chop through, shatter, or otherwise wreck it. You may make such an attack with any weapon – even a firearm.

If you hit and your foe fails to defend, roll your normal damage against his weapon. See Damage to Objects (p. 483) for effects. A weapon’s weight and composition will determine its DR and HP. (For weapons bought as advantages, see Gadget Limitations, p. 116.)

---

**Subduing a Foe**

At times, you want to subdue an enemy without killing him. Knockout gas, high-tech stunners, magic, and similar tricks are the best ways to take prisoners – most weapons are entirely too final! But if you need to defeat someone without harming him, and you have only ordinary weapons, you still have several options:

**Disarm him.** You can do this by striking at his weapon to knock it out of his hand or break it. Of course, he might not surrender, even then . . .

**Pull your punches.** You do not have to strike at full strength. You can choose to use any ST value less than your own when you strike with bare hands or a melee weapon, thrown weapon, bow, or sling (but not with a crossbow or a firearm). For example, if your normal ST is 10, you could strike at only ST 9 in order to deliver a lighter wound . . . or tap at ST 1 to touch your foe without doing any harm.

**Turn your blade.** You can strike with the flat side of any swing/cutting weapon (sword, axe, etc.); this turns its usual cutting damage into crushing damage. You can also poke with the blunt end of a thrust/impaling weapon (spear, halberd, etc.); this reduces damage by 1 point and makes damage crushing. Reversing a reach 2+ impaling weapon to attack with its blunt end requires a Ready maneuver.

**Pin him.** If you can grapple your foe, you can “pin” him (see Unarmed Combat, p. 370) and then tie him up. This takes about a minute with ropes, two seconds with ready handcuffs. For another option, see Arm Lock (p. 403).

**Suffocate him.** For details, see Choke or Strangle (p. 370), Choke Hold (p. 404), and Suffocation (p. 436).

**Strangulation and Smothering**

It is possible to render someone unconscious – or even kill him – through suffocation without inflicting significant HP damage. See Suffocation (p. 436) for details.

If you do not wish to choke your victim (see Actions After a Grapple, p. 370), you must somehow prevent him from breathing, or restrict the flow of blood (and thus oxygen) to his brain, without crushing his throat. If he is restrained, unconscious, or otherwise unresisting, you have many options: hold his nose and mouth shut by hand, cover his face with a pillow or similar object, or constrict either of his carotid arteries (on his neck).

If you are conscious and being smothered, you can choose not to resist and feign unconsciousness. In most cases, you can only fool your attacker if he has been smothering or strangling you for at least 10 seconds. You must make a Will roll to lie passively in the grip of an assailant who is suffocating you! Winning a Quick Contest of Acting vs. your attacker’s IQ may fool a hastily or squeamish foe into believing you’re unconscious.
These rules add additional options – and complexity – to melee attacks and defenses.

**ATTACK FROM ABOVE**

Ambush from above is a good surprise tactic. Roll a Quick Contest to see if it works: your Stealth vs. the victim's Vision. A victim walking along a trail, alley, etc. is at -2 to notice someone lurking above, unless he specifically states he is looking in the trees, high windows, etc.; then he gets +2 (but -2 to notice things on his own level!). Peripheral Vision is of no special value in this situation.

If you win the Quick Contest, your victim fails to spot you. He gets no active defense against your attack! Note that a victim is a soft thing to land on, unless he has DR 3+.

You can drop from any height before attacking (a special kind of “step”). You have an extra -2 to hit. Regardless of the results of your attack, you take falling damage if you dropped from more than two yards – see *Falling* (p. 431). You may attempt an Acrobatics roll to reduce this. Natural ambushers-from-above (e.g., jaguars) have Catfall (p. 41).

You can opt to drop onto your victim instead – animals often attack this way! Resolve damage to yourself and your target separately from your attack.

One foot of vertical difference, or less: Ignore it.

Up to two feet of vertical difference: Ignore it unless you are using hit locations. In that case, the higher fighter has -2 to hit the feet or legs, and +1 to hit the head (skull, face, or eyes) or neck. The lower fighter has +2 to hit the feet or legs, and -2 to hit the head. These modifiers are in addition to normal hit location penalties.

Up to three feet of vertical difference: As above, but the lower fighter is at -1 to any active defense, while the upper fighter is at +1 to his active defenses.

Up to four feet of vertical difference: As above, but the lower fighter is at -2 to defend, while the upper fighter is at +2. The upper fighter cannot strike at the lower fighter's feet or legs.

Up to five feet of vertical difference: The lower fighter cannot strike at the upper fighter's head, and the upper fighter cannot strike at the lower fighter's feet or legs. The lower fighter is at -3 to defend, while the upper fighter is at +3.

Up to six feet of vertical difference: The upper fighter may only strike at the lower fighter's head. The lower fighter may only strike at the upper fighter's feet or legs. Neither gets any special bonus or penalty to attack. The lower fighter is at -3 to defend, while the upper fighter is at +3.

---

**SPECIAL MELEE COMBAT RULES**

**Size Modifier and Reach**

If your SM is greater than 0, you have a longer reach with your arms. Increase the upper end of the reach of any melee weapon according to the table at right.

You also get +1 to hit when you grapple per +1 SM advantage you have over your target.

**Example:** A giant with SM +3 gets +2 to the upper end of reach – a weapon with reach 2-3 has reach 2-5 in his hands! If he grapples a human (SM 0), he gets +3 to hit. He gets no bonus to grapple another giant.

<table>
<thead>
<tr>
<th>SM</th>
<th>Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>+0*</td>
</tr>
<tr>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>+3</td>
<td>+2</td>
</tr>
<tr>
<td>+4</td>
<td>+3</td>
</tr>
<tr>
<td>+5</td>
<td>+5</td>
</tr>
<tr>
<td>+6</td>
<td>+7</td>
</tr>
<tr>
<td>+7</td>
<td>+10</td>
</tr>
<tr>
<td>+8</td>
<td>+15</td>
</tr>
<tr>
<td>+9</td>
<td>+20</td>
</tr>
<tr>
<td>+10</td>
<td>+30</td>
</tr>
</tbody>
</table>

*A* A reach “C” weapon increases to reach 1, but there are no other effects.

**COMBAT AT DIFFERENT LEVELS**

Suppose you want to jump onto a table and strike down at a foe? Or fight your way up a staircase? If you and your foe are at different levels, the vertical distance affects combat. This rule is for melee combat. For ranged weapons, see *Firing Upward and Downward* (p. 407).
Over six feet of vertical difference: Combat is impossible unless the fighters adopt some strange position; e.g., the upper fighter lies down and reaches over the edge. In that particular case, he would effectively bring himself three feet closer, and his foe could strike at his head and arm. The GM may offer appropriate bonuses and penalties for any odd tactics that the players employ.

Effects of Reach
If your weapon or Size Modifier gives you more than one yard of reach, each yard past the first brings the foe three feet closer to you. This does not bring you any closer to your foe! For example, a greatsword (two-yard reach) would let you fight as if your foe were three feet closer. If you were standing six feet below him, you would fight as though he were only three feet higher. He would not enjoy a similar benefit unless he, too, had long reach.

Typical Distances
Set distances by common sense and mutual agreement (beforehand, if possible). Some examples: Ordinary stairs rise eight inches per step (for simplicity, you may want to call them one foot). The seat of a chair is less than two feet tall. An ordinary dining table is less than three feet tall. The counter in a shop is about four feet tall. The hood of a car, or the bed of a wagon, is about three feet tall. The roof of a car, or the seat of a wagon, is over four feet tall.

SPECIAL UNARMED COMBAT TECHNIQUES
Here are some additional options for unarmed fighters who are not content merely to punch, kick, and grapple. Most require Brawling, Judo, Karate, or Wrestling skill. You can improve your ability with some of these techniques – see Sample Combat Techniques (p. 230).

Arm Lock
An arm lock is an attempt to restrain or cripple an opponent by twisting his arm. It uses Judo or Wrestling skill. To perform an arm lock, you must have two hands free and make a successful barehanded parry with Judo or Wrestling against your opponent’s melee attack.

On your first turn following the parry, you may attempt to capture your attacker's arm if he is still within one yard. This is an attack: step into close combat and roll against Judo or Wrestling to hit. Your foe may use any active defense – he can parry your hand with a weapon! If his defense fails, you trap his arm in a lock.

Your foe may attempt to break free (see Actions After Being Grappled, p. 371) on his next turn, but you are at +4 in the Quick Contest. If he loses, he has a cumulative -1 on future attempts to break free.

On your next turn – and on each turn thereafter, until your foe breaks free – you may try to damage the trapped arm. Roll a Quick Contest: the highest of your Judo, Wrestling, or ST vs. the higher of your victim’s ST or HT. If you win, you inflict crushing damage equal to your margin of victory. The target's natural DR (unless it has the Tough Skin limitation) and the DR of his rigid armor protect normally. Flexible armor has no effect!

If you cripple your victim’s arm, he drops anything in that hand. You can inflict no further damage on a crippled limb, but you can continue to roll the Contest each turn. If you win, your target suffers shock and stunning just as if you had inflicted damage.

The rolls to inflict damage are completely passive and do not count as attacks! You can simultaneously make close combat attacks on your opponent, who defends at -4 in addition to any other penalties due to the damage caused by the lock itself.

You can also use this ability offensively. Instead of waiting to parry an attack, grapple your foe normally with Judo or Wrestling skill. If he fails to break free on his next turn, you may attempt an arm lock on your next turn, just as if you had parried his attack.
**Choke Hold**

This Judo and Wrestling technique involves locking one forearm around the target’s neck and applying pressure to the windpipe. The more the victim struggles, the tighter the choke becomes. This can quickly subdue an opponent.

To apply a choke hold, you must grapple your victim from **behind** using both hands. Treat this as a normal grapple (see Grappling, p. 370), but roll against your Judo at -2 or Wrestling at -3 to hit. A victim who is aware of you may attempt any legal defense, but suffers the usual penalties for an attack from behind.

On your foe’s next turn and on subsequent turns, he may attempt to break free. You are at +5 in the Quick Contest. But note that you control your victim’s neck and head – not his arms and legs. He can attack you with a Wild Swing (p. 388), Back Kick (p. 230), etc., at the usual -4 for being grappled.

On your next turn – and on each turn thereafter, until your foe breaks free – your victim loses 1 FP, per Suffocation (p. 436). If you wish, you may choke him for crushing damage at the same time (see Actions After a Grapple, p. 370), and get +3 to ST for this purpose.

**Elbow Strike**

You can attack an enemy **behind** you in close combat by jabbing backward with your elbow. Roll against Brawling-2 or Karate-2 to hit. There is no modifier for not facing the enemy, but apply an extra -1 to hit if you target a specific hit location. On a hit, roll your usual punching damage. Treat an elbow strike at a foe in **front** of you as a normal punch.

**Knee Strike**

This is a vicious, snapping blow with the knee. Unlike a kick, it only has reach C. Roll against Brawling-1 or Karate-1 to hit. If you have grappled your target, he defends at -2... and if you grappled from the front, you may attack his groin at **no penalty**! On a hit, roll your usual kicking damage.

**Lethal Strike**

This is a blow that focuses all of your strength onto a single narrow point: a toe, a few stiffened fingers, etc. It is an option for any punch or kick with Karate. Roll against Karate to hit, but at -2 over and above any other penalties. You get -1 to damage, but your blow is **piercing** instead of crushing. This lets you target the vitals or eyes! There is a down side: the **Hurting Yourself** rule (p. 379) applies if your target has DR 1+ (as opposed to DR 3+).

**Neck Snap or Wrench Limb**

This brute-force technique consists of grabbing and suddenly twisting the victim’s head to break the neck, or a limb to dislocate or break it.

You must first grapple your opponent by the neck or desired limb using both hands; see Grappling (p. 370). Your victim may attempt to break free on his turn. If he fails, then on your next turn, roll a Quick Contest: your ST-4 vs. the **higher** of your victim’s ST or HT. If you win, you inflict swing/crushing damage on the neck or limb. Damage to the neck has the usual x1.5 wounding modifier for hit location. The target’s natural DR (unless it has the Tough Skin limitation) and the DR of his rigid armor protect normally. Flexible armor has no effect!

You may make repeated attempts on successive turns, but your opponent may attack you or attempt to break free, subject to the usual limitations of being grappled.

**Trampling**

You can trample a victim if your Size Modifier exceeds his by 2 or more – or by only 1, if he’s lying prone and you’re not.

Trampling is a melee attack: roll vs. the **higher** of DX or Brawling to hit. The victim’s only legal defense is a dodge. If you hit, you inflict thrust/crushing damage based on your ST; if you have Hooves, add +1 per die of damage.

If you knock down a foe in a collision or slam and keep on moving, you automatically overrun and trample your opponent. Do not make any attack or defense rolls – roll damage immediately, based on **half** your ST, rounded down.

In all cases, if your SM exceeds your victim’s by 3 or more, don’t worry about hit location – your attack counts as a large-area injury (see Large-Area Injury, p. 400).

---

**Improvised Weapons**

You sometimes want to hit a foe with something other than a “real” weapon. If so, the GM should treat the object as the weapon it resembles most closely: a stick would be a baton, light club, or quarterstaff; a heavy tool would be equivalent to a mace or a maul; a length of chain would serve as a clumsy morningstar; and so on.

If an improvised weapon is especially clumsy, add a penalty of -1 to -3 to hit or parry with it, or increase the minimum ST required. If it is shorter or lighter than a “real” weapon of the same type (or not very sharp, for a blade), reduce damage.

**Special Melee Weapon Rules**

Some melee weapons are more complicated than others! Below are some special cases.

**Cloaks**

You can snap a cloak in your opponent’s face or use it to block his vision; treat either as a Feint (see Feint, p. 365). You can also use a cloak to grapple. Roll against Cloak skill to hit; reach is C, 1. Otherwise, treat this just like an unarmed grapple (see Grappling, p. 370).

**Fencing Weapons**

The “ready” position of a fighter using Main-Gauche, Rapier, Saber, or Smallsword skill keeps his weapon pointed toward his foe at all times. If
well, the “fencing weapons” used with these skills are light and maneuverable. These factors make it easy for a fencer to recover from a parry or fall back in the face of an attack.

With a fencing weapon, you get +3 to Parry instead of the usual +1 when you retreat (see Retreat, p. 377). You also suffer only half the usual penalty for multiple parries (see Parrying, p. 376). However, your Parry has a penalty equal to your encumbrance level, and you cannot parry flails at all.

**Flails**

A weapon with a length of chain between the handle and the head is a “flail.” Because of the chain, a flail can wrap around a foe’s weapon or shield when he tries to defend against it. Any attempt to parry a flail is at -4; fencing weapons, with their light blades, cannot parry flails at all! Even a shield is less useful against a flail: all blocks are -2.

**Garrotes**

A “garrote” is a cord or wire used for strangling. You can only use it on an unaware or helpless victim, and you must attack from behind (this often requires Stealth rolls!).

Once you are in position, roll against Garrote skill to hit. You must target the neck, at the usual -5 to hit. In most cases, your target is unaware, so you can safely make an All-Out Attack (Determined) for +4 to hit.

The victim may attempt to parry with his hand or a ready close-combat weapon, but he does so at -3. Unless he has Combat Reflexes, he is most likely mentally stunned, for an additional -4 to his defense roll. On a success, he manages to put his hand or weapon between his throat and the garrote. The hand takes no damage unless you are using a wire garrote.

On the turn of the attack and every subsequent turn, you may choke the victim (see Actions After a Grapple, p. 370), and get +3 to ST in the ensuing Quick Contest. Treat the damage as crushing (x1.5 to the neck) for a rope garrote, cutting (x2 to the neck) for a wire one. In addition, your victim starts to suffocate (see Suffocation, p. 436). To break free, the victim must win a Quick Contest of ST-5, Judo-3, or Wrestling-3 against your Garrote skill.

**Dirty Tricks**

Creative players will constantly invent new combat tricks – for instance, throwing sand in the enemy’s face to blind him. This presents a problem for the GM. On the one hand, creativity should be encouraged; it makes the game more interesting. On the other hand, tricks only work when they’re new and original. If sand in the face worked every time, barbarian warriors would leave their swords at home and carry bags of sand instead!

The best solution is to let “tricks” work once – maybe twice – and then assume that word has gotten around. If you, as the GM, think that the players’ clever idea is a good one, you should give it a fair chance to work. But remember that elaborate tricks can fail elaborately . . . and word gets around. The first Trojan horse was a great success. It hasn’t worked since then.

**IQ and Dirty Tricks**

Often, the GM will find it appropriate to require an IQ roll when a fighter attempts a clever trick. Depending on the circumstance, the GM may:

- Make the trickster roll vs. his IQ to pull off the trick properly.
- Make the victim roll vs. his IQ to see through the trick.
- Require a Quick Contest of IQ to see who outsmarts whom.

There’s no hard-and-fast rule! Just remember: nobody who takes an IQ 8 fighter should be allowed to play him as a genius!

**Liquids in the Face**

This is one of the most common “dirty tricks.” Treat liquid tossed in the face as a thrown weapon with Acc 1 and Max 3. Remember the -5 to target the face!

On a critical hit, the liquid gets in the victim’s eyes, blinding him for 1d seconds (the GM rolls secretly). On any other hit, the target may defend normally – but note that it is impossible to parry a liquid. If he fails to defend, he must make a Will roll to avoid flinching. On a failure, he flinches: -2 to further defenses that turn, and -2 to any DX or Sense roll on his next turn. On a success, the attack has no effect . . . unless the victim has Bad Temper!

This assumes a relatively harmless substance, like beer. Acid, poison, etc. have their usual effects.

An improvised garrote (almost any piece of rope) gives -2 to skill. A wire garrote must be equipped with handles, or you will take thrust/cutting damage to each hand!

**Picks**

Melee weapons that inflict swing/impaling damage – picks, warhammers, etc. – do a lot of damage, but may get stuck in your foe! At the start of the turn following any attack that penetrates the foe’s DR and inflicts damage, you must either relinquish your weapon and leave it stuck in your foe (a free action), or attempt a ST roll to free it (a Ready maneuver).

On a successful ST roll, your weapon comes free. If it is one that must be readied after an attack (any weapon with “‡” next to its ST statistic), you can ready it next turn. On a failure, it is stuck. You can’t use it or ready it – and if you wish to move, you’ll have to let go. On later turns, you have two choices: let go of your weapon or try another ST roll. Should you ever get a critical failure on the ST roll, the weapon is permanently stuck (but you can retrieve it from a fallen foe after the battle).
When the weapon comes free, it does half as much damage as it did going in. For example, if the original wound was 4 points, it does another 2 points. Failed ST rolls cause no extra damage.

If your foe tries to move away while your weapon is stuck in him, roll a Quick Contest of ST. If he wins, he pulls the weapon from your grasp! If you win, your foe can’t move. On a tie, the weapon comes free and does damage as above.

Shields

A shield is an excellent defense against low-tech weapons, but you can also use it offensively:

Shield Bash: A shield “bash” is an ordinary melee weapon attack. A shield can only hit foes in your front or shield-side hexes. See the Melee Weapon Table (p. 271) for statistics.

Shield Rush: A shield “rush” is an attempt to knock your foe down by running into him shield-first. See Slam (p. 368) for details. You cannot do this with a buckler.

Whips

Whips are effective disarming weapons. When you strike to disarm with a whip, you get +2 in the ensuing Quick Contest; see Knocking a Weapon Away (p. 401).

You may try to entangle your opponent instead of his weapon. This attack is at an extra -4 to hit, and inflicts no damage, but follows the Lariat rules (p. 411) if successful.

Whips are poor defensive weapons, and get -2 to Parry. Whips are also unbalanced, and cannot attack and parry on the same turn – and long whips actually become unready after an attack or a parry. It takes one turn to ready a two-yard whip, two turns to ready a whip three yards or longer.

Additional rules apply, depending on the type of whip:

Whip: You can “crack” an ordinary bullwhip – this is the sound of the tip breaking the sound barrier! This requires an attack at -4 to skill, but inflicts +2 damage. Any whip blow is painful: anyone who suffers a whip wound to his arm or hand must roll against Will, modified by the shock penalty for the injury. On a failure, he drops anything in that hand.

Kusari: This is a weighted chain. You can adjust reach from 1 to 4 yards with a Ready maneuver. Treat it as a whip when disarming, entangling opponents, or readying. Treat it as a flail vs. enemy defenses: -2 to block and -4 to parry. If someone parries your kusari with a weapon, make a skill roll immediately. On a success, your kusari entangles his weapon. A failure has no special effect; a critical failure means you drop the kusari! Your opponent may disentangle his weapon on his turn. This requires a free hand and a DX roll. If he does not, you may make a disarm attempt on your next turn without rolling to hit first: state that you are attempting to disarm and immediately roll the Quick Contest. This still counts as an attack. You cannot use a kusari if there is no headroom, or in an area full of obstacles (nearby people count as obstacles). On a critical miss, a roll of 3, 4, 17, or 18 indicates that you have hit yourself in the face!

Monowire Whip: An ultra-tech whip made of superfine wire. A control allows you to vary length from 1 to 7 yards, changing both reach and ready time. Adjusting the length requires a Ready maneuver. When used to snare an opponent or a weapon, the whip cuts into its target, inflicting thrust+1d(10) cutting damage every turn it is pulled taut until the victim escapes. A “drop weapon” critical miss indicates that you have hit yourself or a friend.
**SPECIAL RANGED COMBAT RULES**

The following rules add extra detail in ranged combat situations.

**MALFUNCTIONS**

This *optional* rule applies only to firearms, grenades, and incendiaries. A "malfunction" is a mechanical failure of the weapon; e.g., a misfire or a jam. Unlike a critical failure, a malfunction does not normally endanger the user.

For the purpose of this rule, firearms, grenades, and incendiaries have a "malfunction number," or "Malf.," a function of TL.

<table>
<thead>
<tr>
<th>TL</th>
<th>Malf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>6 or higher</td>
<td>17</td>
</tr>
</tbody>
</table>

A fine or very fine firearm gets +1 to Malf.; a cheap weapon gets -1. Specific types of weapons might have a higher or lower Malf., as indicated in their descriptions. The GM is free to lower a weapon's Malf. for mistreatment, lack of maintenance, or damage.

Regardless of the attacker's skill, a weapon will malfunction instead of firing on any unmodified attack roll equal to or greater than its Malf. The exact effects depend on the weapon.

**Firearm Malfunction Table**

When a weapon malfunctions, roll 3d on the following table:

- 3-4 – Mechanical or electrical problem.
- 5-8 – Misfire.
- 9-11 – Stoppage.
- 12-14 – Misfire.
- 15-18 – Mechanical or electrical problem, and possible explosion.

**Mechanical or Electrical Problem**

The weapon fails to fire. A successful Armoury or IQ-based weapon skill roll (takes a Ready maneuver) can diagnose the problem. Once the problem is known, make an Armoury skill roll to correct it. Each repair attempt takes one hour; and any critical failure destroys the weapon.

**Misfire**

The weapon fails to fire. A successful Armory+2 or IQ-based weapon skill roll (takes a Ready maneuver) can identify the problem. If the weapon is a revolver, the next shot will fire normally. Otherwise, each attempt to fix the problem requires three Ready maneuvers, two hands free, and a successful Armory+2 or IQ-based weapon skill roll. Critical failure causes a mechanical or electrical problem.

**Stoppage**

The weapon fires one shot, then jams or otherwise stops working. (Treat the fired shot as a normal attack.) Each attempt to clear the stoppage requires three Ready maneuvers, two hands free, and a successful Armory roll, or IQ-based weapon skill roll at -4. A success fixes the weapon. Failure means it isn't fixed yet, but you can try again. Critical failure causes a mechanical or electrical problem.

**Grenades**

The grenade is a dud, and will never explode.

**Explosion**

Any TL3 firearm or TL4 grenade, breechloader, or repeating firearm may blow up in the gunner's face, inflicting 1d+2 cr ex [2d]. If the weapon uses an explosive warhead, use the warhead's damage instead. TL5+ weapons do not explode – treat as a mechanical or electrical problem.

**Firing Upward and Downward**

Firing downward increases the distance you can throw or fire a projectile; firing upward decreases it. This effect is unlikely to matter at short distances, but can be important at long range. Ignore it entirely for beam weapons like lasers!

**Firing Downward**

For every two yards of elevation you have over your target, subtract one yard from the effective distance, to a minimum of half the real ground distance. *(Example: You are 40 yards away from your target, and 10 yards higher. Subtract 5 yards from effective range. You fire as though you were only 35 yards away.)*

**Firing Upward**

For every yard of elevation your target has over you, add one yard to the effective distance. *(Example: You are 40 yards away from your target, and 10 yards lower. Add 10 yards to effective range. You fire as though you were 50 yards away.)*

**Cover**

To take cover behind an obstacle, simply move so that it is between you and your attacker. You might also have to kneel or lie prone, depending on the obstacle's height. Cover protects one or more hit locations, making you harder to hit with ranged weapons.

You must normally expose your skull, eyes, face, and neck to see a target. You must expose your weapon arm and hand to fire a one-handed weapon. You must normally expose both arms and hands to fire a two-handed weapon, plus half of your torso and vitals, unless you are firing through a narrow slit. Your groin, legs, and feet can remain hidden if the cover is sufficient to protect them. You might have to expose more of your body if the cover is partial, or if you are unable to kneel, sit, or lie prone behind low cover.
If your foe is partially behind cover, you have three options:

- Target a location that is not behind cover. Your attack takes the usual hit location penalty. If the location is only half exposed, you have an extra -2 to hit.
- Roll randomly for hit location. Your attack takes no hit location penalty, but shots that hit a covered location strike the cover instead. For shots that hit a location that is only half exposed, roll 1d: on a roll of 4-6, the shot strikes cover, not the target.
- Ignore the cover and try to shoot right through it! This is only likely to be effective if you have a powerful weapon or your target is behind light cover. You have an extra -2 to hit. (Exception: If your foe is completely concealed by cover, you suffer the usual penalty for shooting blind, typically -10.) The cover adds its “cover DR” against the attack. For structures, this is typically the barrier’s DR + (HP/4); see the Structural Damage Table (p. 558) and Cover DR Table (p. 559) for more information. For the cover DR of living things, see Overpenetration, below.

Cover is normally only effective against ranged weapons, but certain obstacles might interfere with melee attacks as well. You can fight across a low obstacle if your attacks have sufficient reach to strike past it. Thus, two fencers could duel across an intervening table, but could not strike each other’s legs or feet.

**OVERPENETRATION**

When you inflict piercing, impaling, or tight-beam burning damage with a ranged attack, there is a chance that damage might pass through your target and harm something on the far side; e.g., an innocent bystander. Similarly, a powerful attack might go right through cover (see Cover, above) or a shield (see Damage to Shields, p. 484) – or even penetrate a building or vehicle, damaging it and its occupants.

The GM decides who is likely to be hit due to overpenetration. A hit is automatic if the second target is immediately behind the first; e.g., someone taking cover or blocking with a shield. Otherwise, see Hitting the Wrong Target (p. 389) and Occupant Hit Table (p. 555) to determine who is hit.

An attack only overpenetrates if its basic damage exceeds the target’s “cover DR.” To find this value, add together the target or cover’s DR – on both sides, for a person in armor – and HP (for flesh), 1/2 HP (for a machine, vehicle, or other Unliving target), or 1/4 HP (for a Homogenous object). Use the object’s DR alone if it’s a thin slab, like a wall or a door. Finally, apply any armor divisor.

If the attack does enough damage to penetrate cover DR, determine if anyone on the other side is hit. If so, they get the cover DR plus their own DR against the damage.

**Example:** Special Agent Ira Gray spots an assassin with a rifle, and throws himself in front of the VIP he’s protecting just as the gunman fires. The armor-piercing rifle bullet – a 7d(2) pi-attack – hits him in the chest! The bullet’s basic damage is 20 points. Gray’s DR 8 ballistic vest stops only 4 points due to the armor divisor of (2). Gray takes 16 points of penetrating damage. Halved for small piercing, this inflicts an 8 HP wound. What about the VIP? Gray’s vest gives DR 16, since both sides count, and Gray has 12 HP. The total cover DR is 28, halved for the armor divisor of (2) to give DR 14. Since the bullet’s basic damage was 20, it overpenetrated. The VIP wasn’t wearing armor, so he takes 6 points of damage, halved for small piercing, and suffers a 3 HP injury. He’s wounded, but not badly – Special Agent Gray saved his life.

**SPECIAL RULES FOR RAPID FIRE**

The following additional rules are for use in conjunction with Rapid Fire (p. 373). They only apply when making a ranged attack at RoF 2+.

**Automatic Weapons and Full-Auto Only**

Automatic weapons – firearms with RoF 4+ – use the Rapid Fire rules. Most can fire both controlled bursts and “full auto” (that is, for as long as the trigger is held down).

Some automatic weapons (e.g., machine guns) can only fire full auto; they lack a semi-automatic or limited-burst setting (“selective fire”). A weapon that is “full-auto only” has a “!” after its RoF statistic. The only way to fire a short burst with such a weapon is to hold down the trigger for a fraction of a second. Minimum RoF is one-quarter full RoF (round up) or shots remaining, whichever is less.

**Rapid Fire vs. Close Stationary Targets**

Rapid fire generally results in only a fraction of the shots fired hitting the target. This is realistic . . . except when the target is up close and unable to move. This situation arises when shooting your way through a wall, door, or parked car with a shotgun or assault rifle – or when performing an execution.
If your target is **totally immobile** (for instance, an inanimate object, or someone who is completely restrained or unconscious) and has a Size Modifier high enough to completely counteract the range penalty, a successful attack roll means that half the shots fired (round up) hit. If the attack succeeds by the weapon’s Recoil or more, all of the shots hit.

**Example:** When shooting at a door with SM -2, this rule would apply at any range up to 5 yards (range modifier -2). If the target were a man (SM 0), this would only apply at a range of up to 2 yards (range modifier 0) – and only if he were tied up or unconscious.

### Shotguns and Multiple Projectiles

A weapon with a RoF followed by a multiplier (e.g., RoF 3x9) fires shots that release multiple, smaller projectiles. The most common example is a shotgun. The first number is the number of shots the weapon can actually fire; this is how much ammunition is used up. When resolving the attack, however, multiply shots fired by the second number to get the effective RoF.

**Example:** Father O’Leary’s shotgun has RoF 3x9. He chooses to fire three times at a demon flapping toward him. For the purpose of the Rapid Fire rules, he his three shots are an attack at RoF 3 x 9 = 27, because each shell releases multiple buckshot pellets.

At extremely close range, multiple projectiles don’t have time to spread. This increases lethality! At ranges less than 10% of 1/2D, don’t apply the RoF multiplier to RoF. Instead, multiply both basic damage dice and the target’s DR by half that value (round down).

**Example:** Father O’Leary’s shotgun has 1/2D 50, so once that demon flies to within 5 yards, it is close enough that the pellets won’t disperse much. If O’Leary fires three times, his RoF is 3, not 27. But since the attack is a 3x9 multiple-projectile round, a x4 multiplier applies to both basic damage and the demon’s DR. The shotgun’s basic damage is 1d+1, so O’Leary rolls 4d+4 for each hit (up to three, depending on how well he rolls). However, the demon’s DR 3 becomes DR 12 against the damage.

---

### Spraying Fire

A weapon fired at RoF 5+ can attack multiple targets. All the targets must be in the same general direction (within a 30° angle), and you must engage them in succession – from right to left or from left to right, your choice.

Announce how many shots you will fire at each target before you roll to hit. You may split up your RoF however you wish. If the targets are more than one yard apart, traversing between them wastes some shots. For RoF 16 or less, you lose one shot for each yard between targets. For RoF 16+, you lose two shots per yard.

These “wasted” shots may hit unintended targets (see Hitting the Wrong Target, p. 389).

Make a separate attack roll against each target. Your effective RoF for each attack is just the number of shots you fired at that target. Since a weapon is harder to control when you swing it to engage multiple targets, add +1 to effective Recoil for your attack on the second target, +2 to Recoil when you engage the third target, and so on.

**Example:** Sgt. Kelly, Special Air Service, kicks open the door and sees three armed terrorists. With no hostages in sight, Kelly opens fire! His weapon is a 4.6mm PDW (see p. 278). He sprays fire at all three terrorists, using his weapon’s full RoF of 15. The first two terrorists are standing 2 yards apart; the third is 4 yards from either. Kelly fires 5 shots at the first, wastes 1 shot traversing to the second, fires 4 shots at him, wastes 3 shots traversing to the third, and fires his last 2 shots. He resolves this as three separate rapid-fire attacks: one at RoF 5 with the PDW’s normal Recoil of 2, one at RoF 4 and Recoil 3, and one at RoF 2 and Recoil 4.

### Suppression Fire

If you have a weapon with RoF 5+, you can lay down “suppression fire.” This involves holding down the trigger and “hosing down” an area with fire. This will affect anyone who enters the area before the start of your next turn. There needn’t be a target in the area when you start!

To use suppression fire, select a target zone two yards across at some point within your weapon’s range, take the All-Out Attack (Suppression Fire) maneuver, and start shooting. This maneuver takes an entire second; you can do nothing else that turn. Specify how many shots you are firing, up to your weapon’s full RoF. If your weapon has RoF 10+, you can suppress multiple two-yard zones, as long as they are adjacent and you fire at least five shots into each zone. Your effective RoF in each zone is the number of shots you fired into that zone, not your total shots.
Once you start suppression fire, you must attack anyone – friend or foe – who enters the zone or a swath that extends one yard to either side of a line drawn from you to the center of the zone. With the exception of penalties for target visibility, all normal attack modifiers apply – including the rapid-fire bonus for your effective RoF and any bonus for aiming prior to suppressing. Your final effective skill cannot exceed 6 + your rapid-fire bonus for most weapons, or 8 + your rapid-fire bonus for vehicle- or tripod-mounted ones.

If you hit, use Random Hit Location (p. 400) – you cannot target a particular hit location with suppression fire. This may result in some shots hitting cover (see Cover, p. 407). If all your shots somehow manage to strike targets, you can score no further hits that turn.

**Special Ranged Weapons**

Certain ranged weapons are “special cases,” and require additional notes.

**Bolas**

The bolas is a thrown entangling weapon. The target can dodge or block, but if he tries to parry, the bolas hits his parrying arm, with effects as described below. **(Exception: A successful parry with a cutting weapon cuts the cords, ruining the bolas!)**

You may aim a bolas at any body part. If it hits, it does its damage and wraps around its target. To escape, the victim requires a free hand, and must make three successful DX rolls. Each attempt counts as a Ready maneuver; during which time the victim may take no other actions. Animals roll to escape at -3 for paws or at -6 for hooves.

If you hit a weapon, or an arm or hand that is holding something, roll a Quick Contest: your Bolas skill vs. the target’s ST. If you win, the target drops what he’s carrying (this does not affect a shield strapped to the arm). If you hit a leg or foot, you entangle two legs; a running target must make a DX roll or fall, taking 1d-2 damage. If you hit the neck, the bolas cuts off the target’s breathing (see Suffocation, p. 436) until he escapes.

**Flaming Arrows**

A flaming arrow is made by wrapping oil- or fat-soaked cloth, grass, etc. around the shaft just behind the arrowhead; it takes 10 seconds to prepare, and must be used within three seconds of preparation. It is clumsy in flight, giving -2 to hit. If it hits, treat it as an arrow that does one point of burning damage as a linked effect (see Linked Effects, p. 381). The chance of the flame spreading depends on what the arrow strikes.

**Crossbows**

When you buy a crossbow, you must specify its ST. It takes two seconds to cock any crossbow of your ST or less.

A stronger bow does more damage but takes longer to cock. A crossbow with ST 1 or 2 greater than your own takes six seconds to cock. A crossbow with ST 3 or 4 greater than yours requires a “goat’s foot” device to cock (takes 20 seconds). You cannot cock a stronger crossbow, except using slow mechanical devices. You can still fire it!

Remember that in addition to cocking time, it takes one turn to ready a bolt – unless you have Fast-Draw (Arrow) – and one turn to load the bolt into the crossbow.

**Hand Grenades**

It takes a Ready maneuver to grab a hand grenade from your belt, web gear, etc. To use it, you must arm it (“pull the pin”); this requires a second Ready maneuver. After that, you can throw it normally.

Most grenades have a fixed delay (typically under 5 seconds), but some detonate on impact. If the grenade has
a delay, you can take one or two seconds to Aim (and hope no one shoots you!) before you throw it. Otherwise, it is just barely possible for the enemy to pick up a grenade that lands next to him and throw it back! It takes him one second to kneel down, one to ready the grenade, one to throw . . .

**Harpoons**
Most harpoons are barbed. Use the rules under Picks (p. 405), except that the tether lets you attempt the ST roll to free the weapon at a distance. A harpooned victim can move, but no farther than the tether’s length; to go further, he must win a Quick Contest of ST to pull the tether out of your hands. He might have to beat ST 50 (or even higher!) to escape if the tether is made of thick rope and tied securely to something solid (e.g., a ship).

**Lariats**
Like a harpoon, treat a lariat as a thrown weapon, despite the fact that you hold onto one end. You may aim a lariat at any body part. Your target may dodge or parry – and if he successfully parries with a cutting weapon, he damages the lariat as if he had tried to cut it (see below). But if he tries to parry and fails, you automatically ensnare his parrying arm!

If you hit the target’s arm or torso, you ensnare it. On subsequent turns, you must take a Ready maneuver to keep the victim snared. Roll a Quick Contest of ST on your turn. If you win, you immobilize your opponent; if you lose, he pulls the lariat from your grasp.

If you lasso the neck, use the same rules, but your victim is at -5 in the Contest. If you win, the lariat cuts off the victim’s breathing – see Suffocation (p. 436).

If you rope the foot, the target must make a DX roll to remain standing (this is instead of the Contest above). He rolls at -4 if he was running. If he falls, he takes 1d-4 damage – or 1d-2 if he was running. On subsequent turns, use the rules above to keep him entangled.

You must keep the lariat taut at all times to immobilize or suffocate your victim. This requires a Ready maneuver each turn. If your horse is trained to do this for you, substitute its ST for yours in the Quick Contest.

To escape from a *taut* lariat, cut the rope (DR 1, 2 HP). To escape from a *limp* lariat (including one pulled from the attacker’s grasp), use the rules given under Bolas (p. 410).

A lariat takes 1 turn per 5 yards to ready after a miss. A typical lariat is 10 yards long.

**Molotov Cocktails and Oil Flasks**
A “Molotov cocktail” (TL6) is a bottle filled with gasoline and fitted with a burning “fuse” – often just a rag. Once you have it in hand, it takes a Ready maneuver to light its fuse (if you have a torch or lighter) and an Attack maneuver to throw.

In theory, the bottle bursts upon hitting a hard surface (anything with DR 3+), spilling the gasoline, which immediately catches fire. In reality, Molotov cocktails are notoriously unreliable. They have a Malfunction of 12, regardless of tech level (see Malfunctions, p. 407); on any attack roll of 12+, the fuse separates from the bottle in flight, the bottle fails to break, or the fuel doesn’t ignite.

If your target is a person, he may dodge or block, but not parry. If he dodges, the bottle shatters on the ground at his feet. The same thing happens if he fails to defend but does not have DR 3+ (the bottle bounces off without breaking). If he blocks, it breaks on his shield.

If your target is the ground, or if you targeted a person but hit the ground instead, the Molotov cocktail sets fire to a one-yard radius; see Area-Effect Attacks (p. 413). On a battle map, the target hex is filled with flame.

If the Molotov cocktail bursts on the target, it inflicts 3d burning damage, and then 1d burning damage per second. Most DR protects at only 1/5 value; sealed armor protects completely. If you hit the target’s shield, it takes this damage instead, and the wielder may continue to use his shield until it is destroyed (the fire is on the outside). Use the Damage to Shields rule (p. 484), or just assume that he must discard his shield after the battle. If you hit the ground, the flame does 1d-1 burning damage per second in a one-yard radius. In all cases, the flame burns for 10d seconds.

“Greek fire” (TL3) consists of naphtha – a light petroleum product distilled from crude oil, roughly similar to gasoline – mixed with fat or tar and saltpeter to make it sticky and burn hotter. It should be very expensive! Treat earthenware flasks filled with Greek fire as Molotov cocktails. This is the classic fantasy “oil flask.”

Below TL3, flammable, hot-burning liquids are unavailable in realistic game worlds.

Note that these weapons are fragile. Roll 1d for each bottle if you fall; it breaks on a roll of 1-4. A foe may strike at a bottle on your belt (-5 to hit); it breaks automatically if hit. Either result soaks you in flammable liquid: any burning damage will set you on fire!

**Nets**
A net is a thrown entangling weapon. The target may dodge or parry it. If he successfully parries with a cutting weapon, he damages the net; treat a net of any size as a diffuse object with DR 1 and normal HP for its weight. If the target fails to defend, he is entangled, and cannot move or attack until freed.

To escape, the victim requires at least one free hand, and must make three successful DX rolls. Each attempt counts as a Ready maneuver, during which time the victim may take no other actions. Animals roll at an extra -2, as do humans with only one hand available; rolls to escape from a small net are at +3. If the victim fails three consecutive rolls, he becomes so entangled that he must be cut free.

It is also possible to escape a net by damaging it. The victim can only use attacks with reach “C,” but they hit automatically. Use the Breaking a Weapon rules (p. 401) – but treat a net as diffuse (see Injury to Unliving, Homogenous, and Diffuse Targets, p. 380).

You may also use a small net as a melee weapon. It has a reach of 1 or 2 yards. Handle the attack as per Lariats (above) and the victim’s attempt to break free as per Bolas (p. 410).

**Firearm Accessories**
*These rules cover the effects of the firearm accessories mentioned in Chapter 8.*
Bipods and Tripods

If a weapon has an attached bipod, a prone shooter may treat it as if it were braced (see Aim, p. 364) and reduce its ST requirement to 2/3 normal (round up). To open or close a folding bipod requires a Ready maneuver.

A heavy weapon may be mounted, on a tripod or similar device. The gunner cannot move or step on any turn if he fires the weapon, but he can defend normally. He may ignore the weapon’s ST requirement while it is on its mount. Removing a weapon from its mount, or reattaching it, requires three Ready maneuvers – more, for some very heavy weapons.

Laser Sights

These devices use a low-powered laser beam to project an aiming dot onto the target. Some use a visible beam; others use a beam visible only to infrared or ultraviolet vision.

Laser sights have a maximum range at which they are effective; beyond that range, the dot is too dispersed to be visible. If no maximum range is given, assume the sight’s range is matched to the 1/2D range of the weapon on which it is mounted.

If you can see your own aiming dot, you get +1 to hit, regardless of whether you took an Aim maneuver. But if the target can see it, he gets +1 to Dodge! Activating a laser sight is a free action; specify whether it’s on before you Aim or Attack.

Scopes

A telescopic sight, or “scope,” gives a bonus to hit if you take an Aim maneuver. With a fixed-power scope, you must Aim for at least as many seconds as the scope’s bonus. With a variable-power scope, you may Aim for fewer seconds, but this reduces your bonus by a like amount. Scopes are variable-power unless otherwise noted.

A scope may be integral to a weapon, attached, or part of a vehicle’s sighting system. Telescopic Vision (p. 92) also gives a scope bonus. You can only use one scope (including Telescopic Vision) at a time. Some advanced scopes also function as night-vision devices.

Silencers

A silencer muffles the sound of gunshots. Someone several rooms away indoors, or out of your line of sight outdoors, gets a Hearing+5 roll to hear an unsilenced shot. This roll may be at up to +4 for a high-powered weapon or quiet environment, or down to -4 for a low-powered gun or noisy environment (GM’s discretion).

A typical silencer gives an extra -4, while the best commercial silencers might give -6.

Anyone who is in front of your weapon and exposed and close enough for you to attack with it automatically hears the shot – even with a silencer. However, the silencer makes the sound difficult to localize: the listener must make an IQ roll (not a Hearing roll) to deduce your location unless you’re in plain sight.

Silencers are most common for auto pistols and submachine guns, but exist for many other weapons.

Guided Weapons

A “guided” weapon is a projectile that can receive steering commands in flight. This enables the firer to keep it on course. The weapon relies on the operator’s skill to reach its target. Early guided missiles had to be steered by the operator using a joystick. Modern systems merely require him to keep the launcher’s sights trained on the target; the missile and launcher’s electronics do the rest.

Most reference works categorize guided weapons according to how the launcher communicates with the projectile. For instance, a “wire-guided” missile or torpedo receives commands via thin wires that spool out behind the projectile in flight, while a “radio-guided” weapon receives commands via radio. There are many other systems!

Treat an attack with a guided weapon exactly like any other ranged attack, except for these special rules:

Semi-Active Homing Weapons

“Semi-active” laser or radar homing is common on TL7+ missiles. The seeker head on this type of projectile detects and homes in on the reflections of a laser or radar beam directed at the target. As for other homing weapons, the firer does not need to do anything once the weapon is launched. However, someone (the firer or an ally) must aim a properly modulated laser or radar beam at the target until the missile hits.

Modern soldiers often sneak up close to their targets and use rifle-sized “laser designators” to direct laser-homing “smart bombs” or missiles launched by distant aircraft or artillery. Designating a target requires continued Aim maneuvers and a DX-based roll against Forward Observer skill (p. 196); failure means the weapon misses its target.

Guided and Homing Weapons

Some weapons can be steered, or steer themselves, once launched. This makes it easier to hit distant targets! These weapons appear late in TL6, and are commonly available from TL7 on. Most are rocket-propelled, save for underwater torpedoes – but magical or exotic examples may exist in some game worlds.

Aim: If you Aim a guided weapon before you Attack, you receive its Acc bonus – but you don’t have to aim. If the projectile takes multiple seconds to reach its target (see Time to Target, below), the attack is automatically aimed and gets its Acc bonus.

Attack: If the target is within the weapon’s 1/2D range, the weapon can hit on the turn you fire it. Use an Attack or All-Out Attack maneuver to fire. If the target is more distant, use a Concentrate maneuver – and since the projectile will be in flight for several
seconds, you will also have to take Concentrate maneuvers on one or more subsequent turns.

Modifiers: Treat a guided weapon as any other firearm when assessing modifiers, but ignore range modifiers! Your target might have “electronic countermeasures” (ECM) that give a penalty to hit. Details depend on the ECM and the guidance system, and are outside the scope of the Basic Set.

Homing Weapons

A “homing” weapon is a projectile that steers itself to the target. It has its own homing sense – called a “seeker head,” on a missile – that determines how it tracks its target. This equates to a sensory advantage; e.g., an infrared-homing missile uses Infravision, while a radar-homing missile uses Scanning Sense (Radar). Some weapons have multiple homing senses! Use the weapon's homing sense(s) instead of your senses when assessing combat modifiers; e.g., radar ignores darkness but can be jammed.

Homing weapons use the usual ranged combat rules, with these modifications:

Preparation Time: Some launchers require several seconds to insert batteries, turn on and warm up electronic systems, etc. These activities require Ready maneuvers, but are already factored into the time to ready a new shot, as listed with the Shots statistic.

Aim: Your weapon must “lock on” to the target before you can fire. This takes an Aim maneuver, and usually requires you to be able to see the target. This special Aim maneuver requires a roll against your weapon skill: Artillery (Guided Missile), for homing missiles – not Guns or Gunner.

Attack: Fire a homing weapon using a Ready maneuver, not an Attack maneuver – the projectile attacks on its own! If the target is within the weapon’s 1/2D range, the weapon attacks on the same turn; otherwise, see Time to Target, below. When you make the attack roll, do not roll against your skill to hit. Instead, use the weapon’s skill of 10, adding its Acc if you made your skill roll for “lock on.”

Modifiers: Homing missiles ignore range modifiers and all modifiers for your injury, movement, posture, etc.! Base visibility modifiers on the projectile’s homing sense, not on your senses. Anything that jams this sense (e.g., radar jammer vs. radar homing) gives a penalty to hit. All other ranged combat modifiers (for size, speed, etc.) apply normally.

Time to Target

If a guided or homing attack has a 1/2D statistic, do not halve damage. Instead, read this as the attack’s speed in yards/second. The projectile can hit a target at up to its 1/2D range on the turn you launch it. It requires multiple turns to reach a more distant target. Defer the attack roll until the projectile actually reaches its target.

The projectile continues to close at a speed equal to its 1/2D until it has traveled a total distance equal to its Max (that is, for Max/speed seconds, including the turn of firing). If it still has not hit, it will crash, self-destruct, etc. Thus, it’s possible to “outrun” a guided or homing attack . . . if you’re fast enough!

Some further special rules:

Guided Weapons: Take a Concentrate maneuver each turn to steer the weapon. Should you lose sight of the target while the attack is en route, your attack misses automatically! You must make an Attack or All-Out Attack (Determined) on the turn the projectile reaches the target. Resolve the attack as if you had fired the weapon that turn. If you cannot make an Attack or All-Out Attack, the projectile will fly past the target and crash.

Homing Weapons: You are no longer in control of the projectile once you launch it. It will home on its own. The projectile itself will take an Attack maneuver on the turn that it reaches the target.

Area and Spreading Attacks

Some attacks – dragon’s breath, gas bombs, etc. – affect a wide area. Damage from all such attacks uses the Large-Area Injury rule (p. 400), unless the victim is so big that only a single body part is contained within the area.

Area-Effect Attacks

Gas bombs, Molotov cocktails, and similar attacks – including anything with the Area Effect enhancement (p. 102) – affect everyone within a specified radius. Damage does not usually decline with distance. On a miss, use the Scatter rule (see p. 414) to determine where the area is centered. Active defenses don’t protect against an area attack, but victims may dive for cover or retreat out of the area; see Dodge and Drop (p. 377).

Cone Attacks

Dragon’s fire, wide-beam microwave and sonic weapons, and anything with the Cone enhancement (p. 103) are examples of cone attacks. A cone attack requires a roll to hit . . . but it might still catch the target in the area of effect on a miss! On a hit, the cone is on target; otherwise, use the Scatter rule (see p. 414) to determine a new target point. Once you know the target point, imagine (or trace on a battle map) a line between the attacker and that point. The cone spreads to either side of this line, out to its maximum range.

A cone is one yard wide at its origin, but increases in width at a “rate of spread” equal to its specified maximum width divided by its maximum range. For instance, a cone with a maximum range of 100 yards and a maximum width of 5 yards would spread by one yard per 20 yards of range; out at 60 yards, it would be three yards wide. If maximum width is unspecified, assume the cone spreads by one yard per yard of range.

A cone affects everyone within its area, but anyone who is completely screened from the attacker by an object or person is behind cover, which protects normally. Targets may attempt a dodge defense to leave the area or get to cover; see Dodge and Drop (p. 377).

Dissipation

Certain cone and area attacks dissipate with distance. This is common for realistic wide-area beam weapons and area-effect burning attacks. Attacks with the Dissipation limitation (p. 112) also use these rules.
In the case of a damaging attack (e.g., Innate Attack), damage declines with the target’s distance from the center of the area or the apex of the cone. For a cone, divide damage by the cone’s width in yards at the target’s distance from the apex. For an area effect, divide damage by the distance in yards between the target and the center of the effect.

For an attack that allows a HT roll to resist (e.g., Affliction), find the “damage divisor” as above, but do not apply it to damage (if any). Instead, use the divisor as a bonus to the HT roll to resist; e.g., two yards from the center of an area effect, add +2 to HT.

In the case of a damaging attack (e.g., Innate Attack), damage declines with the target’s distance from the center of the area or the apex of the cone. For a cone, divide damage by the cone’s width in yards at the target’s distance from the apex. For an area effect, divide damage by the distance in yards between the target and the center of the effect.

For an attack that allows a HT roll to resist (e.g., Affliction), find the “damage divisor” as above, but do not apply it to damage (if any). Instead, use the divisor as a bonus to the HT roll to resist; e.g., two yards from the center of an area effect, add +2 to HT.

Explosions

Certain attacks, such as hand grenades and Explosive Fireball spells, produce a blast when they hit. Such attacks have the notation “ex” after their damage type: “cr ex” for a crushing explosion, “burn ex” for a burning explosion, and so on.

In addition to doing the listed damage to whoever was struck directly, an explosion inflicts “collateral damage” on everything within (2 ¥ dice of damage) yards. For instance, if an explosion does 6d¥2 damage, everyone within 24 yards is vulnerable – although some might be lucky enough to take little or no damage.

The listed damage only applies “as is” to the target struck. For everything else caught in the blast, roll this damage but divide it by (3 ¥ distance in yards from the center of the blast), rounding down. Roll damage individually (but the GM can save time by using one roll for several NPCs). Use torso armor to determine DR against explosion damage.

If an explosive attack has an armor divisor, it does not apply to the collateral damage. For example, the shaped-charge warhead of an anti-tank rocket has an armor divisor of (10), but this only reduces the DR of a target it actually strikes; those nearby get their full DR against the blast.

Explosions are considered incendiary attacks, and can start fires; see Catching Fire (p. 434).

Anyone caught in a blast may attempt an active defense roll to dive for cover from the explosion’s collateral damage and fragmentation; see Dodge and Drop (p. 377).

Fragmentation Damage

Many grenades, bombs, and artillery shells have metal casings designed to shatter when they explode, producing a storm of sharp fragments. Some are packed with
extra material (pellets, nails, etc.) to enhance this effect.

Fragmentation damage, if any, appears in brackets after explosive damage; e.g., "[2d]" means 2d fragmentation damage. Everyone within (5 × dice of fragmentation damage) yards is vulnerable. For example, that [2d] attack would throw fragments out to 5 × 2 = 10 yards.

The farther a target is from the blast, the less likely the fragments are to hit him. A hit is automatic if the explosive attack actually strikes the target. The fragments attack everyone else in the area at skill 15. Only three modifiers apply: the range modifier for the distance from the center of the blast to the target, the modifier for the target’s posture (prone, etc.), and the target’s Size Modifier. It is possible for several fragments to hit! For every three points by which the attack roll succeeds, one additional fragment strikes the target.

The only active defense against fragments is to dive away from the explosion that produced them; see *Dodge and Drop* (p. 377).

For each hit, roll hit location randomly. If that location is behind cover, the fragment hits cover.

Fragmentation damage is cutting. Note that if an explosive attack has an armor divisor, this does not apply to the fragments it produces.

**Airbursts:** Against an airburst, do not apply posture modifiers – lying prone under an airburst does not decrease the body area exposed to the rain of fragments! Only overhead cover protects.

**Incidental Fragmentation:** An explosion with no listed fragmentation damage can still create fragments if there is any loose or frangible material at the explosion site. Incidental fragmentation damage ranges from 1d-4 for ordinary earth to 1d for an explosion on loose scrap.

**Hot Fragments:** White phosphorus-type smoke warheads produce this effect. The fragments typically inflict 1d(0.2) burning damage every 10 seconds for one minute.

**Demolition**

Sometimes the only way to deal with a problem is to blow it up! If the adventurers are using or facing explosives, the PCs or GM should decide how many dice of damage – in multiples of 6d – the blasting charge is supposed to do, and what kind of explosive it is.

Explosives normally do crushing damage with the Explosion modifier (p. 104) – and often the Fragmentation modifier (p. 104).

**How Much Explosive?** An explosion doing 6d×n damage takes (n×n)/4 pounds of TNT. If you are using an explosive other than TNT, divide the weight required by its relative explosive force (REF) – see the Relative Explosive Force Table, below.

**How Big a Blast?** Reverse the formula to determine how much damage a given weight of explosive will do: damage is 6d × square root of (weight of explosive in lbs. × 4 × REF).

**Example:** A 1920s Chicago safecracker plans to blast through a bank vault. Estimating the toughness of the vault (see p. 557), he decides he needs a blast that does 6d×8 damage. He’s using dynamite. The weight of dynamite he needs is (8 × 8)/(4 × 0.8) = 20 lbs.

### Relative Explosive Force Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Type</th>
<th>REF</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Serpentine Powder</td>
<td>0.3</td>
<td>Standard gunpowder, pre-1600.</td>
</tr>
<tr>
<td>4</td>
<td>Ammonium Nitrate</td>
<td>0.4</td>
<td>Common improvised explosive.</td>
</tr>
<tr>
<td>4</td>
<td>Black Powder</td>
<td>0.4</td>
<td>Standard gunpowder, 1600-1850.</td>
</tr>
<tr>
<td>5</td>
<td>Black Powder</td>
<td>0.5</td>
<td>Standard gunpowder, 1850-1890.</td>
</tr>
<tr>
<td>6</td>
<td>Diesel Fuel/ Nitrate Fertilizer</td>
<td>0.5</td>
<td>Common improvised explosive.</td>
</tr>
<tr>
<td>6</td>
<td>Dynamite</td>
<td>0.8</td>
<td>Commercially available for mining, demolition.</td>
</tr>
<tr>
<td>6</td>
<td>TNT</td>
<td>1.0</td>
<td>The basic, stable, high explosive.</td>
</tr>
<tr>
<td>6</td>
<td>Amatol</td>
<td>1.2</td>
<td>TNT-ammonium nitrate. Fills bombs &amp; shells in WWII.</td>
</tr>
<tr>
<td>6</td>
<td>Nitroglycerine</td>
<td>1.5</td>
<td>Unstable! If dropped, detonates on 13+ on 3d.</td>
</tr>
<tr>
<td>7</td>
<td>Tetryl</td>
<td>1.3</td>
<td>Common for smaller explosive shells and bullets.</td>
</tr>
<tr>
<td>7</td>
<td>Composition B</td>
<td>1.4</td>
<td>Another common explosive filler.</td>
</tr>
<tr>
<td>7</td>
<td>C4 Plastic Explosive</td>
<td>1.4</td>
<td>Standard military and covert-ops explosive.</td>
</tr>
<tr>
<td>9</td>
<td>Octanitrocubane</td>
<td>4</td>
<td>Theoretical advanced explosive.</td>
</tr>
<tr>
<td>10</td>
<td>Stabilized Metallic Hydrogen</td>
<td>6</td>
<td>Exotic science-fiction explosive.</td>
</tr>
</tbody>
</table>
These rules cover attacks that don’t simply bash through the target’s DR to injure him.

**AFFLICTIONS**

An “affliction” is any attack that causes a baneful effect – blindness, choking, stunning, etc. – *instead* of damage. Examples include tear gas, stun guns, the Affliction advantage (p. 35), and most other “nonlethal” weapons and powers.

The target of an affliction always gets a modified HT roll to resist; e.g., HT-3. His DR normally adds to this roll; for instance, DR 1 gives +1 to HT. However, afflictions often have armor divisors or special “penetration modifiers” (see below) that bypass some or all of the target’s DR. For example, DR gives no HT bonus against a follow-up affliction if the “carrier” attack penetrates DR.

On a failed HT roll, the victim suffers the effects of the affliction: stunning for high-tech stun guns, choking and partial blindness for tear gas, etc. See Afflictions (p. 428) for descriptions of the most common effects. Since afflictions represent a huge variety of different attacks – from beam weapons to chemical agents to psionic mind blasts – you should consult the footnotes to the relevant weapon table for full details.

**Linked Afflictions:** Some attacks that inflict ordinary damage have an affliction “linked” to them. For example, a cattle prod does burning damage and requires the victim to make a HT-3 roll to avoid stunning. Anyone hit by such an attack must attempt his resistance roll or suffer the affliction, regardless of whether any damage penetrates his DR.

**Side Effects:** Certain damaging attacks cause an affliction as a “side effect”... if they inflict injury. The victim gets a HT roll to resist, but typically at -1 per 2 points of injury.

**SPECIAL PENETRATION MODIFIERS**

In addition to armor divisors (see Armor Divisors and Penetration Modifiers, p. 378) and follow-up attacks (see Follow-Up Damage, p. 381), there are several other “penetration modifiers”:

- **Blood Agent:** The attack must reach an open wound or mucous membrane (eyes, open mouth, nose, etc.) to be effective. If it does not, it has no effect at all. See Blood Agent (p. 110) for detailed rules.

- **Contact Agent:** This is most common for contact poison, nerve gas, and exotic “hand of death” effects. The attack must touch bare skin or porous clothing to have any effect. Any DR stops it, unless the DR is limited with Tough Skin. Exception: If the attack is an Area Effect (p. 102) or Cone (p. 103), it affects everyone in the area who lacks the Sealed advantage (either innate or granted by a sealed suit).

- **Respiratory Agent:** The attack affects only those who inhale it. DR has no effect – but the attack cannot harm those who are holding their breath, breathing supplied air (e.g., in a vacuum suit), or using a gas mask or respirator. It is also totally ineffective against anyone who has either the Doesn’t Breathe or Filter Lungs advantage.

- **Sense-Based:** The attack is channeled through one or more of the victim’s senses (e.g., vision or hearing), as specified for the attack. It can only affect someone using the targeted sense. See Sense-Based (p. 109) for details.
The following rules are shamelessly unrealistic and strictly optional, but can be fun in larger-than-life games!

**Bulletproof Nudity**

PCs with Attractive or better appearance can get a bonus to active defenses simply by undressing! Any outfit that bares legs, chest, or midriff is +1. Just a loincloth or skimpy swimwear is +2. Topless females get an extra +1. Total nudity gives no further bonus to defense, but adds +1 to Move and +2 water Move.

**Cannon Fodder**

The GM may rule that minor NPCs are mere “cannon fodder,” with these effects:

1. They automatically fail all defense rolls . . . yet never All-Out Attack.
2. They collapse (unconscious or dead) if any penetrating damage gets through DR. If they are unprotected, or if the hero’s attacks are such that damage would always penetrate, there’s no need to roll damage at all. In any event, don’t bother keeping track of HP!

**Cinematic Explosions**

In reality, a grenade or anti-tank rocket will almost certainly kill an unarmored man. In cinematic combat, explosions do no direct damage! Ignore fragmentation, too. All a blast does is disarray clothing, blacken faces, and (most importantly) cause knockback. Every yard of knockback from a cinematic explosion causes a token 1 HP of crushing damage.

**Cinematic Knockback**

In reality, guns cause little or no knockback. But in cinematic combat, a big gun can blast foes through windows and even walls! Work out knockback for a piercing attack just as if it were a crushing attack. In addition to rolling to see if he falls down, anyone who suffers knockback from any attack must make an IQ roll or be mentally stunned on his next turn. This roll is at -1 per yard of knockback.

**Flesh Wounds**

Immediately after you suffer damage, you may declare that the attack that damaged you (which can include multiple hits, if the foe used rapid fire) was a glancing blow or “just a flesh wound.” This lets you ignore all but 1 HP (or FP) of damage . . . at the cost of one unspent character point. If you have no unspent points, the GM might let you go into “debt”: he will subtract these points from those you earn for the adventure.

**Infinite Ammunition**

PCs always have spare ammunition or power cells. If they use up all they are carrying, they immediately find more. Furthermore, weapons never malfunction.

**Melee Etiquette**

If a PC chooses to fight unarmed or with melee weapons, his opponents always face him one-on-one, one at a time. Unengaged NPCs can dance around the fight uttering shrill cries of encouragement, but wait their turn to attack.

If the foe is a super-strong monster that could kill or maim the hero with a single blow, it rarely strikes to inflict damage directly. Instead it slams the hero, or grabs him and tosses him around!

**TV Action Violence**

If struck by a potentially lethal attack (including a rapid-fire attack that inflicts multiple hits), the hero can choose to convert his failed defense roll into a success. This costs him 1 FP and he loses his next turn. The hero cannot spend FP to avoid unarmed attacks or melee or thrown weapon attacks that inflict crushing damage (or no damage, such as a grapple), unless they would hit the skull or neck. Likewise, he cannot avert attacks on his weapons or non-living possessions.

With this rule in effect, those involved in a fight with lethal weapons “duck for cover” and are forced “onto the defensive” until they’re exhausted.

---

**Dual-Weapon Attacks**

This optional rule might be cinematic . . . but it is balanced enough to use in a realistic campaign. The GM has the final say.

If you have at least two hands, you can strike with two hands at once using an Attack maneuver instead of an All-Out Attack (Double) maneuver. Each hand can attack unarmed, with a one-handed melee weapon, or with a pistol. Of course, if your ST is high enough, you can wield a two-handed weapon in one hand!

Each attack is at -4 to hit, but you can learn the Dual-Weapon Attack technique (p. 230) to reduce this penalty. You have an extra -4 (total -8) with your “off” hand, unless you have Ambidexterity (p. 39) or learn Off-Hand Weapon Training (p. 232).

Roll to hit separately for each hand. You can attack one target or two – but to strike two foes with melee attacks, they must be adjacent. If you aim both attacks at a single opponent, he defends at -1 against them, as his attention is divided!

If you already have multiple attacks – for instance, from an Extra Attack (p. 53) – you may “trade” only one of these for a Dual-Weapon Attack. All your remaining attacks must be simple, single-weapon attacks.
The life of an adventurer is not all song and glory. You get tired. You get your clothes dirty. You might actually get hurt – or even worse, killed!

Fortunately, all these problems can be cured. Even death.

Read on . . .

**INJURIES**

Wounds and ailments cause “injury”: a (usually) temporary loss of Hit Points. Thus, your HP score measures your ability to sustain injury; see Hit Points (p. 16).

Injury often results from “penetrating damage”: the damage left after Damage Resistance is subtracted from the basic damage of an attack. However, disease, overexertion, and the like can cause injury without damage.

If any injury reduces you to 0 or fewer HP, you will soon fall unconscious. You can even go to negative HP . . . but if you go too far, you risk death. For the average man, the difference between full HP and negative HP is one or two sword blows or bullets. This is realistic . . . and dramatic. Even in cinematic battles, heroes rarely shrug off dozens of blows. Instead, they avoid being hit.

Armor helps . . . but fights can be deadly, so think before you act!

The life of an adventurer is not all song and glory. You get tired. You get your clothes dirty. You might actually get hurt – or even worse, killed! Fortunately, all these problems can be cured. Even death.
**Example of Injury**

Fiendish Friedrick has HT 12 and HP 14. He has the ill fortune to be trapped in a dead-end corridor by a horde of orcs. He fights valiantly, but the monsters keep coming.

The first wound Friedrick receives is a spear thrust that inflicts 4 HP of injury. This reduces him to 10 HP. He will have a -4 shock penalty on his next turn.

Then the orc leader swings a halberd. The GM is using hit locations, and says the orc strikes at Friedrick’s right arm. Friedrick fails to block and suffers 11 HP of injury. This is over Friedrick’s HP/2, so it cripples his arm. But injury to a limb can’t exceed the minimum required to cripple it. For Friedrick, HP/2 is 7. Damage over HP/2 is 8 HP, so he only loses 8 HP. Now he is at 2 HP... and has the One Arm disadvantage!

Since a crippling wound is also a major wound, Friedrick must make a HT roll to avoid being stunned and knocked down. If he fails by 5 or more, he could even pass out! Luckily, he succeeds. He’ll have a -4 shock penalty (the maximum) next turn, but he can keep on fighting. He picks up his axe left-handed...

However, Friedrick now has less than 1/3 his HP left. His movements slow and falter: he is at half Move and Dodge.

Soon, Friedrick takes another blow. This inflicts 2 HP of injury, reducing him to 0 HP. At the beginning of his next turn, he rolls vs. HT – and succeeds! Grimly, he hangs on to consciousness. Despite the -2 for shock, he slays another orc. For two more turns, he makes successful HT rolls. He is wounded again, dropping to -3 HP, but fights on. But on his third turn, he fails his HT roll and instantly falls unconscious.

Friedrick has desecrated the orcs’ sacred burial grounds, so they’re mad. They keep hacking at him after he falls! When he reaches -14 HP, he must roll vs. HT or die. He succeeds... and the orcs keep hacking. At -28 HP, and again at -42 HP, he must make another HT roll to survive. Each time, he rolls a 12 or less and clings to life. But the orcs keep hacking. Eventually, Friedrick reaches -70 HP (-5¥HP) and dies automatically.

Only strong magic can help Friedrick now! And if the angry orcs keep hacking until he is at -140 HP (-10¥HP), there won’t even be a body to revive – just Friedrickburger.

**GENERAL INJURY: LOST HIT POINTS**

Repeated wounding eventually causes anyone or anything to weaken and collapse, even if no single injury is very great. The chart below summarizes the effects of being at low or negative HP. All effects are cumulative.

- **Less than 1/3 your HP left** – You are reeling from your wounds. Halve your Move and Dodge (round up).
- **0 HP or less** – You are in immediate danger of collapse. In addition to the above effects, make a HT roll at the start of your next turn, at -1 per full multiple of HP below zero. Failure means you fall unconscious (or simply stop working, if you weren’t truly alive or conscious in the first place); see Recovering from Unconsciousness (p. 423). Success means you can act normally, but must roll again every turn to continue functioning. Exception: If you choose Do Nothing on your turn, and do not attempt any defense rolls, you can remain conscious without rolling. Roll only on turns during which you attempt a defense roll or choose a maneuver other than Do Nothing.
- **1¥HP** – In addition to the above effects, make an *immediate* HT roll or die. (If you fail by only 1 or 2, you’re dying, but not dead – see Mortal Wounds, p. 423). If you succeed, you can still talk, fight, etc., as above (until you fail a HT roll and collapse). Roll again each time you suffer injury equal to a further multiple of your HP, whether as a result of one wound or many. For instance, if you have 11 HP, you must roll to avoid death at -11 HP. If you survive, you must roll again at -22 HP, -33 HP, and so on...
- **5¥HP** – You die immediately. You have lost a total of 6 times your HP! Nobody can survive that much injury.
- **10¥HP** – Total bodily destruction, if this makes sense given the source of the damage – 200 points of arrow wounds leave a messy but recognizable corpse; 200 points of fire injury leaves nothing but an unrecognizable lump of charcoal. The difference can be important in settings where resurrection, reanimation, etc. are possible!

**SHOCK**

Whenever you suffer injury, reduce your DX and IQ by the number of HP you lost – to a maximum penalty of -4, regardless of your injuries – *on your next turn only*. This effect, called "shock," is temporary; your attributes return to normal on the turn after that.

Shock affects DX- and IQ-based skills, but *not* active defenses or other defensive reactions; see Temporary Attribute Penalties (p. 421). Therefore, on the turn after you are badly hurt, it is often a good idea to try flight or All-Out Defense instead of an immediate counterattack!

*High HP and Shock:* If you have 20 or more Hit Points, your shock penalty is -1 per HP/10 of injury (drop all fractions). Thus, if you have 20-29 HP, it’s -1 per 2 HP lost; if you have 30-39 HP, it’s -1 per 3 HP lost, and so forth. The maximum penalty is still -4.
Major Wounds

A “major wound” is any single injury of greater than 1/2 your HP. If you are using hit locations, a lesser injury that cripples a body part also counts as a major wound – see Crippling Injury (below). Any major wound requires a HT roll to avoid knockdown and stunning (see below).

Knockdown and Stunning

Whenever you suffer a major wound, and whenever you are struck in the head (skull, face, or eye) or vitals for enough injury to cause a shock penalty (see Shock, p. 419), you must make an immediate HT roll to avoid knockdown and stunning.

Modifiers: -5 for a major wound to the face or vitals (or to the groin, on a humanoid male); -10 for a major wound to the skull or eye; +3 for High Pain Threshold, or -4 for Low Pain Threshold.

On a success, you suffer no penalty beyond ordinary shock.

On a failure, you’re stunned; see Effects of Stun, below. You fall prone (if you weren’t already), and if you were holding anything, you drop it. This effect is called “knockdown,” and isn’t the same as “knockback” (see p. 378). On a failure by 5 or more, or any critical failure, you fall unconscious! See Recovering from Unconsciousness (p. 423).

Those with Injury Tolerance (p. 60) suffer reduced effects: No Brain means that skull, face, and eye injuries don’t cause knockdown or stunning unless they are major wounds – and even then, the roll is at no special penalty. No Vitals means that vitals and groin injuries don’t cause knockdown or stunning unless they are major wounds, in which case the roll has no special penalties. Homogenous and Diffuse include No Brain and No Vitals.

Effects of Stun

A failed knockdown roll can cause “stun,” as can certain critical hit results and some afflictions. If you are stunned, you must Do Nothing on your next turn. You may perform any active defense while stunned, but your defense rolls are at -4 and you cannot retreat.

At the end of your turn, you may roll against HT. On a success, you recover from stun and can act normally on subsequent turns. On a failure, you remain stunned; your next maneuver must also be Do Nothing, but you get another roll at the end of that turn . . . and so on, until you recover from stun.

Mental Stun: If you are surprised, you might be mentally stunned; see Surprise Attacks and Initiative (p. 393). This sort of stunning works as described above, but you must make an IQ roll, not a HT roll, to snap out of it. You’re not hurt – you’re confused!

Crippling Injury

When using hit locations, sufficient injury to a limb, extremity, or eye may cripple it. This requires a single injury that exceeds a certain fraction of the target’s HP. For humans and humanoids, these thresholds are:

Optional Rules for Injury

These rules add realism, and give heroes with medical skills or healing abilities exciting tasks to perform – but they also require extra record keeping, so they are optional.

Bleeding

If you are injured, you may continue to lose HP to bleeding. At the end of every minute after being wounded, make a HT roll, at -1 per 5 HP lost. On a failure, you bleed for a loss of 1 HP. On a critical failure, you bleed for 3 HP. On a critical success, the bleeding stops completely. On an ordinary success, you do not bleed this minute, but must continue to roll every minute. If you do not bleed for three consecutive minutes, the bleeding stops for good. Otherwise, you or someone else will need to make a First Aid roll to stop the bleeding; see First Aid (p. 424).

The GM decides which wounds bleed. Cutting, impaling, and piercing wounds usually bleed; crushing wounds generally don’t, but there are always exceptions. Minor burning and corrosion injury does not bleed significantly: the damage sears the flesh, cauterizing the wound and preventing blood loss. However, if such injury causes a major wound, treat it as a bleeding wound, oozing blood plasma until properly treated.

Accumulated Wounds

It normally takes a single injury over HP/3 to cripple an extremity – or over HP/2 to cripple a limb. For extra realism, you can keep track of injury by hit location, in which case total injury over HP/3 or HP/2, as appropriate, cripples the body part. Be aware that this leads to complicated record keeping! One good way to handle this is to make tally marks by the affected body part on the character's picture.

Excess injury is still lost under this rule. For instance, if you have 11 HP, a total of 6 HP of injury cripples your arm. Ignore further injury, except for the purpose of determining dismemberment. Repeated blows to a limb or extremity cannot kill you.

Last Wounds

It can happen that a sorely wounded hero is knocked out, or even killed, by a 1 HP blow to the foot. There are those who find this unrealistic. If you wish, use this optional rule: once you have less than 1/3 your HP left, you can totally ignore any wound to a limb or extremity unless: (a) it is a critical hit; (b) it is enough to cripple that body part; or (c) it inflicts injury equal to 1/3 your HP or more at once.
**Limb** (arm, leg, wing, striker, or prehensile tail): Injury over HP/2.

**Extremity** (hand, foot, tail, fin, or extraneous head): Injury over HP/3.

**Eye**: Injury over HP/10.

It is sometimes possible to cripple a body part with less damage or no damage at all; e.g., with a specific critical hit result.

A blow to a limb or extremity can never cause more injury than the minimum required to cripple that body part. For example, if a man has 10 HP and suffers 9 points of injury to his right arm, he loses only 6 HP – the minimum required to cripple his arm. **Exception:** No such limit applies to the eyes!

**Dismemberment:** If injury to a body part before applying the above limit was at least twice what was needed to cripple it, the body part is not just crippled but destroyed. A cutting attack or explosion severs a limb or extremity; otherwise, it’s irrevocably crushed, burned, etc.

## Crippling Extra Limbs

If you have more than two of a particular limb (arm, leg, etc.), a crippling blow is injury over HP/(number of limbs of that kind); e.g., if you have four arms, injury over HP/4 cripples an arm.

If you have more than two of a given extremity (hand, foot, etc.), a crippling blow is injury over HP/(1.5 × number of extremities of that kind); e.g., if you have four feet, injury over HP/6 cripples a foot.

## Effects of Crippling Injury

Any crippling injury is also a major wound, and requires a HT roll for knockdown and stunning; see **Knockdown and Stunning** (p. 420). Below are some additional effects specific to particular body parts; all these effects apply to **dismemberment** as well. These last until the fight is over, and possibly longer – see **Duration of Crippling Injuries** (p. 422).

**Hand:** You drop anything you were carrying in that hand. If you were using two or more hands to hold an object, roll vs. DX to avoid dropping it. You cannot hold anything (e.g., a weapon) in that hand. You can wear a shield on that arm and use it to block, but you cannot **attack** with it. Until healed, you have the One Hand disadvantage (p. 147).

**Arm:** As for a crippled hand . . . but while someone with a crippled hand could at least carry something in the crook of the arm, you cannot use a crippled arm to carry anything! You do not drop a shield on that arm (unless the arm is severed), but you cannot use it to block – and since it’s just hanging in front of you, reduce its usual Defense Bonus by one. Until healed, you have the One Arm disadvantage (p. 147).

**Foot:** You fall down! You cannot stand or walk without a crutch or something to lean on. You can still fight if you brace yourself against a wall. If you have nothing to lean on, you may assume a kneeling or sitting posture. Until healed, you have the Lame (Crippled Legs) disadvantage (p. 141).

**Leg:** You fall down! You can still fight if you assume a sitting or lying posture. Until healed, you have the Lame (Missing Legs) disadvantage (p. 141).

**Eye:** You are blind in that eye. Until healed, you have the One Eye (p. 147) disadvantage – or Blindness (p. 124), if you lose all your eyes – unless you have some substitute for eyes.

## Patient Status

Hospitals often describe a patient as being in Good, Fair, Serious, or Critical condition. Here’s how these familiar terms equate with injury in **GURPS**.

**Good:** Vital signs are stable and within normal limits; indicators are excellent; patient is conscious. This means he has 1/2 or more his full HP; e.g., an average human (10 HP) with 5 to 10 HP remaining.

**Fair:** Vital signs are stable and within normal limits; indicators are favorable; patient is conscious but in moderate to severe discomfort. He has at least 1 HP, but less than 1/2 his full HP; e.g., the same person at 1 to 4 HP.

**Serious:** Vital signs may be unstable or outside normal limits; indicators are questionable; patient is badly injured or acutely ill, and may be unconscious. He is at 0 HP or worse, but above -1xHP; e.g., our victim at -9 to 0 HP.

**Critical:** Vital signs are unstable and outside normal limits; indicators are unfavorable; patient is often unconscious, and may not survive. He is at -1xHP or worse; e.g., our patient at -10 HP or below.

## Temporary Attribute Penalties

Shock, afflictions, and many other things can **temporarily** lower your attributes. ST reductions affect the damage you inflict with muscle-powered weapons. IQ penalties apply equally to Will and Per. However, there are no other effects on secondary characteristics; for instance, ST, DX, and HT reductions do **not** affect HP, Basic Speed, Basic Move, or FP.

An attribute penalty always reduces skills governed by the lowered attribute by a like amount. For example, -2 to IQ would give -2 to all IQ-based skills (and to all Per- and Will-based skills, since IQ reductions lower Per and Will).

**Exception:** Defensive reactions that don’t require a maneuver to perform – active defenses, resistance rolls, Fright Checks, etc. – **never** suffer penalties for attribute reductions. For instance, -2 to DX would not affect Block, Dodge, or Parry.

Note that **permanent** attribute losses require recalculation of all secondary attributes and skills!
Nonhuman Body Parts

*Extra Arms:* If you have three or more arms, a crippled arm (hand) simply reduces the number of arms (hands) you can use. You only suffer an actual disadvantage if reduced to fewer than two arms (hands).

*Extra Head:* If an extraneous head is crippled, you lose the benefits of that Extra Head; see *Extra Head* (p. 54).

*Extra Legs:* If you have three or more legs, see *Extra Legs* (p. 54) for the effects of a crippled foot or leg.

*Striker:* You cannot use your Striker to attack. If your Striker is also a wing or a tail, see below for additional effects.

*Tail:* Any advantages the tail provides (e.g., Extra Arm or Striker) no longer function. As well, your balance is off: -1 DX, except for close manual tasks. If you’re a swimmer or winged flyer, the DX penalty is -2 and you are at half your usual water or air Move (which will also halve your top speed with Enhanced Move).

*Wing:* If you have Flight (Winged), you cannot fly – and if you were airborne, you *fall.* If your wing is also a Striker, you cannot use it to attack.

**Duration of Crippling Injuries**

If you suffer a crippling injury, make a HT roll to see how serious it is. For battlefield injuries, roll at the end of combat. Success means the crippling is temporary, failure means it’s last- ing, and critical failure means it’s permanent. Dismemberment is automatically permanent – don’t bother rolling!

*Temporary Crippling:* Until you are back at full HP, you suffer the disadvantages described under *Effects of Crippling Injury,* above. Once you are fully healed, these effects disappear.

*Lasting Crippling:* You suffered a broken bone, badly torn (or burned) muscle, or other lingering damage. Roll 1d. This is the number of months it will take for the injury to heal fully. (If the injury is treated by a physician, subtract 3 from the roll at medical TL7+, 2 at TL6, or 1 at TL5 – but the period of healing is never less than one month.)

*Permanent Crippling:* You lose the use of that body part. It is either nonfunctional or *gone.* Either way, you acquire a new disadvantage (One
Hand, Lame, etc., as appropriate). You get no extra character points for this! It simply lowers your point value. In some settings, even this degree of injury is curable; see Repairing Permanent Crippling Injuries (p. 424).

**Mortal Wounds**

If you fail a HT roll to avoid death by 1 or 2, you don't drop dead, but suffer a “mortal wound.” This is a wound so severe that your internal injuries might kill you even after you stop bleeding.

If you are mortally wounded, you are instantly incapacitated. You may or may not be conscious (GM's decision). If you suffer further injury and must make another HT roll to avoid death, any failure kills you.

While mortally wounded, you must make a HT roll every half-hour to avoid death. On any failure, you die. On a success, you linger for another half-hour – then roll again. On a critical success, you pull through miraculously: you are no longer mortally wounded (but you are still incapacitated).

If you're alive but mortally wounded, surgery may be able to stabilize your condition – see Stabilizing a Mortal Wound (p. 424). At TL6+, “trauma maintenance” can keep you alive while waiting for surgery. This involves CPR, oxygen, transfusions, etc. Instead of rolling vs. HT every half-hour, roll against the higher of your HT or your caregiver's Physician skill every hour – or every day, if you are on a heart-lung machine or similar life support. You do not need to roll at all if you're put into magical or ultra-tech suspended animation!

If you recover from a mortal wound, make a HT roll. On a failure, you lose a point of HT permanently. On a critical failure, the GM may apply the Wounded disadvantage (p. 162) or some other effect (e.g., reduced appearance due to scarring).

**Injuries, Illness, and Fatigue**

If your character is killed, you may still wish to keep track of further injury. In certain futuristic or magical worlds, the dead can be brought back to life by prompt treatment, as long as the body is mostly intact (not reduced to -10¥HP).

**Death**

If your character is killed, you may still wish to keep track of further injury. In certain futuristic or magical worlds, the dead can be brought back to life by prompt treatment, as long as the body is mostly intact (not reduced to -10¥HP).

**Recovery**

The Injuries rules may seem harsh, but don’t despair...you can get better!

**Recovering from Unconsciousness**

Failure by 5 or more on a knock-down roll, a failed HT roll to stay conscious at 0 HP or less, and many other things (e.g., certain critical hits) can leave you unconscious. It is up to the GM to decide whether you are truly unconscious or just totally incapacitated by pain and injury – but either way, you can’t do anything. You recover as follows:

- If you have 1 or more HP remaining, you awaken automatically in 15 minutes.
- At 0 HP or worse, but above -1xHP, make a HT roll to awaken every hour. Once you succeed, you can act normally. You do not have to roll against HT every second to remain conscious unless you receive new injury. But since you are below 1/3 your HP, you are at half Move and Dodge.
- At -1xHP or below, you are in bad shape. You get a single HT roll to awaken after 12 hours. If you succeed, you regain consciousness and can act as described above. But if you fail, you won’t regain consciousness without medical treatment – use the rules given under Stabilizing a Mortal Wound (p. 424). Until you receive help, you must roll vs. HT every 12 hours; if you fail, you die.

---

“Now stand aside.”

“'Tis but a scratch.”

“A scratch? Your arm’s off.”

“No it isn’t.”

“Then what’s that?”

“. . . I’ve had worse.”

– King Arthur and the Black Knight, Monty Python and the Holy Grail

**Dying Actions**

When a PC or important NPC is killed in any but the most sudden and thorough fashion, the GM should allow a “dying action.” If this is a final blow at the enemy, it should take no more than a turn. If it’s a deathbed speech, the GM should stretch time a little bit for dramatic purposes! This has nothing to do with realism, but it’s fun.

---

**Recovery**

This does not apply to a merely unaware victim. If you sneak up behind a sentry with a knife, you can’t automatically kill him. Game it out realistically. Target the vitals or neck. Since it’s a surprise attack, he won’t be hitting back: make an All-Out attack! Your attack roll will almost certainly succeed. Your victim gets no active defense at all. You will probably inflict enough injury to incapacitate or kill him. But it isn’t automatic.
High HP and Healing

The healing rates given for natural recovery, first aid, magical healing spells, the Regeneration advantage, etc. assume someone with human-scale Hit Points; that is, with fewer than 20 HP. Those with more HP heal in proportion to their HP score. Multiply HP healed by 2 at 20-29 HP, by 3 at 30-39 HP, by 4 at 40-49 HP, and so on, with each full 10 HP adding 1 to the multiple.

NATURAL RECOVERY

Rest lets you recover lost HP, unless the damage is of a type that specifically does not heal naturally (for an example, see Illness, p. 442). At the end of each day of rest and decent food, make a HT roll. On a success, you recover 1 HP. The GM may give a penalty if conditions are bad, or a bonus if conditions are very good.

First Aid Table

<table>
<thead>
<tr>
<th>Tech Level</th>
<th>Time per Victim</th>
<th>HP Restored</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>30 minutes</td>
<td>1d-4</td>
</tr>
<tr>
<td>2-3</td>
<td>30 minutes</td>
<td>1d-3</td>
</tr>
<tr>
<td>4</td>
<td>30 minutes</td>
<td>1d-2</td>
</tr>
<tr>
<td>5</td>
<td>20 minutes</td>
<td>1d-2</td>
</tr>
<tr>
<td>6-7</td>
<td>20 minutes</td>
<td>1d-1</td>
</tr>
<tr>
<td>8</td>
<td>10 minutes</td>
<td>1d</td>
</tr>
<tr>
<td>9+</td>
<td>10 minutes</td>
<td>1d+1</td>
</tr>
</tbody>
</table>

FIRST AID

The two main uses for First Aid skill (p. 195) are bandaging and treating shock.

Bandaging

It takes one minute to apply pressure or a tourniquet to stop bleeding. This restores 1 HP.

Using the Bleeding rule (p. 420), someone who is wounded but receives a successful First Aid roll within one minute of his injury loses no HP to bleeding. A later roll will prevent further HP loss.

Treating Shock

After bandaging, the aid-giver may take extra time to apply a more elaborate dressing and treat the victim for shock. He must keep the victim warm, comfortable, calm, and still. After the time indicated on the First Aid Table, he may roll against First Aid skill.

On a success, the medic rolls as indicated on the table to see how many HP the victim recovers – minimum 1 HP. A critical success restores the maximum possible HP! This roll includes the 1 HP for bandaging; thus, a roll of 1 HP restores no further HP.

On a critical failure, the victim loses 2 HP instead of recovering any HP at all!

Surgery

Surgery can physically repair damage to the body, but it's risky at low TLs – especially prior to the invention of anesthesia (mid-TL5) and blood typing (TL6). See Surgery skill (p. 223) for general modifiers and for the effects of a failed skill roll. Some additional rules:

Equipment: Basic equipment gives -6 at TL1, -5 at TL2-3, -4 at TL4-6, -3 at TL5, and +(TL-6) at TL6+. Equipment quality further modifies the roll; see Equipment Modifiers (p. 345).

The modifiers for TL5+ surgery assume that anesthetic is available. If it isn't, don't apply a -2 penalty to skill. This is instead of the usual -1 for a missing item.

Infection: Before TL5 (and, at the GM's option, even during much of TL5), antiseptic practice is poor. Check for infection (see Infection, p. 444) after any surgery.

Stabilizing a Mortal Wound

Each attempt takes one hour. The roll is: -2 if the patient is -3¥HP or worse, or -4 if he's at -4¥HP or worse. On a failure, repeated attempts are allowed, at a cumulative -2 per attempt. If the victim dies on the table, resuscitation may be possible; see Resuscitation (p. 425).

Repairing Lasting Crippling Injuries

It is possible to fix a lasting crippling injury (see Duration of Crippling Injuries, p. 422) through surgery rather than leaving it to heal on its own. This takes 2 hours. On a success, measure the injury's remaining recovery time in weeks rather than months. But on a critical failure, the injury becomes permanent!

Repairing Permanent Crippling Injuries

Radical surgery can fix certain permanent crippling injuries at TL7+; exact details are up to the GM. This often requires prosthetic or transplant parts, which might be costly or hard to find. At TL7-8, the procedure might only restore partial functionality. This kind of operation is also tricky: -3 or worse to skill. On a failure, the patient needs 1d months to recover before another attempt is possible.

Medical Care

Anyone under the care of a competent physician (Physician skill 12+) gets +1 on all rolls for natural recovery.

The healer may also make a Physician roll to cure the patient. Only one physician may roll per patient, but a single physician can care for up to 200 patients. The exact number of patients a physician can attend to and the frequency with which he may roll to cure them depend on the TL of his Physician skill; see the Medical Help Table, below. On a success, the patient recovers 1 HP; on a critical success, he recovers 2 HP. This is in addition to natural healing. However, a critical failure costs the patient 1 HP!

High-tech physicians depend heavily on equipment but still receive good
basic training; therefore, a TL6+ physician performs as though he were TL6 if he has to make do without the gadgetry to which he is accustomed, as long as the surroundings are clean.

**RESUSCITATION**

Reviving a drowning, asphyxiation, or heart attack victim requires resuscitation. Make a successful Physician/TL7+ roll – or a First Aid/TL7+ roll at -4. Each attempt takes one minute. Repeated attempts are possible, but there is almost always a time limit.

Cardiopulmonary resuscitation (CPR) and rescue breathing, widely taught after 1960, are more effective than earlier forms of resuscitation. First Aid rolls (but not default rolls) to revive victims of drowning or asphyxiation are at -2 instead of -4.

**Medical Help Table**

<table>
<thead>
<tr>
<th>Medical TL</th>
<th>Frequency of Rolls</th>
<th>Patients per Doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>There are no physicians. Get well by yourself.</td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>Weekly</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Every 3 days</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Every 2 days</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Daily</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>Daily</td>
<td>25</td>
</tr>
<tr>
<td>8</td>
<td>Daily</td>
<td>50</td>
</tr>
<tr>
<td>9</td>
<td>2 x daily</td>
<td>50</td>
</tr>
<tr>
<td>10</td>
<td>3 x daily</td>
<td>50</td>
</tr>
<tr>
<td>11</td>
<td>4 x daily</td>
<td>100</td>
</tr>
<tr>
<td>12+</td>
<td>5 x daily</td>
<td>200</td>
</tr>
</tbody>
</table>

*It just so happens that your friend here is only MOSTLY dead. There’s a big difference between mostly dead and all dead.*

– Miracle Max, *The Princess Bride*

**Ultra-Tech Drugs**

Miraculous drugs are a staple of science-fiction medicine. Below is a quick-and-dirty system for designing TL9+ drugs.

**Effects:** Select one or more attribute modifiers, advantages, or disadvantages to represent the drug's effects and (usually bad) side effects. Most medical drugs give Rapid Healing, Resistant to Disease, HT bonuses, or similar benefits. Some mitigate disadvantages, canceling them for the drug's duration (e.g., a psychiatric drug might suppress Delusions and Paranoia). A few provide unique effects, such as healing lost HP or FP.

**Duration:** Select the duration of the effects. Standard durations are short-term (lasts [25 - HT] minutes), medium-term ([25 - HT]4 hours), long-term (one full day), or very long-term (up to a week). Multiple doses generally extend duration rather than increasing effect; e.g., two doses of a long-term drug last two days.

**Potency:** The subject gets a HT roll to resist disadvantages and other negative effects. The drug's potency is a modifier to this roll. Assume that each doubling of dosage gives an extra -1 to the roll.

**Form:** A drug may be a pill, injection, aerosol, contact agent, or aerosol contact agent. Many drugs are available in multiple forms. Most pills require 30 minutes or more to take effect, but can be dissolved in drinks. Contact agents (e.g., patches) take at least 5 minutes. Aerosols and injections take effect almost immediately.

**LC:** This will vary by society and with the nature of the drug. Medical drugs are typically LC3. Drugs perceived as socially harmful might be LC2 or even LC1.

**Example:** A “truth drug” that forces the subject to roll HT-3 or suffer -4 to Will for (25 - HT) minutes would cost 20 (point value) ¥ $2 (short-term) ¥ 8 (potency) ¥ 1 (injection) = $320 per dose. It would probably only be available to spies: LC2.
Running long distances, using extra effort, being suffocated, casting magic spells, and many other things can cause “fatigue”: a temporary loss of Fatigue Points. Your Fatigue Points (FP) score starts out equal to your HT, but you may modify this; see Fatigue Points (p. 16). Just as injury represents physical trauma and comes off of HP, fatigue represents lost energy and reduces FP. When you lose FP, keep track of it on your character sheet.

Lost Fatigue Points

The chart below summarizes the effects of being at low or negative FP. All effects are cumulative.

Less than 1/3 your FP left – You are very tired. Halve your Move, Dodge, and ST (round up). This does not affect ST-based quantities, such as HP and damage.

0 FP or less – You are on the verge of collapse. If you suffer further fatigue, each FP you lose also causes 1 HP of injury. Thus, fatigue from starvation, dehydration, etc. will eventually kill you – and you can work yourself to death! To do anything besides talk or rest, you must make a Will roll; in combat, roll before each maneuver other than Do Nothing. On a success, you can act normally. You can use FP to cast spells, etc., and if you are drowning, you can continue to struggle, but you suffer the usual 1 HP per FP lost. On a failure, you lose your HP, incapacitated, and can do nothing until you recover to positive FP. On a critical failure, make an immediate HT roll. If you fail, you suffer a heart attack; see Mortal Conditions (p. 429).

-1xFP – You fall unconscious. While unconscious, you recover lost FP at the same rate as for normal rest. You awaken when you reach positive FP. Your FP can never fall below this level. After this stage, any FP cost comes off your HP instead.

Fatigue Costs

The following activities commonly result in FP loss.

Fighting a Battle

Any battle that lasts more than 10 seconds will cost FP – you expend energy quickly when you fight for your life! Those who make no attack or defense rolls during the fight are exempt from this fatigue, but other actions (e.g., casting magic spells) still have their usual FP cost. Assess the following costs at the end of the battle:

No Encumbrance: 1 FP.
Light Encumbrance: 2 FP.
Medium Encumbrance: 3 FP.
Heavy Encumbrance: 4 FP.
Extra-Heavy Encumbrance: 5 FP.

If the day is hot, add 1 FP to the above – or 2 FP for anyone in plate armor, an overcoat, etc. Full-coverage armor at TL9+ is climate-controlled. This counts as a cooling system, and negates the penalties for hot weather. These costs are per battle, not per 10 seconds of battle. A very long battle may cost more (GM’s decision), but it would have to run for 2 or 3 minutes (120 to 180 turns!) before extra FP costs would be realistic.

Hiking

Use the FP costs for fighting a battle, but assess them per hour of road travel; e.g., one hour of marching with light encumbrance costs 2 FP (3 FP on a hot day). If the party enters combat while on the march, assume they’ve been walking for an hour, unless events dictate otherwise, and assess fatigue accordingly.

Overexertion

Carrying more than extra-heavy encumbrance, or pushing/pulling a very heavy load, costs 1 FP per second (see Lifting and Moving Things, p. 353). For FP costs for other forms of heavy exertion, see Extra Effort (p. 356).

Running or Swimming

Every 15 seconds of sprinting, or minute of paced running or swimming, requires a HT roll to avoid losing 1 FP. Encumbrance has no direct effect on this, but you run or swim more slowly. See Running (p. 354) and Swimming (p. 354).

Special Abilities

Most magic spells (see Chapter 5), many advantages (such as Healing, p. 59), and a few cinematic skills (for instance, Power Blow, p. 215) cost FP to use, as does any trait with the Costs Fatigue limitation (p. 111).

Starvation and Dehydration

When you buy equipment, don’t forget food! The traveler’s rations under Camping and Survival Gear (p. 288) are the minimum necessary to keep you healthy on the road; missing even one meal weakens you.

Note to the GM: If keeping up with the party’s meals doesn’t sound like fun, feel free to ignore this whole section. Travel is much more hazardous if you have to keep track of food and water!

Starvation

A human needs three meals per day. For each meal you miss, take 1 FP. You can only recover “starvation” fatigue with a day of rest: no fighting or travel, and three full meals. Each day of rest makes up for three skipped meals.

Dehydration

In temperate areas, where water is easy to come by, assume that you can renew your supplies as needed. But if water is in short supply, watch out! A human (or elf, dwarf, etc.) needs 2 quarts of water a day – 3 in hot climates, 5 in the heat of the desert! If you get less than you need, you lose 1 FP every eight hours. If you drink less than a quart a day, you lose an extra 1 FP and 1 HP per day. You can regain all FP lost to dehydration after a day of rest with ample water supplies. You recover lost HP at the usual rate.

Missed Sleep

The average human can function for a 16-hour “day.” He must then rest...
for an eight-hour “sleep period.” Less Sleep (p. 65) shortens this sleep period, thereby increasing useful day length; Extra Sleep (p. 136) and Sleepy (p. 154) do the opposite. Getting less sleep than your sleep period costs FP that you can only recover by sleeping.

Interruptions, noise, and disadvantages such as Chronic Pain (p. 126), Insomniac (p. 140), Light Sleeper (p. 142), and Nightmares (p. 144) can reduce the quality of your sleep. In game terms, your sleep counts as fewer hours – or none at all. Those who have the Doesn’t Sleep advantage (p. 50) can ignore this entire section!

**Staying Up Late**

If you’ve been awake for more than your normal day (typically 16 hours), you start to get tired. You lose 1 FP if you fail to go to sleep, and 1 FP per quarter-day (usually four hours) you stay awake after that.

If you’ve lost half or more of your FP to lack of sleep, you must make a Will roll every two hours you spend inactive (e.g., standing watch). On a failure, you fall asleep, sleeping until you are awakened or get a full night’s sleep. On a success, you have -2 to DX, IQ, and self-control rolls. Those with the Slow Riser disadvantage (p. 155) get an extra -1.

If you’re down to less than 1/3 your FP due to lack of sleep, roll as above once per 30 minutes of inaction or two hours of action. This can be very dangerous!

**Getting Up Early**

If you sleep for less than your full sleep period, you’ll still be tired when you wake up. Subtract twice the hours of missed sleep from your day to determine how long you can stay awake. For example, if your sleep period is eight hours and you sleep only six hours, you’ve missed two hours of sleep. You will suffer the effects of staying up late after only 12 hours: your usual 16-hour day, minus four hours (twice your hours of missed sleep).

**RECOVERING FROM FATIGUE**

You can recover “ordinary” lost FP by resting quietly. Reading, talking, and thinking are all right; walking around, or anything more strenuous, is not. Lost FP return at the rate of 1 FP per 10 minutes of rest. The GM may allow you to regain one extra FP if you eat a decent meal while resting. Certain drugs, magic potions, etc. can restore missing FP, as can spells such as Lend Energy and Recover Energy (see p. 248).

You can only recover from fatigue caused by missed sleep by sleeping for at least one full sleep period. This restores 1 FP. Further uninterrupted sleep restores 1 FP per hour.

You need food or water to recover FP lost to starvation or dehydration; see Starvation and Dehydration (above).
HAZARDS

Irritating Conditions

Coughing or Sneezing: You are at -3 to DX and -1 to IQ, and cannot use Stealth.

Drowsy: You are on the verge of falling asleep. Make a Will roll every two hours you spend inactive. On a failure, you fall asleep, and sleep until you are awakened or get a full night's sleep. On a success, you have -2 to DX, IQ, and self-control rolls.

Drunk: You are highly intoxicated: -2 to DX and IQ, and -4 to self-control rolls except those to resist Cowardice. Reduce Shyness by two levels, if you have it.

Acid

Acids range from extremely weak to extremely strong (e.g., hydrochloric, perchloric, nitric, and sulfuric acids). Most laboratory acids are dangerous only to the eyes, but strong or highly concentrated acids can “burn” through equipment and flesh. For game purposes, treat strong alkalis just like strong acids.

If the victim is splashed with strong acid, he suffers 1d-3 points of corrosion damage. If the acid splashes on his face, he must make a HT roll to avoid eye damage. On a failure, or on a direct hit to the eyes, the damage is to his eyes. Use the Crippling Injury rules (p. 420) to see whether he is blinded – and if so, whether the blindness is permanent. On a critical failure, permanent blindness is certain (acquire the Blindness disadvantage, p. 124).

If the victim is immersed in acid, he takes 1d-1 corrosion damage per second. If his face is immersed, he must also roll for eye damage (see above) every second.

If the victim swallows acid, he takes 3d damage at the rate of 1 HP per 15 minutes. A successful Physician or Poisons roll can halt this damage; treatment requires 2d minutes.

Used against a lock's pins or other small, vulnerable items, acid requires 3d minutes to eat through the item.

A vial of acid powerful enough to produce these effects is a TL3 item, and costs $10.

Afflictions

An “affliction” is a harmful effect other than direct injury or fatigue, usually the result of an attack, hazard, illness, magic spell, or toxin. In most cases, the victim gets a HT roll to resist, and only suffers the affliction on a failure. Duration depends on the cause; see the relevant disease, hazard, poison, spell, or weapon description for details.

I laugh in the face of danger, and then I hide until it goes away.

– Xander, Buffy the Vampire Slayer

Euphoria: You have a -3 penalty to all DX, IQ, skill, and self-control rolls. Nauseated: You have -2 to all attribute and skill rolls, and -1 to active defenses. As well, roll vs. HT after you eat, are exposed to a foul odor; fail a Fright Check, or are stunned, and every hour in free fall or in any situation where you might suffer motion sickness. A rich meal in the past hour gives -2; anti-nausea remedies give +2. On a failure, you vomit for (25 - HT) seconds – treat as Retching, below.

Pain: You have a penalty to all DX, IQ, skill, and self-control rolls. This is -2 for Moderate Pain, -4 for Severe Pain, and -6 for Terrible Pain. High Pain Threshold halves these penalties; Low Pain Threshold doubles them.

Tipsy: You are slightly intoxicated: -1 to DX and IQ, and -2 to self-control rolls except those to resist Cowardice. Reduce Shyness by one level, if you have it.

Incapacitating Conditions

All of these afflictions prevent you from taking voluntary action for the duration. In addition to their other effects, you’re effectively stunned (-4 to -6 for active defenses). In combat, you must Do Nothing on your turn. If an affliction lets you drop, you can sit, kneel, go prone, etc. if standing, or go prone if kneeling or sitting. If it lets you stagger, you can drop, change facing, or step or crawl one yard. In all cases, you are still effectively stunned.

Agony: You are conscious but in such terrible pain that you can do nothing but moan or scream. If standing or sitting, you fall down. While the affliction endures, you lose 1 FP per minute or fraction thereof. After you recover, anyone who can credibly threaten you with a resumption of the
**Hallucinating:** You can try to act, but you must roll vs. Will before each success roll. On a success, you merely suffer 2d seconds of disorientation. This gives -2 on success rolls. On a failure, you actually hallucinate for 1d minutes. In this case, the penalty is -5.

The GM is free to specify the details of your hallucinations, which need not be visual. On a critical failure, you "freak out" for 3d minutes. You might do anything! The GM rolls 3d: the higher the roll, the more dangerous your action.

**Paralysis:** You cannot move any voluntary muscles, and fall over if you are not in a balanced position. You remain conscious, and can still use advantages or spells that require neither speech nor movement.

**Retching:** You are conscious but vomiting (or suffering dry heaves). You can try to act, but you will be at -5 to DX, IQ, and Per; and automatically fail at any action that requires a Concentrate maneuver. At the end of the retching spell, you lose 1 FP. You gain no benefit from recent meals or oral medication — you've thrown it up.

**Seizure:** You suffer a fit of some kind. Your limbs tremble uncontrollably, you fall down if standing, and you cannot speak or think clearly. You can do nothing. At the end of the seizure, you lose 1d FP.

**Unconsciousness:** You are knocked out, just as if you had suffered injury.

**Mortal Conditions**

**Coma:** You collapse just as if you had been wounded to -1xHP or below and passed out; see Recovering from Unconsciousness (p. 423). You get a single HT roll to awaken after 12 hours. On a failure, you won't recover without medical treatment. Until you receive treatment, roll vs. HT every 12 hours. On any failure, you die.

**Heart Attack:** Your heart stops functioning ("cardiac arrest"). You immediately drop to -1xFP. Regardless of your current HP, you will die in HT/3 minutes unless resuscitated — see Resuscitation (p. 425). If you survive, you will be at 0 HP or your current HP, whichever is worse. Missing HP heal normally. If you die and it matters what your HP total was, treat this as death at -1xHP or your current HP, whichever is worse. Injury Tolerance (Diffuse, Homogenous, or No Vitals) grants immunity to this affliction.

**Hazardous Atmospheres**

Earth's atmosphere is 78% nitrogen and 21% oxygen (plus 1% comprising a number of other gases). Visitors to other planets (and victims of lab accidents or death traps) might encounter other atmospheres, most of which are unsafe for humans without proper protection. Of course, "breathable air" for humans might be deadly for nonhumans, and vice versa!

**Corrosive:** The atmosphere reacts with exposed flesh. Those with the Sealed advantage are safe; those in sealed suits might be safe, but some gases eat away at seals. Small concentrations in otherwise breathable air require a roll at HT to HT-4 every minute to avoid 1 point of corrosion damage. Victims suffer coughing (see Afflictions, p. 428) after losing 1/3 their HP, blindness (as the disadvantage) after losing 2/3 their HP. Atmospheres made up mostly of corrosive gases have effects comparable to immersion in acid (see Acid, p. 428) and count as suffocating. Corrosives include ammonia and nitriles. Chlorine and fluorine are extremely corrosive and toxic!

**Toxic:** The atmosphere is poisonous. Individuals without respirators, Doesn't Breathe, Filter Lungs, etc. are susceptible. Ordinary airborne industrial pollutants might require a daily HT roll to avoid 1 point of toxic damage. Lethal gases would call for a HT-2 to HT-6 roll every minute to avoid 1 point of toxic damage. If such gases make up most of the atmosphere, they inflict at least 1d toxic damage per 15 seconds (no resistance possible) and count as suffocating. A typical toxic gas is carbon monoxide. Chlorine and fluorine are deadly in tiny concentrations, and also corrosive.

**Suffocating:** The atmosphere is unbreatheable. For humans, this means it lacks oxygen. Those without Doesn't Breathe or an air supply start to suffocate (see Suffocation, p. 436). Hydrogen, methane, and nitrogen are all suffocating. As noted above, an atmosphere made up mostly of corrosive or toxic gases is suffocating as well — but these usually kill so rapidly that suffocation becomes irrelevant.

**ATMOSPHERIC PRESSURE**

Regardless of its composition, an atmosphere may be difficult or impossible to breathe if its pressure is wrong. We measure air pressure in "atmospheres" (atm.); 1 atm. is air pressure at sea level on Earth.

**Trace** (up to 0.01 atm.): Treat an atmosphere this thin as vacuum (see Vacuum, p. 437).

**Very Thin** (up to 0.5 atm.): The air is too thin to breathe. Earth's atmosphere becomes "very thin" above 20,000'. If you lack protection (e.g., the Doesn't Breathe advantage, or a respirator and oxygen tanks), you suffocate — see Suffocation (p. 436). Vision rolls are at -2 without eye protection.

**Thin** (0.51-0.8 atm.): Earth's atmosphere is "thin" between 6,000' and 20,000'. Thin air is breathable if oxygen is present in Earthlike percentages, but it is hard on unprotected individuals. Increase all fatigue costs for exertion by 1 FP. Vision rolls are at -1 without eye protection. Finally, anyone who breathes thin air for an hour or more must check for "altitude sickness." Make a daily HT roll at +4. Critical success means acclimatization — do not roll again. Success means no effect today. Failure means headaches, nausea, etc., giving -2 to DX and IQ. Critical failure means the victim falls into a coma after 1d hours; see Mortal Conditions (above). Roll against Physician skill once per day to revive the victim before he dies.
**Dense** (1.21-1.5 atm.): The air is breathable, with some discomfort: -1 to all HT rolls, unless you have a pressure suit. If the air contains more than 50% oxygen, you must wear a “reducing respirator” that lowers oxygen partial pressure, or suffer -2 to DX due to coughing and lung damage.

**Very Dense** (1.51+ atm.): As “dense,” but a reducing respirator is required if the air is more than 10% oxygen. Usually quite hot from green-house effects.

**Superdense** (10+ atm.): As “very dense,” but the atmospheric pressure is so great that it can actually crush someone who is not native to it, unless he has Pressure Support or an armored suit that provides this advantage; see **Pressure** (p. 435). Visitors to Venus, or deep inside Jupiter, experience hundreds of atmospheres of pressure! Such atmospheres are often poisonous, which presents a separate problem.

These rules assume you are native to 1 atm. and can function normally at 0.81-1.2 atm. If your native pressure differs from 1 atm., multiply all the pressure ranges above by your native pressure in atm. For example, if you’re native to 0.5 atm., a “dense” atmosphere for you would be 0.61-0.75 atm. and a “thin” one would be 0.26-0.4 atm.

---

**Cold**

Cold can be deadly, but only magic or superscience can produce cold quickly enough to cause damage in combat. Armor offers its usual DR against such “instant” cold attacks, but it must be insulated or heated to shield against prolonged exposure to ambient cold.

Make a HT or HT-based Survival (Arctic) roll, whichever is better, every 30 minutes in “normal” freezing weather. For most humans, this means temperatures below 35°F, but see **Temperature Tolerance** (p. 93). In light wind (10+ mph), roll every 15 minutes. In strong wind (30+ mph), roll every 10 minutes. Additionally, strong wind can dramatically reduce the effective temperature (the “wind chill factor”). Also see the modifiers below:

<table>
<thead>
<tr>
<th>Modifier to Situation</th>
<th>Modifier to HT Roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light or no clothing</td>
<td>-.5</td>
</tr>
<tr>
<td>Ordinary winter clothing</td>
<td>+0</td>
</tr>
<tr>
<td>“Arctic” clothing</td>
<td>+.5</td>
</tr>
<tr>
<td>Heated suit</td>
<td>+.10</td>
</tr>
<tr>
<td>Wet clothes additional</td>
<td>-.5</td>
</tr>
<tr>
<td>Every 10° below 0°F</td>
<td>effective temperature</td>
</tr>
</tbody>
</table>

Failure costs 1 FP. As usual, once you go below 0 FP, you will start to lose 1 HP per FP. Recovery of FP or HP lost to cold requires adequate shelter and a heat source (flame, electric heat, body warmth, etc.).

**Thermal Shock:** Sudden immersion in icy waters (e.g., any of Earth’s oceans far from the equator) or a cryogenic environment can cause death by thermal shock. Note that impure water (e.g., saltwater oceans) can be below the usual freezing temperature! If you are wearing a completely waterproof “dry suit,” you are only affected as per normal freezing. Otherwise, roll against HT once per minute of immersion. Do not modify this for clothing. On a success, you lose 1 FP. On a failure, you lose FP equal to the margin of failure. Don’t forget to check for drowning as well!

---

**Collisions and Falls**

When a moving object hits another object, this is a collision. Use the rules below for ramming attempts, accidental crashes, falls, and dropped objects.

**Damage from Collisions**

An object or person’s Hit Points and velocity determine collision damage. Mass only matters indirectly: massive objects usually have high HP, but it would hurt more to collide with a locomotive than with a pillow of the same mass! HP take into account both mass and structural strength.

“Velocity” is how fast the character or object is moving in yards per second (2 mph = 1 yard per second). Velocity could be anything up to Move. It might exceed Move when diving or falling; see **High-Speed Movement** (p. 394).

An object in a collision inflicts dice of crushing damage equal to (HP × velocity)/100. If this is less than 1d, treat fractions up to 0.25 as 1d-3, fractions up to 0.5 as 1d-2, and any larger fraction as 1d-1. Otherwise, round fractions of 0.5 or more up to a full die.

If an object is bullet-shaped, sharp, or spiked, it does half damage, but this damage is piercing, cutting, or impaling, rather than crushing.
Falling Velocity Table

<table>
<thead>
<tr>
<th>Fall</th>
<th>Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 yard</td>
<td>5</td>
</tr>
<tr>
<td>2 yards</td>
<td>7</td>
</tr>
<tr>
<td>3 yards</td>
<td>8</td>
</tr>
<tr>
<td>4 yards</td>
<td>9</td>
</tr>
<tr>
<td>5 yards</td>
<td>10</td>
</tr>
<tr>
<td>6 yards</td>
<td>11</td>
</tr>
<tr>
<td>7 yards</td>
<td>12</td>
</tr>
<tr>
<td>8 yards</td>
<td>13</td>
</tr>
<tr>
<td>9 yards</td>
<td>14</td>
</tr>
<tr>
<td>10-11 yards</td>
<td>15</td>
</tr>
<tr>
<td>12 yards</td>
<td>16</td>
</tr>
<tr>
<td>13-14 yards</td>
<td>17</td>
</tr>
<tr>
<td>15 yards</td>
<td>18</td>
</tr>
<tr>
<td>16-17 yards</td>
<td>19</td>
</tr>
<tr>
<td>18-19 yards</td>
<td>20</td>
</tr>
<tr>
<td>20-21 yards</td>
<td>21</td>
</tr>
<tr>
<td>22-23 yards</td>
<td>22</td>
</tr>
<tr>
<td>24-25 yards</td>
<td>23</td>
</tr>
<tr>
<td>26-27 yards</td>
<td>24</td>
</tr>
<tr>
<td>28-29 yards</td>
<td>25</td>
</tr>
<tr>
<td>30-32 yards</td>
<td>26</td>
</tr>
<tr>
<td>33-34 yards</td>
<td>27</td>
</tr>
<tr>
<td>35-37 yards</td>
<td>28</td>
</tr>
<tr>
<td>38-39 yards</td>
<td>29</td>
</tr>
<tr>
<td>40-42 yards</td>
<td>30</td>
</tr>
<tr>
<td>43-45 yards</td>
<td>31</td>
</tr>
<tr>
<td>46-48 yards</td>
<td>32</td>
</tr>
<tr>
<td>49-51 yards</td>
<td>33</td>
</tr>
<tr>
<td>52-54 yards</td>
<td>34</td>
</tr>
<tr>
<td>55-57 yards</td>
<td>35</td>
</tr>
<tr>
<td>58-61 yards</td>
<td>36</td>
</tr>
<tr>
<td>62-64 yards</td>
<td>37</td>
</tr>
<tr>
<td>65-67 yards</td>
<td>38</td>
</tr>
<tr>
<td>68-71 yards</td>
<td>39</td>
</tr>
<tr>
<td>72-75 yards</td>
<td>40</td>
</tr>
<tr>
<td>76-79 yards</td>
<td>41</td>
</tr>
<tr>
<td>80-82 yards</td>
<td>42</td>
</tr>
<tr>
<td>83-86 yards</td>
<td>43</td>
</tr>
<tr>
<td>87-90 yards</td>
<td>44</td>
</tr>
<tr>
<td>91-95 yards</td>
<td>45</td>
</tr>
<tr>
<td>96-99 yards</td>
<td>46</td>
</tr>
<tr>
<td>100-103 yards</td>
<td>47</td>
</tr>
<tr>
<td>104-108 yards</td>
<td>48</td>
</tr>
<tr>
<td>109-112 yards</td>
<td>49</td>
</tr>
</tbody>
</table>

Alternatively, calculate velocity in yards per second as the square root of \((21.4 \times g \times \text{distance fallen in yards})\), where \(g\) is the local gravity in Gs (\(g = 1\) on Earth). Round to the nearest whole number.

Immovable Objects

If a moving object hits a stationary object that is too big to push aside – like the ground, a mountain, or an iceberg – it inflicts its usual collision damage on that object and on itself. If the obstacle is breakable, the moving object cannot inflict or take more damage than the obstacle’s HP + DR.

**Hard Objects:** If the immovable object is hard, use twice the HP of the moving object to calculate damage. Clay, concrete, ordinary soil, and sand are all “hard,” as is a building, mountain, or similar obstacle.

**Soft Objects:** If the immovable object is soft – e.g., forest litter, hay, swamp, or water – damage is normal. However, elastic objects (mattresses, nets, airbags, etc.) give extra DR against collision damage, ranging from DR 2 for a feather bed to DR 10 for a safety net, trampoline, or airbag. When striking water or a similar fluid, a successful Swimming roll (or vehicle control roll, if “ditching” a vehicle) means a clean dive that negates all damage. This roll is at a penalty for velocity; use the speed penalty from the Size and Speed/Range Table (p. 550).

Falling

A fall is a collision with an immovable object: the ground. Find your velocity when you hit using the Falling Velocity Table.

**Example:** Bill is pushed out a fifth-story window. He falls 17 yards. When he hits the street, his velocity is 19 yards/second. Bill has 10 HP, but he uses twice this because he hit a “hard” surface. Damage is \((2 \times 10 \times 19)/100 = 3.8d\), which rounds up to 4d crushing.

*Falls and Armor:* All armor, flexible or not (but not innate DR), counts as “flexible” for the purpose of calculating blunt trauma from falling damage. Thus, even if the victim has enough armor DR to stop the falling damage, he suffers 1 HP of injury per 5 points of falling damage. See Flexible Armor and Blunt Trauma (p. 379).

Controlled Falls: If you are free to move, you can use Acrobatics skill to land properly. On a success, reduce falling distance by five yards when calculating velocity. If falling into water, you can do this or attempt a proper dive (see above) – decide which first!

Terminal Velocity: “Terminal velocity” is the maximum speed a falling object can achieve before air resistance negates further acceleration under gravity. Air resistance is relatively negligible for distances shown on the table, but increases drastically for longer falls.

Terminal velocity varies greatly by object. For human-shaped objects on Earth, it is 60-100 yards/second. Use the low end for a spread-eagled fall, the high end for a swan dive. For dense objects (e.g., rocks) or streamlined objects, it can be 200 yards/second or more!

The terminal velocity rules assume Earth-normal gravity (1G) and atmospheric pressure (1 atm.). Multiply terminal velocity by the square root of gravity in Gs. Then divide it by the square root of pressure in atm. Thus, gravity under 1G, or pressure above 1 atm., reduces terminal velocity; gravity over 1G, or pressure below 1 atm., increases it. Note that terminal velocity is unlimited in a vacuum!

Damage from Falling Objects

If an object falls on someone, find its velocity on the table above and calculate damage as for an ordinary collision. To hit someone with a dropped object, use Dropping skill (p. 189). Most dropped objects will have Acc 1. Your target cannot avoid the object unless he knows it’s coming. If he’s aware of it, he can dodge.

A falling object with a Size Modifier equal to or greater than that of whoever it lands on impedes the victim’s movement. He may move only one yard on his next turn, and his active defenses are -3. These penalties result from bulk, not mass, so ST is irrelevant.

Hit Location from a Fall

If using hit locations, roll randomly for the hit location damaged in a fall. If the injury is to an extremity or a limb, do not ignore injury in excess of that required to cripple it. Instead, subtract the fall amount from HP! If the fall would cripple a limb, roll 1d. On 5-6, all limbs of that type are crippled, although there is no extra injury.
**Collision Angle**

The angle at which you hit adjusts velocity, affecting damage. This is especially true in collisions between two moving objects!

**Head-On:** In a head-on collision between two moving objects, collision velocity is the sum of the objects’ velocities. The slower object cannot inflict more dice of damage than the faster one.

**Rear-End:** If a faster object overtakes and strikes a slower one, collision velocity is that of the striking object minus that of the struck object. The struck object cannot inflict more dice of damage than the striking one.

**Example:** A car with 60 HP, moving at 50 mph (velocity 25), strikes a pedestrian with 10 HP. The pedestrian was fleeing from the car at Move 5, so this is a “rear-end” collision. Collision velocity is 25 (car) - 5 (pedestrian) = 20. The car inflicts (60 × 20)/100 = 12d crushing damage on the pedestrian; the pedestrian inflicts (10 × 20)/100 = 2d crushing damage on the car.

**Overruns**

If the Size Modifier of the striking object in a collision exceeds that of the struck object by two or more (e.g., a car hitting a man) the striking object “overruns” the struck object. This inflicts additional crushing damage: roll thrust damage for ST equal to half the striking object’s HP (or half its ST score, if it has one). Even a slow-moving elephant or a tank can crush someone who doesn’t get out of the way. This rule does not apply to falls. Anything with a ST attribute can deliberately trample as well; see Trampling (p. 404).

**Whiplash and Collision**

Anyone inside an object that comes to a sudden stop in a fall or a collision (a falling elevator, a crashing car, etc.) takes damage. Find the speed lost in the “stop” and work out falling damage for this velocity. Seatbelts or straps give DR 5 vs. this damage; airbags give DR 10. In a collision involving an open vehicle, also work out knockback from this damage for those who weren’t strapped in. This is how far they fly . . .

In a collision involving an open vehicle, work out knockback for those who weren’t strapped in. This is how far they fly . . .

**Electricity**

If an uninsulated person is exposed to electricity, he may receive a shock. The effects of electric shock are highly variable, ranging from momentary stunning to instant death! This section helps the GM assess these effects if a character receives a shock during an adventure. If a specific attack or scenario gives different rules, they override the guidelines below.

All electrical damage falls into one of two classes: nonlethal or lethal. Against either, metallic armor (e.g., plate armor) provides only DR 1 – and if the wearer is grounded, he actually attracts electrical attacks, giving the attacker +2 to hit.

**Nonlethal Electrical Damage**

High-voltage, low-power shocks are unlikely to kill, but can stun the victim or even render him unconscious. This is called “nonlethal electrical damage.” Examples include electric stun weapons, realistic electric fences, and static shocks on a cool, dry day. The GM should require an immediate HT roll whenever someone is zapped.

**Modifiers:** From +2 for a short circuit in a battery-powered gadget down to -3 or -4 for a specially designed stun weapon. Nonmetallic armor gives a bonus equal to its DR – but surface shocks (e.g., from a cattle prod) tend to flow over armor rather than through it, and have an armor divisor of (0.5), while energy weapons designed to arc through armor have an armor divisor of (2) or even (5).

On a failure, the victim is stunned. An instantaneous jolt (static electricity, electrolaser, etc.) stuns for one second, after which time the victim may roll vs. HT once per second to recover. A continuous shock (stun gun, electric fence, etc.) stuns for as long as the victim is in contact with the source, and for (20 - HT) seconds after that, with a minimum of 1 second. After this time, the victim may roll vs. HT each second to recover. The basic HT modifier for the strength of the shock (but not for DR) applies to all recovery rolls.

**Electromuscular Disruption (EMD):** Some ultra-tech weapons deliver a more powerful current that induces convulsions. The HT roll is at -5, and if the victim fails, he is knocked down and paralyzed instead of merely stunned. Otherwise, the effects are as above.

**Lethal Electrical Damage**

High-power shocks cook flesh and inflict real damage; they can even stop the victim’s heart! This is called “lethal electrical damage.” Examples include power mains, lightning bolts (natural and magical), and cinematic electric fences.

Lethal electric shocks inflict burning damage: only 1d-3 to 3d around the house, but 6d on up for lightning, transmission lines, etc. A victim who suffers any injury must make a HT roll at -1 per 2 points of injury suffered. On a failure, he falls unconscious for as long as the current is applied, and for (20 - HT) minutes afterward, with a minimum of 1 minute. He will be at -2 DX for another (20 - HT) minutes when he recovers. Failure by 5 or more, or any critical failure, results in a heart attack; see Mortal Conditions (p. 429). Lethal electrical...
damage also causes “surge” effects in victims who have the Electrical disadvantage (p. 134).

Localized Injury: Attacks that don’t affect the target’s entire body – including most magical electricity attacks – cause pain and burns, but not unconsciousness or cardiac arrest. Treat this as normal burning damage, except that the victim must make a HT roll at -1 per 2 points of injury suffered. On a failure, he is stunned for one second, after which time he may roll vs. HT once per second to recover. If the injury is to the arm or hand, he must also make a Will roll or drop anything carried in that hand.

**FLAME**

Exposure to flame inflicts burning damage. See *Wounding Modifiers and Injury* (p. 379) and *Hit Location* (p. 398) for wounding effects. Below are some additional special rules.

**Fire Sources**

Adventurers often encounter flaming oil (see *Molotov Cocktails and Oil Flasks*, p. 411), high-tech weapons, Innate Attacks, and battle magic (see *Fire Spells*, p. 246) . . . not to mention the burning rubble these attacks leave behind!

If you spend part of a turn in a fire (e.g., running through the flames), you take 1d-3 burning damage. If you spend all of a turn in a fire of ordinary intensity – or if you are on fire – you take 1d-1 damage per second. Very intense fires inflict more damage; for instance, molten metal or a furnace would inflict 3d per second! Use *Large-Area Injury* (p. 400) in all cases.

Continued exposure to a fire can result in intense heat that can rapidly fatigue you even if the flames themselves cannot penetrate your DR. See *Heat* (p. 434).

Incendiary Attacks: Any attack with the Incendiary damage modifier (p. 105) does one point of burning damage in addition to its other damage; in effect, it has a one-point linked burning attack. Examples include torches (see *Torches and Flashlights*, p. 394) and flaming arrows (see *Flaming Arrows*, p. 410). High-tech tracer bullets also qualify.

---

**Making Things Burn**

Materials are grouped into six “flammability classes,” based on the amount of burning or incendiary damage needed to set them aflame:

- **Super-Flammable** (e.g., black powder, ether): Negligible damage (candle flame).
- **Highly Flammable** (e.g., alcohol, paper, tinder): 1 point.
- **Flammable** (e.g., dry wood, kindling, oil): 3 points.
- **Resistant** (e.g., seasoned wood, clothing, rope, leather): 10 points.
- **Highly Resistant** (e.g., green wood, flesh): 30 points.
- **Nonflammable** (e.g., brick, metal, rock, fireproof synthetics): N/A.

A fire source (including any incendiary attack) that inflicts the listed amount of burning damage in a single damage roll ignites the material immediately. Divide damage by 10 for tight-beam burning attacks. If the flame fails to ignite the material immediately, but could do so on its best damage roll, roll damage once per second for as long as it is in contact. Even if the flame is incapable of inflicting enough damage on its best roll, it may set things afire with prolonged contact. Roll 3d for every 10 seconds of contact. Materials one category up (e.g., Flammable materials taking 1 point per second) catch fire on a 16 or less; those two categories up (e.g., Flammable materials touching a candle flame) catch on a 6 or less.

Once a material starts burning, it may ignite adjacent materials. Make separate rolls for it based on the fire’s damage (1d-1 per second for an ordinary fire).
Catching Fire

A single hit that inflicts at least 3 points of basic burning damage ignites part of the victim's clothing. (The Ignite Fire spell does this at its third level of effect; see p. 246). This does 1d-4 burning damage per second and is distracting (-2 to DX, unless the damage simply cannot harm the target). To put out the fire, the victim must beat it with his hands. This requires a DX roll, and each attempt takes a Ready maneuver.

A single hit that inflicts 10 or more points of basic burning damage ignites all of the victim's clothes. This does 1d-1 burning damage per second and is very distracting (-3 to DX, except when rolling to put out the fire). To put out the fire, the victim must roll on the ground. This requires a DX roll, and each attempt takes three Ready maneuvers. Jumping into water takes only one second, and automatically extinguishes the fire.

If a wooden shield takes 10 or more points of burning damage in one second, the bearer is at -2 to DX, and takes 1d-5 burning damage per second until he gets rid of it.

In all cases, remember to apply shock penalties to DX if the flame inflicts injury!

The above guidelines assume ordinary clothing. Armor is good protection against fire; clothing worn over armor (e.g., a surcoat) might burn, but the armor's DR reduces the damage normally. Clothing that is wet or worn under armor is almost impossible to ignite, and won't stay lit. On the other hand, fancy dresses, lace cuffs, and so on, ignite if they take even 1 point of burning damage!

Clothing that is wet or worn under armor is almost impossible to ignite, and won't stay lit. On the other hand, fancy dresses, lace cuffs, and so on, ignite if they take even 1 point of burning damage!

Gravity and Acceleration

A change in gravity can be harmful. These rules describe health effects; see Different Gravity (p. 350) for the effects of gravity on common tasks.

Space Adaptation Syndrome ("Space Sickness")

Those who are not native to micro-or zero gravity ("free fall") may become nauseated and disoriented by the constant falling sensation. Roll against the higher of HT or Free Fall when you first enter free fall. The Space Sickness disadvantage (p. 156) gives 4.

On a success, you are unaffected.
On a failure, you are nauseated (see Afflictions, p. 428), which may trigger vomiting. If you begin to retch while wearing a vacc suit, you may choke; treat this as drowning (see Swimming, p. 354). Roll against the better of HT or Free Fall every 8 hours to recover. If you suffer from Space Sickness, you cannot adapt!

High Acceleration

Make a HT roll whenever you experience a sudden acceleration ("G-force") of at least 2.5 times your home gravity. Treat a home gravity under 0.1G as 0.1G for this purpose.

Modifers: -2 per doubling of acceleration (-2 at 5x home gravity, -4 at 10x, and so on); +2 if seated or lying prone, or -2 if upside down.

On a failure, you lose HP equal to your margin of failure. On a critical failure, you also black out for 10 seconds times your margin of failure.

A sudden acceleration may throw you against a solid object. If this happens, treat it as a collision with that object at a velocity equal to 10 x G-force of the acceleration.

Heat

In ordinary hot weather, you will experience no ill effects if you stay in the shade and don't move around much. But if you are active in temperatures in the top 10° of your comfort zone or above – over 80°F, for humans without Temperature Tolerance (p. 93) – make a HT or HT-based Survival (Desert) roll, whichever is better, every 30 minutes.

Modifiers: A penalty equal to your encumbrance level (-1 for Light, -2 for Medium, and so on); -1 per extra 10°F heat.

Failure costs 1 FP. On a critical failure, you suffer heat stroke: lose 1d FP. As usual, if you go below 0 FP, you start to lose 1 HP per FP. You cannot recover FP or HP lost to heat until you move into cooler surroundings.

In addition, at temperatures up to 30° over your comfort zone (91-120°F for humans), you lose an extra 1 FP whenever you lose FP to exertion or dehydration. At temperatures up to 60° over your comfort zone (121-150°F for humans), this becomes an extra 2 FP.

Intense Heat: Human skin starts to burn at 160°F; see Flame (p. 433) for damage. Even if no damage penetrates your DR, you will rapidly overheat if the ambient temperature is more than 6 x your comfort zone's width over your comfort zone (e.g., in a fire). After 3 x DR seconds, make a HT roll every second. On a failure, you lose 1 FP. Your DR provides its usual protection against burning damage, but it has no effect on this FP loss.

Sunburn: After a day of full sun on unprotected skin, an albino will be near death and a light-skinned Caucasian will be very uncomfortable (1d-3 damage). Darker-skinned individuals may itch, but aren't in much danger. Details are up to the GM.

Armor: Armor prevents sunburn and provides its full DR against burning damage – but only armor that provides Temperature Tolerance (through insulation or a cooling system) can prevent FP loss due to heat. This feature is standard on battlesuits and TL9+ combat armor.
PRESSURE

Adventurers are most likely to encounter extreme pressure in super-dense atmospheres (see Atmospheric Pressure, p. 429) or deep underwater (where pressure increases by about 1 atmosphere per 33’ of depth). Pressures in excess of your native pressure – 1 atm., for a human – are not always immediately lethal, but present serious risks.

**Over 2 \times \text{native pressure}**: You risk “the bends” (see below) if you experience over 2 \times \text{native pressure} and then return to normal pressure. With Pressure Support 1, the bends are only a risk when returning from over 10 \times \text{native pressure}. With Pressure Support 2 or 3, you are immune to the bends.

**Over 10 \times \text{native pressure}**: You may be crushed! On initial exposure and every minute thereafter, roll vs. HT at a basic +3, but -1 per 10 \times \text{native pressure}. If you fail, you suffer HP of injury equal to your margin of failure. If your Size Modifier is +2 or more, multiply injury by SM. With Pressure Support 2 or 3, you are immune to pressure.

The Bends

When you are breathing air that has been compressed (e.g., using scuba gear), your blood and tissues absorb some of the nitrogen gas in the compressed air. When you return to normal pressure, or “decompress,” this nitrogen escapes, forming small bubbles in the blood and muscles. This can result in joint pains, dizzy spells, possibly even death. These symptoms are known as “the bends.”

You risk the bends if you return to normal pressure after experiencing pressure greater than twice your native pressure (or 10 times native pressure, with Pressure Support 1). To avoid this, you must decompress slowly, spending time at intermediate pressures to allow the nitrogen to escape harmlessly.

Divers and mountaineers use precise tables to determine decompression times based on time spent at a given pressure. For game purposes, at up to 2 atm. (about 33’ underwater), a human can operate for any amount of time and return without risk. At up to 2.5 atm. (50’ depth), a human can safely operate for up to 80 minutes and return without requiring slow decompression. Greater pressures reduce the safe time without slow decompression: at 4 atm. (100’ depth), it’s about 22 minutes; at 5.5+ atm. (150’ depth), there is no safe period.

Safe decompression involves slowly lowering the pressure, either naturally (e.g., a diver deliberately taking hours to reach the surface) or in a decompression chamber. The time required increases with both pressure and exposure time. It can be several hours – or even days.

If you fail to decompress slowly enough, make a HT roll. Critical success means no ill effects. Success means severe joint pain, causing agony (see Incapacitating Conditions, p. 428); roll vs. HT hourly to recover. Failure means unconsciousness or painful paralysis; roll vs. HT hourly to regain consciousness, with each failure causing 1d of injury. Once conscious, you suffer joint pain, as described above. Critical failure results in painful death. Decompression to the highest pressure experienced lets you roll at HT+4 every five minutes to recover from all effects short of death.

An instant pressure reduction can also result in explosive decompression; see Vacuum (p. 437) for details. All effects are cumulative!

RADIATION

Radiation threatens high-tech heroes in the form of solar flares, cosmic rays, nuclear accidents, radioactive materials, and lethal weapons (nuclear bombs, particle beams, etc.). Exposure is measured in **rads**. The more rads received, the greater the chance of ill effects.

Whenever a character is exposed to radiation, the GM should note both the dose and the date. Each dose diminishes separately from all others; it starts to heal after 30 days, at the rate of 10 rads per day. However, 10% of the original dose never heals (except via ultra-tech, magic, etc.).

**Example**: A reactor technician spends a day in a “hot” environment and receives a 200-rad dose. After 30 days, that particular dose starts to heal at 10 rads/day. After another 18 days, the remaining dose is 20 rads – 10% of 200 rads – and stops healing.

### Radiation Hazards

**Cosmic Rays**: A constant hazard for space travelers. Inflict 1 rad/week. Only massive shielding protects people.

**Fallout**: Small radioactive particles, such as those produced by a ground-burst nuclear bomb. Inflicts 2–5 rads/minute during a few hours of the blast, and several rads/hour over the next day. If you breathe or swallow fallout (in contaminated food or water), the ingested material delivers a continuing dose (see below).

**Fission Plant Accident**: 1,000 rads/hour or more! This is only in close proximity (e.g., the reactor room); divide dose by the square of the distance in yards from the source.

**Ingested Radioactive Material**: Plutonium, radium-226, uranium-235, etc. Even tiny doses can cause 1 rad/day to several rads/minute, depending on the isotope. (Some radioactive materials, such as plutonium, are also extremely toxic!)

**Inmate Attack**: An attack with the Radiation damage modifier (p. 105) delivers one rad per point of damage rolled.

**Nuclear Blast**: One-megaton fission air or space burst at 2,000 yards: 6,600 rads!
**Effects of Radiation on Living Things**

When a living being accumulates at least 1 rad (but no more than once per day, for continued exposure to a given source), he must make a HT roll. On the Radiation Effects Table, below, find his current accumulated dose in the "Accumulated Dose" column. Apply the modifier in the "HT" column to his HT roll. Then roll the dice. Use the first result in the "Effects" column on a critical success, the second on a success, the third on a failure, and the last on a critical failure.

---

### Radiation Effects Table

<table>
<thead>
<tr>
<th>Dose</th>
<th>HT</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10 rads</td>
<td>+0</td>
<td>-/-A/B</td>
</tr>
<tr>
<td>11-20 rads</td>
<td>+0</td>
<td>-/-A/B/C</td>
</tr>
<tr>
<td>21-40 rads</td>
<td>+0</td>
<td>A/B/C/D</td>
</tr>
<tr>
<td>41-80 rads</td>
<td>-1</td>
<td>A/B/C/D</td>
</tr>
<tr>
<td>81-160 rads</td>
<td>-3</td>
<td>A/B/C/D</td>
</tr>
<tr>
<td>161-800 rads</td>
<td>-4</td>
<td>A/B/C/D</td>
</tr>
<tr>
<td>800-4,000 rads</td>
<td>-5</td>
<td>C/D/E/E</td>
</tr>
<tr>
<td>Over 4,000 rads</td>
<td>-5</td>
<td>D/E/E/E</td>
</tr>
</tbody>
</table>

...The dose has no obvious effect, but doses continue to accumulate.

**A:** Radiation burns and chronic "somatic" damage. HT hours after irradiation, suffer 1d of injury and gain Low Pain Threshold for one week (those with High Pain Threshold lose this instead). If you recover, make two more HT rolls with the modifier on the table; one to avoid sterility, the other to avoid gaining the Terminally Ill (1 year) disadvantage. Gain either condition only on a critical failure.

**B:** Hematopoietic syndrome. As A, but as well, after HT hours you are nauseated (see Irritating Conditions, p. 428) for a further (40 - HT) hours; lose 1d each from DX, IQ, and FP; and acquire the Hemophilia disadvantage. Each day, make a HT roll with the modifier on the table. On a critical success, you heal 2 points each of DX, IQ, and FP; on a success, you recover 1 point of each; on a failure, there is no improvement; and on a critical failure, you lose 1 point of each and are nauseated that day. After recovering all lost DX, IQ, and FP, you no longer suffer from Hemophilia or need to make daily HT rolls.

**C:** Gastrointestinal syndrome. As B, but in 1d/2 weeks, you also lose all body hair and must make daily HT rolls. On a critical failure, you suffer 1d points of injury; on a failure, 2 points of injury; on a success, 1 point of injury; and on a critical success, injury stops and normal recovery can occur (and hair starts to grow back). Until injury stops, you have Susceptible to Disease -3 (p. 158) and suffer from nausea. If you lose more than 2/3 of your HP to radiation, your teeth and nails start to fall out.

**D:** Terminal radiation sickness. As C, except HP loss begins in 1d/2 days, and even a critical success won’t stop daily HP loss – it only postpones it for a day. Death is certain.

**E:** Rapid cerebrovascular death. After one hour, you lose 1d from each of DX, IQ, and FP; take 1d of injury; gain Hemophilia, Low Pain Threshold, and Susceptible to Disease -3; and are nauseated. Make an hourly HT roll. Critical failure means instant death from brain hemorrhage; failure means loss of another 2 points of DX, IQ, and FP, and 2 more points of injury; success means 1 extra point of each; critical success mean no decline that hour.

**Other Effects:** In addition to these effects, a single dose of 200+ rads causes sterility and blindness for 1d months; a dose of 500+ rads makes it permanent. An accumulated dose of 100+ rads increases the risk of birth defects. Should you become a parent, make a HT roll, at +3 if you are male. On a failure, the child has some sort of birth defect (GM’s option).

### Radiation and Nonhumans

The above effects apply to humans and most other mammals. Other creatures may have Radiation Tolerance (p. 79).

**Machines** are not affected unless they have the Electrical disadvantage (p. 134). Each time such a machine accumulates a dose of 100 rads, make a HT roll at a basic +4, -1 per 100 rads accumulated dose. On a failure, it ceases to function until repaired. On a critical failure, it is destroyed (any data stored on it is also lost).

### Radiation Protection

Any material between you and the radiation source grants a Protection Factor (PF) that reduces your received dose. Divide your dose by PF; e.g., PF 100 means 1/100 the dose. Half an inch of lead, 1.5 inches of steel, or 750 yards of air has PF 2; a yard of water has PF 8; a yard of earth has PF 27; and a yard of concrete has PF 64.

Shielding protects differently against certain types of radiation. Radiation from solar flares and planetary radiation belts (like the Van Allen belt) is mostly free electrons and alpha particles: multiply PF by 20. Against cosmic rays, divide PF by 100!

### Radiation Treatment

All costs below are per treatment.

At TL7, drugs are available that can halve your effective rad dosage if a dose ($500) is taken 1-3 hours in advance. Chelating drugs are also available to get radioactive fallout out of your system; a dose ($500) halves exposure after 3 days and eliminates it entirely after a week. This has no effect on radiation already absorbed!

At TL8, advanced chelating drugs ($500) encapsulate and remove fallout in 12 hours.

At TL9, advanced anti-radiation drugs or cell-repair nanotechnology ($1,000) can give +3 to all HT rolls vs. radiation for 2 weeks.

At TL10+, cell-repair nanotech or rejuvenation technology might be able to completely repair the ravages of radiation, providing the victim is still alive.

### Seasickness

Those aboard a seagoing vessel (excluding large, modern vessels with roll stabilizers) must check for seasickness on their first day afloat. Use the rules for the Motion Sickness disadvantage (p. 144) – but if you lack that disadvantage, you roll at HT+5, and with a success by 5 or more, or a critical success, you suffer no ill effects at all.

### Suffocation

If you completely lack air – see Actions After a Grapple (p. 370), Choke Hold (p. 371), and Holding Your Breath (p. 351) for examples – you lose 1 FP per second. If you are drowning after a failed Swimming roll, you can get some air, but you also inhale water: roll vs. Swimming every five seconds;
failure costs 1 FP (see *Swimming*, p. 354).

At 0 FP, you must make a Will roll every second or fall unconscious. You are likely to die unless rescued (see *Lost Fatigue Points*, p. 426). Regardless of FP or HP, you die after four minutes without air.

If you get clean air before you die, you stop losing FP and start to recover FP at the usual rate (see *Recovering from Fatigue*, p. 427). If you are unconscious, you awaken once you have 1 FP. If you were drowning, a rescuer must also make a First Aid roll to get the water out of your lungs in order to save you – see *Resuscitation* (p. 425).

If you went without air for more than two minutes, roll vs. HT to avoid permanent brain damage: -1 to IQ.

**Vacuum**

Vacuum is the absence of air – but these rules also apply in trace atmospheres, where there is almost no air. If you are exposed to vacuum without protection (e.g., a vacc suit or the Vacuum Support advantage), the following rules apply.

**Breathing Vacuum**: You can’t hold your breath in vacuum – and you may rupture your lungs if you try (1d of injury). If you exhale and leave your mouth open, you can operate on the oxygen in your blood for half the time listed under *Holding Your Breath* (p. 351). After that, you begin to suffocate (see *Suffocation*, p. 436). *Explosive Decompression*: When an area suddenly goes from normal pressure to little or none (a “blowout”), body fluids boil, blood vessels rupture, and eardrums pop. Take 1d of injury immediately, and roll vs. HT to avoid the bends (see *The Bends*, p. 435). Also roll vs. HT+2 for each eye; failure means One Eye or Blindness, as appropriate. Finally, roll vs. HT-1 to avoid Hard of Hearing.

Use the *Duration of Crippling Injuries* rules (p. 422) to determine how long these disadvantages last.

**Extreme Temperatures**: Vacuum itself is neither “cold” nor “hot,” but in the absence of air, surfaces in shadow will eventually grow very cold, while those in sunlight will become extremely hot. For example, on the moon – with its month-long “day” – the temperature can range from -243°F (at night) to 225°F (at noon).

**Poison**

Poison can show up on weapons; on darts, needles, or spikes in traps; in food or drink offered by a treacherous foe; and anywhere else you did not expect it. Human foes are not the only ones who can poison you. Snakes, insects, and certain other creatures have natural poison (usually blood agents) – and eating the wrong plant or animal may treat you to a dose of digestive poison.

**Describing Poisons**

A poison’s description includes its name, means of delivery, delay, resistance roll, effects (injury and symptoms), and cost per dose – and possibly notes on what constitutes a “dose,” how to use or conceal the poison, and how to treat it (including any antidotes).

A poison can have multiple sets of effects. For example, tear gas is both a respiratory agent (with one set of effects) and a vision-based agent (with other effects).

**Delivery**

A given poison might reach its victim in any of several ways:

**Blood Agent**: The poison must reach a mucous membrane (eyes, open mouth, nose, etc.) or an open wound. If it is sprayed or spat, it must actually strike one of these vulnerable areas (so a spitting cobra must target the face). If it is delivered as a gas or wide-area spray, only those with the Sealed advantage (p. 82) – or with one of Doesn’t Breathe (p. 49) or Filter Lungs (p. 55) and one of Nictitating Membrane (p. 71) or Protected Vision (p. 78) – are immune. These advantages might be natural or provided by equipment.

**Contact Agent**: The poison must be inhaled or touch skin to take effect. If it is used to poison a melee weapon, the weapon must hit an unarmored and unclad hit location for the poison to affect the target. If it is delivered as a gas or wide-area spray, it affects everyone in the area who lacks the Sealed advantage (whether natural or provided by a suit, vehicle, etc.).

**Digestive Agent**: The victim must swallow the poison. This is typical of poisonous plants and toxic substances such as arsenic. If the poison has a slight but distinctive taste (e.g., cyanide), the GM can allow the victim a Taste roll or Perception-based Poisonings roll – at a basic -2, but +2 per doubling of dosage – to notice it in time. Poisons that are easier to detect give a bonus; those that are harder to detect, or whose taste is masked by suitable food or drink, give a penalty. To force someone to swallow a poison rather than spit it out, you must grasp him by the head or neck and maintain your hold for 10 seconds.

**Follow-Up Poison**: The poison must be placed on a piercing or impaling weapon, or injected using a hollow projectile, hypodermic needle, etc. If the weapon penetrates DR and does any damage, it delivers the poison. Most “follow-up” poisons are simply blood or contact agents injected into the body.

**Respiratory Agent**: The poison is a gas that only affects those who inhale it into their lungs. Delivery is usually via an area or cone attack (e.g., gas grenade, spray gun, or dragon’s breath), but an entire atmosphere could be poisonous! Only Doesn’t Breathe and Filter Lungs protect completely against respiratory agents – but a victim who makes a Sense roll to notice the poison in time may hold his breath (see *Holding Your Breath*, p. 351). Unconscious or stunned victims inhale automatically. An improvised mask, such as a wet towel over the face, gives +1 to HT to resist.
**Injuries, Illness, and Fatigue**

**Sense-Based Agent:** The poison affects the victim through a specific sense. It has no effect on those who lack that sense or have appropriate protection. A smell-based agent is usually a foul stench that induces nausea; suitable protection is nose plugs, a respirator, or the Protected Sense (Smell) advantage. A vision-based agent is generally a cloud of gas that irritates the eyes; appropriate protection is a gas mask, goggles, or the Protected Sense (Vision) advantage. See Sense-Based (p. 109).

**Delay**

Most poisons require a few seconds to several hours to take effect. This is nearly always true for digestive agents.

Delays given are for victims with Size Modifier 0. The victim's size modifies delay: each +1 to SM doubles the delay; each -1 to SM halves the delay. For example, if the delay is 1 hour, someone with SM -2 is affected in only 15 minutes.

**Special Delivery**

Two qualifiers can apply to several of the standard means of delivery:

*Cumulative:* A poison may be mild in low concentrations but become harmful with continued exposure. The GM must decide how much exposure constitutes a “dose.” This might be time-based (e.g., a toxic atmosphere that requires an hour of exposure) or based on the victim’s bulk or body mass (ST/10 ounces of liquid, HP/5 pills, etc.). See Drinking and Intoxication (p. 439) for a detailed example.

*Persistent Gas:* A respiratory agent or area-effect blood or contact agent typically persists for 10 seconds or more, depending on wind. Some contact agents leave a poisonous residue on exposed surfaces until they’re washed away.

**Resistance Roll**

Some poisons give the victim a HT roll to resist. Make this roll after the delay, if any, has passed. There is often a modifier: a mild poison might call for a HT+2 roll, while one that is almost impossible to resist might require a HT-8 roll! HT to HT-4 is typical. DR never affects this roll.

If you’re in a poisonous environment (like a gas cloud or toxic atmosphere) and make your initial HT roll, you must roll again once per second until the poison affects you or you leave the area. If the poison has a delay, roll after each delay period instead.

Some poisons are specific to certain species and do not affect others. Others are easier or harder for particular species to resist. These effects are up to the GM.

**Effects of Poison**

The most common effect of poison is toxic or fatigue damage. Mild poisons might only inflict 1 HP or FP; more severe poisons might inflict 1d or more. DR has no effect on this damage. These HP and FP losses heal normally, but if the poison is cyclic (see below), no healing is possible until after the final cycle!

Damaging poisons sometimes affect their victims gradually, causing damage each time a specified interval of time passes. The description of such a poison specifies the length of this interval and the total number of cycles. The interval may vary from one second (for a fast-acting agent) to one day (for a slow poison). The total number of cycles may be two to several dozen.

If a resistible poison is cyclic, the victim gets a new HT roll to resist every cycle. On a success, he shakes off the poison; on a failure, an additional cycle of damage occurs. Note that even a poison that inflicts 1 HP of injury per day can be lethal if it’s hard to resist and lasts for two dozen cycles!

A poison always has some symptoms. The basic damage includes symptoms such as swelling, headache, and fever. Poisons that inflict toxic damage may have more severe symptoms that occur automatically after the poison causes enough injury (usually 1/3, 1/2, or 2/3 of the victim’s HP). For example, a poison might result in blindness once the victim loses 1/2 his HP. Symptoms vanish when the victim’s HP rise above this threshold.

Some poisons cause effects other than injury or fatigue, including attribute penalties, irritating or incapacitating conditions (see Afflictions, p. 428), temporary disadvantages, or even the removal of existing advantages (e.g., an alchemical poison that negates Magery). The victim usually gets a resistance roll against these effects, and the effects always have a specific duration. The default duration is a number of minutes equal to the margin of failure on the resistance roll. In a poisonous environment, a failed resistance roll means the effects last for as long as you’re in the environment plus the duration.

**Cost Per Dose**

It is up to the GM whether a particular poison is for sale – it might be impossible to extract in a useful form, or the authorities might want to keep it off the market. If a poison is available, its cost often reflects how difficult it is to obtain, not its effectiveness. In most game worlds, people who sell poisons are criminals. All of these factors make cost per dose highly variable. See Poison Examples (p. 439) for suggestions . . . but the GM is free to use whatever prices he feels are reasonable.

**Dosage**

The statistics given in a poison’s description always assume one “dose”: enough poison to produce the described effects in one victim. Some additional notes:

*Contact Agents:* One dose of a contact agent coats or affects a single hit location.

*Gases and Sprays:* One dose of a respiratory agent, or a blood or contact agent in gas or spray form, affects one hit location on one victim. For a respiratory agent, this must be the face. Ten doses are enough to affect everyone in a room (say, a 2-yard radius).
Poison Examples

Arsonic (TL1): A digestive agent with a one-hour delay and a HT-2 roll to resist. Inflicts 1d toxic damage, repeating at hourly intervals for eight cycles. $1/dose. LC1.

Cobra Venom (TL0): A follow-up poison with a one-minute delay and a HT-3 roll to resist. Inflicts 2d toxic damage, repeating at hourly intervals for six cycles. A victim who loses 1/3, 1/2, or 2/3 HP has -2, -4, or -6 DX, respectively. $10/dose. LC1.

Cyanide (TL4): This fast-acting poison is deadly in any form. As a follow-up poison or respiratory agent, it has no delay. As a contact or digestive agent, it has a 15-minute delay. In all cases, there is no HT roll to resist! Inflicts 4d toxic damage. $2/dose. LC1.

Mustard Gas (TL6): An area-effect respiratory and contact agent. As a contact agent, it has no delay and a HT-4 roll to resist, and inflicts 1 point of toxic damage, repeating at 8-hour intervals for 24 cycles. As a respiratory agent, it has a two-hour delay and a HT-1 roll to resist, and inflicts 1d toxic damage, repeating at one-hour intervals for six cycles. $10/dose. LC0.

Nerve Gas (TL6): An area-effect contact agent with no delay and a HT-6 roll to resist. Inflicts 2d toxic damage, repeating at one-minute intervals for six cycles. A nerve gas usually causes agony, paralysis, retching, or seizure as well; see Afflictions (p. 428) $20/dose. LC0.

Smoke: Ordinary smoke is an area-effect respiratory agent with a 10-second delay and a HT roll to resist. Causes coughing (see Afflictions, p. 428) for the time spent in the smoke plus one minute times the margin of failure. Dense smoke can cause actual damage. LC4.

Tear Gas (TL6): An area-effect respiratory and vision-based agent. As a respiratory agent, it has no delay and a HT-2 roll to resist, and causes coughing (see Afflictions, p. 428). As a vision-based agent, it has no delay and a HT-2 roll to resist, and causes blindness. Both effects endure for the time spent in the gas plus one minute times the margin of failure. Tear gas is opaque: Vision rolls are at -1 to -3 per affected yard. $10/dose. LC2.

Individuals unprepared for mustard, nerve, or tear gas may have to make Fright Checks!

Poisoned Weapons: One dose of a follow-up poison envenoms the tip of a piercing or impaling weapon, or fills a hypo. Poisoning the edge of a weapon, so that a cutting attack can deliver it, requires three doses per yard of reach. Most poisons on blades only last for one successful strike or three blocked or parried ones. Misses and dodged attacks do not rub off the poison.

Varying the Dosage: It is possible to vary the dosage of a digestive agent or a follow-up poison delivered by hypodermic. Each doubling of dosage (and cost!) halves the delay and interval, doubles damage, gives -2 to HT rolls to resist, and gives +2 to all rolls to detect the poison (including the victim’s Sense rolls, and any Diagnosis or Forensics roll made to investigate the victim’s symptoms or death). Using less than one full dose may reverse these modifiers or simply make the poison ineffective, at the GM’s option.

Treatment

If the poison has a delay, there may be time to treat the victim before he suffers any ill effects. Since he will not yet be showing symptoms, he must be aware of his predicament in order to seek help!

A poisonous animal bite is usually obvious – but the GM may require a Naturalist roll to realize that an animal is venomous. Sucking the poison from the wound takes a minute, requires a First Aid or Physician roll at -2, and gives +2 on HT rolls to resist.

If the victim suspects a digestive agent, he or a friend can induce vomiting to expel the poison. This takes 10 seconds, calls for a First Aid or Physician roll, and gives +2 on HT rolls to resist.

It might also be possible to take an antidote. Antidotes exist for only a few poisons. Where they do exist, they are usually specific to the poison. The correct antidote gives the victim a bonus to HT rolls to resist the poison, or even completely halts the poison.

Medical procedures – chelation, gastric lavage, intravenous fluids, oxygenation, etc. – can also give a HT bonus, but only if the treatment suits the poison. Such measures require a Physician roll. The HT bonus never exceeds TL/2 (round up, minimum +1).

To learn whether it is safe to induce vomiting, or which antidotes or procedures to use, you must identify the poison. This is tricky before symptoms appear! The GM may require rolls against Poisons (to identify a residue on a dart, in a glass, etc.), Naturalist (to identify a venomous animal), or even Intimidation (to force the poisoner to reveal what he used).

Once the victim takes damage, symptoms appear. At this point, a Diagnosis or Poisons roll can identify the poison. If the poison is cyclic, the correct antidote or medical procedures can help prevent further damage, providing their bonus to future HT rolls.

Drinking and Intoxication

If you drink too much alcohol in a short period of time, you may become intoxicated. Keep track of how many “drinks” you consume each hour. For simplicity, one drink is a full mug or can of beer (12 oz.), a full glass of wine (4-5 oz.), or a shot of spirits (1.5 oz.).

At the end of any hour during which you consume more than ST/4 drinks, roll against the higher of HT or Carousing. If you continue to drink, continue to roll once per hour.
Modifiers: -1 per drink over ST/4 that hour; -2 on an empty stomach, or +1 if you have recently eaten; +2 for the Alcohol Tolerance perk (p. 100), or -2 for the Alcohol Intolerance quirk (p. 165).

Each failure shifts you one level from sober to tipsy to drunk to unconscious (drunken stupor) to coma; see Afflictions (p. 428) for details. A critical failure drops you two levels: sober to drunk, tipsy to unconscious, or drunk to coma. If penalties reduce your roll to 2 or less, critical failure means you drop three levels! Remember that any roll 10 or more above effective skill is a critical failure; e.g., a roll of 11+ against a modified HT of 1.

**Pink Elephants:** If you are drunk, make one additional HT+4 roll. On a failure, you are also hallucinating (see Incapacitating Conditions, p. 428).

**The Heaves:** If you are drunk and keep drinking, your body will try to purge itself of the alcohol (which is a toxin, after all!). When a failed HT roll indicates that you would fall unconscious or into a coma, make a second, unmodified HT roll. On a success, you vomit up the alcohol instead of passing out; treat this as retching (p. 429). On a critical failure, however, you pass out and then retch; treat this as choking (p. 428).

**Sobering Up:** To sober up, you must first stop drinking. After half as many hours as the total number of drinks you consumed, roll vs. HT. Various remedies may give a bonus. On a success, you move one step toward sober. Continue to roll each time this many hours pass until you are sober. **Exception:** To recover from a coma, you need medical help!

**Hangovers:** If you are tipsy or worse, you must roll vs. HT when you stop drinking, at -2 if you’re drunk or -4 if you’re unconscious. On a failure, you will suffer a hangover. This kicks in 1d hours after the end of the drinking session – or on awakening, if you pass out or fall asleep before this time – and lasts hours equal to your margin of failure. During this time, you will suffer from moderate pain (see Irritating Conditions, p. 428) and acquire Low Pain Threshold (or lose High Pain Threshold, if you have it). The GM may decide that preventative treatment (including drinking plenty of water and possibly taking a mild analgesic) gives you a bonus to this roll.

### Addictive Drugs

The habitual use of a mind-altering substance can lead to dependency. Abusers have the Addiction disadvantage (p. 122), and may suffer withdrawal (see box) if forced to go without the drug.

Below are rules for three common classes of addictive drugs. Note that these are also poisons. If someone takes a large dose, follow all the usual rules for poison on pp. 437-439, except where specified otherwise.

**Stimulants**

Stimulants elevate the user’s mood and energy level . . . temporarily. Potent ones – e.g., amphetamine – restore 1d FP, and give Doesn’t Sleep and Overconfidence (12). These effects endure for (12 - HT) hours, minimum one hour. After that time, the user loses twice the FP he recovered (e.g., if his FP jumped from 8 to 10, he drops to 6 FP), and gains the disadvantages Bad Temper (12) and Chronic Depression (9) for an equal length of time.

If the user takes multiple doses in 24 hours, he must roll vs. HT after the second and later doses, at a cumulative -1 per dose after the first. On a critical failure, he suffers a heart attack (see Mortal Conditions, p. 429).

Stimulants are cheap and only slightly addictive. If they are legal, stimulant addiction is a Minor Addiction (-1 point); if they are illegal, it is a -5-point Addiction.

**Hallucinogens**

Hallucinogens – e.g., LSD and mescaline – cause disorientation,
hallucinations, and fits of paranoia. They may induce psychological dependency, but not physiological addiction.

Most of these drugs are taken orally and require about 20 minutes to work. Make a HT-2 roll to resist. On a failure, the user starts hallucinating (see Incapacitating Conditions, p. 428). This lasts for hours equal to the margin of failure. After that time, the user may roll vs. HT-2 once per hour to shake off the drug's influence.

Addiction is typically worth -10 points if the drugs are legal, -15 points otherwise.

Depressants

Depressants induce drowsiness, lassitude, and (in large doses) insensibility. All offer a HT roll to resist. As with any poison, a large dose gives a penalty – see Dosage (p. 438). Massive doses may lead to overdose (see box). Commonly abused depressants include:

Sedatives: These include sleep aids, anti-anxiety drugs, and many psychiatric drugs. A typical sedative is taken orally and requires 20 minutes to take effect. Make a HT-2 roll to resist. On a failure, the user becomes drowsy (see Irritating Conditions, p. 428) for hours equal to the margin of failure. Habitual users need larger and larger doses to produce the same effect, increasing the risk of overdose. Sedatives are cheap and highly addictive. If the user acquires them legally, he has a -5-point Addiction; otherwise, he has a -10-point Addiction.

Painkillers: Potent painkillers, such as morphine, are used to treat chronic or surgical pain. Abuse is often the unintended result of legitimate use. Taken orally, there is a delay of 20 minutes; injected, there is no delay. Roll vs. HT-4 to resist. On a failure, the user acquires the High Pain Threshold (p. 59) and Unfazeable (p. 95) advantages, and the Laziness disadvantage (p. 142), and experiences euphoria (see Irritating Conditions, p. 428). All effects last for hours equal to the margin of failure. Painkillers powerful enough to produce these effects are expensive and totally addictive. Addiction is worth -15 points if the drugs are legal, -20 points otherwise.

Heroin: This opium derivative has few legitimate uses. It is typically injected, in which case there is no delay. Roll vs. HT-4 to resist. Failure incapacitates the user for hours equal to the margin of failure – treat this as ecstasy (see Incapacitating Conditions, p. 428). In addition to the usual risk of overdose, there is always the chance the heroin was "cut" with toxic filler; effects are up to the GM. Heroin is very expensive, incapacitating, totally addictive, and illegal; Addiction to heroin is a -40-point disadvantage.

Overdose

Anyone who takes two or more doses of depressants risks an "overdose." This definitely includes taking a single dose of two or more depressants! Any alcohol at all counts as an extra dose. Drug interactions can kill . . .

Overdose occurs on a critical failure on any resistance roll for multiple doses. As with any poison, each doubling of dosage gives -2 to resistance rolls – and as for all success rolls, a roll of 10 or more above effective skill is a critical failure. For instance, heroin offers a HT-4 roll to resist. If a HT 10 man takes a double dose, his effective HT is 10 - 4 - 2 = 4. He overdoses on a 14 or higher.

Overdose causes unconsciousness for hours equal to the margin of failure. As well, the drug acts as a poison with a resistance roll equal to its usual resistance roll (the most difficult roll, for two or more drugs); e.g., HT-4, for heroin. It inflicts 1 point of toxic damage, repeating at 15-minute intervals for 24 cycles. If the victim reaches -1¥HP, he slips into a coma (see Mortal Conditions, p. 429).
Maladies and strange diseases may affect adventurers in far-off lands . . . or even at home. The search for a cure – whether for the Princess’ wasting disease, an alien plague, or a terrorist’s bioweapon – is a wonderful plot device. The invention of diseases is an excellent opportunity for the GM to exercise a morbid sort of creativity.

Magical or technological items, the Resistant advantage (p. 80), and high HT can all protect you from disease. Risks are greatest in warm, moist areas. If you catch something, you won’t know until the symptoms start to show . . . the GM makes your roll to avoid it!

DISEASE

Most diseases are caused by microorganisms and spread by infected people or animals – but some have other causes!

News about disease-ridden areas travels fast; a successful Current Affairs roll can alert adventurers to the presence of disease in a region. Spotting locals suffering from symptoms requires a Perception-based Diagnosis or Physician roll. And in an area where animals are carrying a disease that people can catch, investigators would need to examine an infected specimen and make a successful Veterinary roll to realize the danger.

Defining a Disease

Diseases are defined in much the same way as poisons (see Poison, p. 437). For each disease the PCs encounter, the GM should specify:

Vector: How the disease spreads. Diseases are generally blood, contact, digestive, or respiratory agents. These terms mean just what they do for poisons; see Delivery (p. 437).

Resistance Roll: The HT roll to avoid the disease. Anyone exposed must roll, possibly at a penalty. Most diseases allow a roll at HT to HT-6. The means of exposure can modify this roll; see Contagion (p. 443). On a success, the victim does not contract
the disease. On a failure, he does, but he gets further rolls – once per “cycle” – to throw off the disease.

Delay: This is the incubation period – the time between initial exposure to the disease and the appearance of the first symptoms in those who fail to resist. This is 24 hours for a “generic” disease, but can vary considerably for real-life diseases.

Damage: The disease’s effects in game terms. This is typically 1 point of toxic damage, but it might be higher – up to 1d – for virulent diseases. DR does not protect against disease! Symptoms (fever, sneezing, coughing, spots, rash, etc.) appear after the subject starts to suffer injury. Injury from disease will not heal naturally until the victim makes his HT roll to recover!

Cycles: Like a cyclic poison, a disease damages its victim at regular intervals until he makes a HT roll or a maximum number of cycles passes. The “default” interval between HT rolls is one day. The number of cycles varies with the deadliness of the disease; for instance, a potentially lethal disease might only inflict 1 HP per cycle but endure for 20–30 cycles.

Symptoms: A disease can cause attribute penalties, temporary disadvantages, etc. after the victim loses a specified fraction (typically 1/3, 1/2, 2/3, or all) of his HP to it.

Contagion: Some diseases are mildly or highly contagious – although sometimes not until after the incubation period.

Most diseases are caused by microorganisms and spread by infected people or animals – but some have other causes!

The combination of resistance roll, damage, and cycles determines “deadliness.” By carefully selecting these statistics, the GM can distinguish between a virulent but mild flu that ends in a day or two (24-hour delay, HT-2, 1 point of toxic damage, 12-hour interval, six cycles) and a slower but usually fatal disease (72-hour delay, HT-5, 1 point of toxic damage, daily interval, 30 cycles).

Diagnosis
Once the symptoms of a disease become apparent, identification requires a successful roll against Diagnosis or Expert Skill (Epidemiology) – or Veterinary, for an animal illness. This cannot identify a totally new illness, but a good roll might give enough information to allow treatment.

Treatment
Appropriate remedies – herbs, drugs, etc. – can provide a bonus to the cyclic HT rolls to shake off certain diseases. At TL6+, antibiotics (e.g., penicillin) give +3 to recover from most bacterial diseases. At any TL, a physician’s care provides the same bonuses to recover from disease that it gives to recover from injuries (see Medical Care, p. 424).

However, some diseases are drug-resistant, in which case ordinary medicine gives no bonus. At TL7+, drug treatments can often mitigate the effects of such illnesses – usually by reducing damage or shortening interval – but these aren’t cures. Radiation treatment, gene therapy, nanotech, magic, and psi might still work, however.

Immunity and Susceptibility

Differential Susceptibility: Members of a given ethnicity, sex, or race may be more or less susceptible to a particular disease. For instance, the GM might decide that dwarves are immune to the Purple Shakes, and that elves get +2 on their HT rolls against it . . . but that the mortality rate among male giants is 100% unless they are treated within two days. A successful Diagnosis or Physician roll reveals differential susceptibility, if applicable.

Natural Immunity: Some individuals are simply immune to a specific disease. If the GM rolls a 3 or 4 for your first attempt to resist a disease, you are immune! He should note this fact and not tell you – under normal circumstances, you have no real way of knowing about your immunity.
Infections are possible anywhere, but some places (especially jungles) may harbor especially severe forms of infection.

Open wounds treated with antibiotics (TL6+) never become infected except on a critically failed First Aid or Physician roll. People wounded under less-than-clean circumstances (GM's decision) and who do not receive treatment must make a HT+3 roll, modified as follows:

- Ordinary "clean" dirt in wound: +0.
- Dung or other infected matter in wound: +2.
- Locale harbors a special infection: +3.

These modifiers are cumulative, and replace those listed under Contagion (p. 443).

On a failure, the wound is infected. Treat this as any other disease. A typical infection requires a daily HT roll, modified as above, with failure indicating the loss of 1 HP. Most infections progress until the victim either makes a HT roll, ending the infection, or takes so much injury that he dies.

Treatment with antibiotics (TL6+) gives +3 to HT rolls. This usually halts the infection before serious injury can occur.

If drugs are unavailable, or if the patient doesn't respond, a surgeon can cut out the infected tissue if the injury from infection hasn't progressed beyond a certain point. On the head or torso, this limit is the patient's HP/2. On a limb or extremity, it is the amount of injury required to cripple the body part. Surgery cannot help infections more severe than this.

The surgeon must make a Surgery roll. This inflicts 2d of injury to the head or torso, or amputates a limb or extremity. On a success, it cures the infection. On a failure, damage or amputation occurs but the patient remains infected.
The GM is responsible for establishing which professional, social, and racial origins are (and aren’t) appropriate for PCs. No GM can hope to anticipate every possible character concept, but a good GM shares his expectations with his players and helps those who are struggling for ideas. One effective way to do this is to provide the players with a set of “templates”: collections of traits that typify the kinds of characters that are likely to figure prominently in the campaign.

This section gives rules for template design, and is intended for GMs. It assumes you have read the rules for template use in Chapter 7.

CHARACTER TEMPLATES

A “character template” is a carefully structured list of the attribute levels, secondary characteristics, advantages, disadvantages, and skills the GM feels a PC should possess to fill a particular professional, social, or dramatic role in the campaign. The GM calculates all point costs in advance and gives the results with the template, reducing the amount of math involved in character creation.

The main purpose of a character template is to prevent new players from overlooking vital abilities when choosing from among all the options in Chapters 1-6. The secondary goal is to accelerate character design. Thus, a template should list only necessary traits – not everything that might fit. The player should always have room to customize his PC!

How GURPS Works: Character Templates Aren’t Rules!

Character templates are not rules. They are just a character-design aid with no effect on point costs, success rolls, NPC reactions, character development, or any other aspect of game play. The traits on templates are suggestions as to what abilities a hero will need to fill his role in the game world. Make sure your players know this! They should feel free to customize or alter templates, or to create characters without using templates at all.
**Types of Character Templates**

Most character templates fall into one of the general categories below—a few will fall into more than one. There is no harm in mixing PCs built using different classes of templates within a single campaign.

**Occupational Templates**

Someone who does a certain job (e.g., a physician or a mechanic) should have the necessary job skills—see Jobs (p. 516). Not all occupations are jobs; however, you could create occupational templates for hereditary nobles, idle rich, slaves, students, etc. These latter templates might include Duties, codes of conduct (see Self-Imposed Mental Disadvantages, p. 121), and “entrance requirements.” All occupational templates should suggest Wealth and Status appropriate to the occupation, and should specify attribute levels and advantages that would lead to success at—or successful adaptation to—that career.

**Cultural Templates**

Cultural background is a powerful defining concept in many settings. For instance, Alexander the Great was first and foremost a Macedonian, and this identified him throughout his adventures. A cultural template might specify the genetic traits of a closed-breeding group, skills taught to all members of a culture, or the beliefs and prejudices of a given tribe, nation, or religion. It will often include Cultural Familiarity and Languages.

**Dramatic Templates**

A dramatic template defines a character’s role in the plot—often in terms of an archetype such as “wise man” or “trickster.” Some roles are genre-specific (“screaming victim” is rare except in horror; for instance); others are universal (e.g., “femme fatale”). The dramatic template ensures that the PC has the traits he needs to advance the plot, regardless of his exact occupation or culture. This type of template attempts to define personality as much as ability; therefore, it often includes more mental disadvantages than other kinds of templates.

**Concept**

A character template is a partially built character. To design it, you need a “concept”—a clear idea of what it represents and where it fits in—just as for a fully realized character (see Character Concept, p. 11). Decide on the type of template you are designing and what role it will fill, and then visualize which traits would best meet the demands of that role in your campaign. Use your knowledge of the game world to help you here!

*Example:* We shall construct a “heroic knight” template for a fantasy campaign. This template is both dramatic (the “heroic” part) and occupational (the “knight” part). We could create separate templates for each aspect—or even treat one as a “lens” on the other (see Lenses, p. 449)—but we have chosen to keep things simple. We decide that a heroic knight should be strong, honorable, a wise leader, and a skilled warrior.

**Flexibility**

The concept behind a template should be sufficiently flexible that the player can easily individualize his character. Leave enough creative “space” that the player is not stuck playing a stereotype. There are two useful measures of flexibility: the number of abilities on the character template (its degree of detail) and the extent to which those abilities use up the player’s “budget” for character creation (its point cost).

**Degree of Detail**

A “dense” character template includes many traits. It defines a particular role precisely...so precisely that it can rob a PC of individuality. A “sparse” template makes a few suggestions, perhaps only a skill or two. It makes the resulting PC easier to customize, but leaves inexperienced players wondering, “What’s my role?” The secret is to strike a balance between the two: don’t try to give the template every trait that might fit—just focus on the traits that define the role!

**Template Cost**

The more expensive the template, the more points you’re spending for the player. Keep the campaign power...
level in mind and come in under the point budget for PCs, leaving enough unspent points (and enough unused points in disadvantages, if you are enforcing such a limit) that the player can customize his character. If a template absolutely must tie up a lot of points, make it “interactive” (see p. 449).

**Example:** We’ll design our heroic knight for a 150-point game with a -75-point disadvantage limit. This means we’ll try to spend fewer than 150 points total, and take less than the full -75 points of disadvantages.

The character templates you offer your players will affect their view of the game world and the type of campaign you intend to run.

**SELECTING TRAITS**

The next few sections offer concrete advice on selecting the actual traits that appear on character templates.

**Attributes**

The 9-13 range is suitable for most characters. “Adventuring” templates should have one or two above-average scores, but those for most normal jobs should leave everything at 10. Remember that an 11 or 12 is noteworthy, and that a 13 or 14 is exceptional — see How to Select Basic Attributes (p. 14). Dramatic templates are a special case, as it often serves the purposes of drama for an archetype to have extreme attributes. Still, try to avoid excessive stereotyping.

**Example:** We see our knight as a capable warrior, so we give him superior physical attributes: **ST 12 [20]**, **DX 12 [40]**, and **HT 12 [20]**. To reflect his wisdom and resolve, we give him **IQ 11 [20]** – he is supposed to be a wise leader; not a genius. This comes to 100 points.

**Secondary Characteristics**

It is usually best to leave Hit Points, Will, Perception, Fatigue Points, Basic Speed, and Basic Move at their base values. Tweaking these numbers is likely to confuse new players. Unless the concept absolutely requires exceptional talent in one of these areas (e.g., high Perception for a detective), just choose attributes that give fair secondary characteristics and leave fine-tuning to the adventurous player.

**Advantages**

For occupational templates, list the job’s requirements (e.g., Languages for a translator) or benefits (e.g., Clerical Investment for a priest). Other possibilities include “tricks of the trade” (e.g., Combat Reflexes for a soldier) and talents that would lead a person to select this particular career (e.g., Night Vision for a thief).

For cultural templates, also consider genetic and cultural traits (e.g., “All Northerners have Temperature Tolerance”), as well as Cultural Familiarity (p. 23), Languages (p. 23), and Social Regard (p. 86).

For dramatic templates, include traits that are invariably found in literary and cinematic examples of the archetype (e.g., Charisma or Handsome appearance for a swashbuckler).

Justify each advantage using an argument similar to one of those above – which means that most advantages on a character template should be learned or social in nature. Also, try to avoid unusual advantages. If every single character of a given type has a rare advantage, it will dilute the value of the advantage and possibly strain the suspension of disbelief.

**Disadvantages**

For the most part, follow the advice given for advantages. In the case of occupational templates, avoid disadvantages that are liable to inhibit job performance (e.g., Honesty for a thief). Focus instead on those that are likely to help with the chosen career (e.g., Fat for a sumo wrestler) and those that are expected (e.g., Disciplines of Faith or Vows for a priest). Some professions tend to lead to disadvantages, a few of which might be so common that they merit a place in the template (e.g., Social Stigma for a thief).

Dramatic templates are often defined almost entirely by their mental disadvantages, and frequently have “good” disadvantages or tragic flaws – see Disadvantages for Heroes (p. 119).

**Example:** Our knight owes fealty to his liege lord, so we give him Duty (Liege lord, 9 or less) [-5]. Since he’s a heroic knight out of fantasy, we also give him Code of Honor (Chivalry) [-15], Honesty (6) [-20], and Vow (Never refuse a request for aid) [-15]. This comes to -55 points.

**Skills**

Pick the skills needed for the character to be competent at the role the template describes. Avoid excessive numbers of skills, but include all necessary skills, a few skills that are complementary but not vital, and perhaps one or two skills that serve mostly to provide background color.

When assigning skill levels, assume that skill 12 suffices for “safe” jobs (e.g., accountant or librarian) and that skill 14 is plenty for “risky” jobs (e.g., assassin or surgeon) — including most “adventuring professions.” Save skill 16+ for those who truly stand out in their field; don’t water down the value of high skill by making it commonplace.

Of course, these guidelines assume relatively realistic characters. Many larger-than-life heroes have dozens of skills at high levels. It is up to the GM whether he wishes to encourage this pattern of skill buying in his campaign.
Listing Skills

When listing skills, include all relevant information in the following format:

**Skill Name (Difficulty)** Relative Level [Point Cost]-Actual Level

For instance, “Broadsword (A) DX+2 [8]-14.” This might look odd now, but it makes things much more transparent when the time comes to customize the character!

It can also be helpful to break down skill listings as follows:

- **Primary Skills:** Vital skills, at level 12+ – or at 14+, if they are likely to matter in life-or-death situations.
- **Secondary Skills:** Helpful skills that it’s hard to imagine the character not having, at level 11+.
- **Background Skills:** Anything else that fits, chosen for descriptive reasons rather than utility, usually at a lower level than primary and secondary skills.

**Examples:** Our knight is an adventurer first, so we make his primary skills Broadsword-14 [8], Lance-14 [8], Riding (Horse)-12 [2], and Shield-14 [4]. We make his leadership abilities secondary: Leadership-11 [2] and Tactics-11 [4]. We make his leadership abilities secondary: Leadership-11 [2] and Tactics-11 [4]. Finally, we add Armoury (Melee Weapons)-10 [1] and Heraldry-10 [1] as background skills, to cover his knowledge of arms and armor. Total cost is 30 points.

**SETTING THE PRICE**

Total the cost of everything on the character template. This is the “template cost”: the number of points the player must pay to purchase the template.

If template cost comes to more than 90% of the campaign’s starting points (see Starting Points, p. 10), players are liable to find it restrictive. To remedy this, lower attribute levels, remove noncritical advantages and skills, or add a few appropriate disadvantages. Alternatively, you can try to optimize the template (see below).

If you still can’t get template cost down to a reasonable level, it is likely that the starting points you’ve selected are less than ideal for the heroes you see working well in the game world. It might be a good idea to revise the campaign power level! See Power Level (p. 487) for advice.

**Example:** Our knight has spent 100 points on attributes, 20 on advantages, -55 on disadvantages, and 30 on skills. That’s 95 points, which is well within the recommended 90% limit for a 150-point campaign (135 points).

**Optimization**

Experienced players usually attempt to minimize the point cost and maximize the effectiveness of their characters. New players are unlikely to do so; therefore, it is a good idea to optimize templates so that characters built with them are not less efficient than scratch-built PCs. There are two main methods for doing this:

1. Select attribute levels that minimize the cost of the chosen skills. For instance, an Average skill at DX+2 level costs 8 points; six such skills would cost 48 points. An Average skill at DX+1 costs 4 points; six skills at this level would cost only 24 points. By lowering six skills from DX+2 to DX+1, you could free up 24 points – and if you then spent 20 points on DX, you could raise DX by one level, regain the original skill levels, and save 4 points!

2. Add advantages that give skill bonuses at discount rates – notably Talents (see p. 89).

If you have trouble justifying this, remember: templates are blueprints for adventurers – exceptional characters built with more points than the average person – so high attributes and rare advantages are going to be more common than in the general population.

**WRITING IT UP**

Use the following format for the final character template (illustrated here using our heroic knight):

**Heroic Knight**

95 points

You are a brave knight out of fantasy or fairy tales – strong, honorable, a wise leader, and a skilled warrior.

**Attributes:** ST 12 [20]; DX 12 [40]; IQ 11 [20]; HT 12 [20].

**Secondary Characteristics:** Dmg 1d-1/1d+2; BL 29 lbs.; HP 12 [0]; Will

**Discounts**

Avoid the temptation – often carried over from other RPGs – to offer a discount on template cost. A character built using a template should be indistinguishable from an equivalent character designed from the ground up.

**Adjusting for Player Experience**

When designing character templates, be sure that they take into account the character-creation habits of your experienced players. For instance, if all their warriors have Combat Reflexes and all their wizards have Magery 3, your templates should follow suit – even if the “typical” warrior or wizard in the setting lacks this level of talent. This puts the characters of inexperienced players who use your templates on an equal footing with those of more experienced players.
Lenses

You can treat common variations on templates as “lenses” through which to view the basic design. A lens is a package of advantages, disadvantages, and skills that adds to the base template, changing its emphasis. It might be specific to just one template or applicable to several (or all) templates in your campaign. Some lenses are mutually exclusive; others can “stack.”

A lens should not add traits that oppose or that are redundant with those on the base template(s). If this is inevitable, explain what to do when conflict occurs. A lens should also be compatible with all other lenses the player can select at the same time (but don’t worry about mutually exclusive lenses).

The player adds the cost of any lenses selected to the cost of the base template and writes down both sets of abilities.

Example: It is possible to represent the “heroic knight” in our example as a “warrior” template modified by “heroic” and “knight” lenses:

Warrior

101 points

You are a fantasy warrior - a barbarian, knight, swashbuckler, or someone else who lives by the sword.

Attributes: ST 12 [20]; DX 12 [40]; IQ 10 [0]; HT 12 [20].

Secondary Characteristics: Dmg 1d-1/1d+2; BL 29 lbs.; HP 12 [0]; Will 10 [0]; Per 10 [0]; FP 12 [0]; Basic Speed 6.00 [0]; Basic Move 6 [0].

Skills: Armoury (Melee Weapons) (A) IQ-1 [1]-10; Shield (E) DX+2 [4]-14; and two weapon skills, each (A) DX+2 [8]-14.

Lenses

Heroic (-9 points): You are wise, honorable, and a leader of men. Add +1 IQ [20], Honesty (6) [-20], Vow (Never refuse a request for aid) [-15], Leadership (A) IQ [2], and Tactics (H) IQ [4].

Knight (+3 points): You are an invested knight, with all the attendant privileges and duties. Add Comfortable [10], Status 2 [10], Code of Honor (Chivalry) [-15], Duty (Liege Lord, 9 or less) [-5], Heraldry (A) IQ-1 [1], and Riding (Horse) (A) DX [2].

Interactive Templates

Along with fixed character traits, you may wish to include a number of choices with identical point costs. These can be specific (e.g., High Pain Threshold or +1 ST; Chemistry-14 or Mathematics-14) or general (e.g., any DX/Average weapon skill at 15; any three IQ/Hard sciences at 14), as long as the point cost is the same. A good compromise is to set aside a pool of points that the player can spend on a specific list of options however he sees fit.

Once you are comfortable with template design, consider using this option for all your templates. It simplifies the player’s choices without eliminating them and is an effective stepping-stone to unassisted character design. It is especially useful for mental disadvantages, because it gives the player more latitude in defining his character’s personality.

Example: Not all knights use broadswords; many prefer the mace. On our heroic knight template, we could replace “Broadsword (A) DX+2 [8]-14” with “Axe/Mace or Broad- sword, both (A) DX+2 [8]-14” and let the player choose.

We could also offer a choice of mental disadvantages. Instead of requiring Code of Honor, Honesty, and Vow, we could say: “A total of -50 points chosen from Charitable [-15*], Code of Honor (Chivalry) [-15], Honesty [-10*], Selfless [-5*], Sense of Duty [-2 to -20], Truthfulness [-5*], and Vow [-5 to -15].” Note how disadvantages with variable values offer a range of point costs, and how disadvantages that require self-control rolls are marked (*) to indicate that they might be at ×.5, ×1, ×1.5, or ×2 value, depending on the self-control number.
Racial Templates

The baseline character in GURPS is human, but nonhumans are common in many game worlds. The collection of traits that differentiate a nonhuman species from humanity is called a “racial template.”

Unlike character templates, racial templates are not normally optional or customizable – every member of a species must purchase its racial template, exactly as written. Furthermore, racial templates are subject to a number of special rules that have ramifications in play, and may even include “hidden features” that can affect outcomes in the game.

Concept

Before building a racial template, you should develop a clear idea of what it is you are designing. A racial concept is not a character concept – you are creating an entire species, and must consider morphology, survival strategies (biological, technological, or magical), group behavior, and culture.

What Is a Race?

A “race” is normally a biological species – human, tiger, elf, Gray alien, etc. – but you need not limit yourself to this definition. A race might be a genetically engineered subspecies, a particular category of fantastic creature (for instance, “faerie” or “vampire”), or a specific make or model of construct (golem, robot, sentient computer program, etc.). What matters is that every member of the group possesses a common set of identifiable traits.

What Do They Look Like?

A race’s appearance suggests many of its racial traits. For instance, a species with four arms needs to purchase Extra Arms, because it has two more arms than a human, which is an advantage. Likewise, a species with one eye should have One Eye, as its lack of binocular vision puts it at a disadvantage next to a human.

Be sure to distinguish between purely cosmetic features and those that actually affect play. Outward appearance is often just a “special effect,” and special effects should not cost points – see Features and Taboo Traits (p. 452). Only genuine differences in function, relative to a human, call for definition in terms of attributes, advantages, and disadvantages. Assigning point values to racial characteristics unnecessarily is a sure-fire way to make a multiracial campaign confusing, if not unbalanced.

How Do They Think?

Decide how members of the race act, and lend some thought to the race’s dominant cultural background. These things determine the race’s mental traits, including racial skills. Here again, be careful to distinguish features that affect play from those that do not.

The most challenging problem is to determine how the race thinks. This is crucial if you expect people to roleplay...
members of the race! Humanity’s two primary motivations seem to be sex and material comfort. Other races might not share these drives. Of course, any biological creature must feel some instinct to preserve its young and itself, or the race will vanish. Races that lack this drive would have psychologies that humanity would find truly alien.

**SELECTING TRAITS**

A racial template consists of attribute modifiers, secondary characteristic modifiers, advantages, disadvantages, quirks, and skills that apply to every member of the race. A race may also have features that do not have a point cost but that do have in-game effects.

Most of the mental and physical traits in Chapters 1-3 are suitable as racial traits. More rarely, social traits are appropriate – for instance, an entire race might enjoy Social Regard or suffer from Social Stigma.

As the GM, you are free to assign exotic and supernatural traits to racial templates as needed – even if such traits are otherwise forbidden (in which case nonhumans are likely to be the only ones who have such traits). A few traits explicitly note that they are reserved for racial templates, and cannot occur otherwise.

In all cases, make sure that the traits you choose are in line with the racial concept and, more importantly, make sense.

**Racial Attribute Modifiers**

If the ST, DX, IQ, or HT of an average member of a race differs from the human norm of 10, that race has a “racial attribute modifier.” This costs ±10 points per ±1 to racial average ST or HT, or ±20 points per ±1 to racial average DX or IQ.

A member of a race with such modifiers pays for his personal scores as usual, and then applies his racial modifiers to find his final scores.

*Example:* A racial +10 to ST costs 100 points, while a racial -1 to IQ costs -20 points. A racial template with these modifiers notes “ST+10 [100]” and “IQ-1 [-20].”

**PC Races vs. NPC Races**

A “player character race” is one that the PCs can belong to at the time of character creation. A “nonplayer character race” is one reserved for NPCs under the GM’s control. There is no rule distinction between a PC race and an NPC race. As the GM, you are free to assign a race to either category – or even to move a race from one category to the other during the course of the campaign.

Try not to be too restrictive, however: *GURPS*, being a generic system, has rules for most situations. This makes it feasible to allow PCs to belong to races reserved for NPCs in other games (ghosts, monsters, robots, etc.) if the players and GM are up to the roleplaying challenge.

**Player-Created Races**

It is the GM’s job to design the racial templates for his campaign. The rules given here have fewer arbitrary limitations and balancing factors than do those for creating individual characters, because this is intended to be a GM’s system, and the GM is free to decide what is balanced in his campaign.

That said, the adventurous GM might allow an especially good player or group to design races for their characters. This can be a major time-saver for the GM in a campaign that calls for a plethora of nonhuman species!

A few tips for GMs who wish to allow player-created races:

- Watch out for abuse. The lack of balancing factors in these rules makes it possible to create a race that has a significant advantage in effectiveness over the human race. Do not allow such races – at least, not as PCs.
- Do not allow abilities (or combinations of abilities) that you do not want in the PCs’ hands, however balanced they may be. In particular, keep an eye on exotic and supernatural traits. If a trait is strictly off-limits to all PCs, then the race of the PC should be unimportant.
- Player-generated races work best in game worlds that already have many different races, because “yet another race” will rarely upset the campaign. Be sure to have a few ready-made PC races on hand for players who do not wish to create their own, however – and to serve as examples for those who do.
- Be leery of player-created NPC races. In most game worlds, NPC races are supposed to be somewhat mysterious. Mystery is hard to maintain when the creator is a member of the party!

**Racial Secondary Characteristic Modifiers**

These work much as do racial attribute modifiers. The main difference is the point cost: ±1 to HP costs ±2 points; ±1 to FP costs ±3 points; and ±0.25 to Basic Speed or ±1 to Will, Perception, or Basic Move costs ±5 points.

A member of this race buys a personal ST 9 [-10], IQ 14 [80]. He then applies his racial attribute modifiers: ST+10 gives ST 19, and IQ-1 gives IQ 13.

*Example:* A racial -0.75 to Basic Speed would cost -15 points. A racial template with this modifier would note “Basic Speed-0.75 [-15].”

A member of a race with such modifiers calculates his basic secondary characteristics from his attributes as usual, after applying all racial attribute modifiers. He may buy these characteristics up or down, as usual. After that, he applies racial secondary characteristic modifiers to find his final scores.

**Creating Templates**
CREATING TEMPLATES

Example: A member of a race with DX+2, HT+1, and Basic Speed-0.75 buys a personal DX 12 [40], HT 12 [20]. His racial attribute modifiers make this DX 14, HT 13. These attributes give Basic Speed 6.75. Next, he buys his Basic Speed up to 7.75, for 20 points. At the very end, he applies his racial Basic Speed-0.75 to get a final Basic Speed 7.00.

Racial Advantages and Disadvantages

A nonhuman race could conceivably possess almost any advantage or disadvantage that an individual could . . . within reason. When in doubt, the GM should exercise common sense.

Traits related to build – Skinny, Overweight, Fat, Very Fat, Dwarfism, and Gigantism (see Build, p. 18) – are relative to the racial norm. They’re valid for individuals, not races. To create an entire race that is smaller or larger than humanity, assign an appropriate Size Modifier (see Size Modifier, p. 19). This has no point cost – the advantage of longer reach cancels out the disadvantage of being a large target, while the disadvantages of being short balance the advantage of being hard to hit. Individual members of such races can have any build; e.g., an ogre with racial SM +1 could take Dwarfism and have a personal SM of 0.

Note that racial disadvantages do not count against the campaign disadvantage limit (see Disadvantage Limit, p. 11). This limit applies only to personal disadvantages. For instance, a player in a campaign with a -75-point disadvantage limit may take up to -75 points in disadvantages, regardless of which race he selects for his PC.

Racial Quirks

It can be useful to assign a few quirks on a racial basis to define a race’s minor disadvantages or personality traits. Use these sparingly, however – players are obligated to roleplay their quirks, and too many racial quirks can result in a complicated, unplayable character.

Racial quirks do not count against the normal limit of five quirks.

Features and Taboo Traits

Many traits distinguish a race without actually increasing or reducing its capabilities. Such traits cost 0 points, and fall into two categories:

Features: A “feature” is just a note on how the race differs cosmetically or physiologically from humanity when that difference does not grant an advantage or a disadvantage. For instance, a human subspecies genetically modified to lack an appendix has a feature; so does a fantasy race that bears a magical mark from birth. Faster and slower maturation are features as well. A race’s native environmental conditions are also features, if they differ from the human norm (humans are adapted to 1G of gravity, have a temperature “comfort zone” of 35° to 90°, and breathe 78% nitrogen/21% oxygen at 1 atm of pressure). A race that can tolerate a broader spectrum of conditions than humanity has an advantage, however!

Taboo Traits: A specific advantage, disadvantage, or skill might be off-limits (“taboo”) for the race – that is, no member of the race can possess that trait. Given the number of possible choices, and the small odds that a given character would actually take a particular trait, this is not considered a disadvantage. Often, “taboo traits” result from racial disadvantages; for instance, No Legs (Sessile) logically forbids movement-related traits. To keep a race fun to play, do not assign excessive numbers of taboo traits, and give a plausible cultural, psychological, or physiological reason for each one.

Racial Skill Bonuses and Penalties

A race with a particular gift for a skill or a set of skills has an advantage, while a race that is unusually inept has a disadvantage.

Racial talent for one skill costs 2 points for +1 to skill, 4 points for +2, or 6 points for +3 (the maximum bonus allowed). Write this as, for instance, “+1 to Forgery [2]” or “+3 to Fast-Talk [6].” This trait does not actually grant the skill – it gives a bonus whenever a member of the race rolls against that skill or its default.

Treat a racial knack for a group of related skills as a Talent (see p. 89). Each +1 to those skills costs 5 points for six or fewer skills, 10 points for seven to 12 skills, or 15 points for 13 or more skills. The maximum bonus is +4. If this is not a standard Talent, note which skills get the bonus. (Keep an open mind – some unusual things might be “closely related” for a race that thinks nothing like humanity!)

Racial ineptitude at one skill is a flat -1 point for -4 to skill. This is just a racial Incompetence quirk (see p. 164), and is subject to all the usual rules for Incompetence. To keep

Any biological creature must feel some instinct to preserve its young and itself, or the race would vanish. Races that lack this drive would have psychologies that humanity would find truly alien.

Effects of Experience: When an individual improves a racially modified skill, disregard the racial modifiers and calculate the new level based solely on the points he spent. Apply the racial skill bonus to his final skill level. For example, a member of a race with +1 to Fast-Talk would pay only 1 point to have Fast-Talk at IQ. If he wanted to improve Fast-Talk to IQ+1 later on, he would pay 1 more point.
Racially Learned Skills

A “racially learned skill” is an automatic level of proficiency acquired by every member of the race. It is usually innate or instinctive. For instance, a flying race might possess racial Flight skill, while a race with padded feet might have Stealth skill on a racial basis.

Price racially learned skills just as if an individual character were learning them; see the Skill Cost Table (p. 170). Write them in the format used on character templates (see Listing Skills, p. 448), calculating the final skill level based on the racial average attribute score. For instance, a race with DX+4, HT-1 would have racial average DX 14, HT 9, and would write “Flight (A) HT [2]-9” and “Stealth (A) DX+1 [4]-15.” The actual skill levels that an individual member of the race enjoys vary according to his personal attribute scores.

Effects of Experience: Members of a race may improve racially learned skills just as they would any other skill. For instance, if a race has Flight at HT, it would cost an individual member of that race 2 points to increase his skill to HT+1.

Racial Magic

Many races of fantasy and horror are magical. Below are two possible ways to handle magical powers.

Advantages: Any advantage might stem from the race’s magical nature as a “special effect” (see Advantage Origins, p. 33). Such advantages require mana to work. If regions without mana are common in the campaign world, apply the limitation “Mana Sensitive,” worth -10%, to the cost of such abilities.

Racially Innate Spells: Every member of the race might have the inborn ability to cast one or more spells; see Chapter 5. Ignore the usual prerequisites and buy the spells using the rules for racially learned skills (above). Add racial Magery, if any, to the race’s skill level. Magery is not required for racially innate spells – but without Magery, the race’s magic only works in areas of high or very high mana (see Mana, p. 235). A race that can only cast racially innate spells pays the usual 5 points for Magery 0, but may buy Magery 1+ with a -40% Accessibility limitation: “Racially innate spells only.”
Setting the Price

The point cost of a racial template – called the “racial cost” – is the sum of the point values of its constituent traits. Anyone who wishes to play a member of the race must pay its racial cost. If racial cost is 0 points or more, treat the template as an advantage; if racial cost is negative, treat it as a disadvantage. (It costs 0 points to play a human, but there is no need to note this, as characters are assumed to be human unless they buy a racial template.)

A template with a negative racial cost does not count against the campaign disadvantage limit, if any (see Disadvantage Limit, p. 11). Individual mental, physical, and social problems are as likely for members of low-powered races as they are for humans and members of high-powered races!

Players must normally purchase all elements of a racial template as a unit, and may only “opt out” of a given trait with the GM’s permission. Opting out of an advantageous trait saves points, while opting out of a disadvantageous one costs points. In both cases, pay racial cost normally and note the changes separately – for instance, “No Infravision [-10]” or “No Bad Sight [25].” See Omitting Racial Traits (p. 262) for additional details.

Sub-Races

A “sub-race” is a sizeable portion of a race that differs significantly from the racial norm. Examples include extreme sexual dimorphism, true biological subspecies, half-breeds, and radical mutations (or even upgrades, in the case of robots).

Sub-races should share most of the parent racial template, but with a few important differences (and a matching adjustment to racial cost). Write up sub-races exactly as you would “lenses” for a character template – see Lenses (p. 449).

Filling in the Blanks

After finalizing any racial template, try to answer the following questions. The answers will help you present the race to the players and help them role-play members of that race!

- What do they look like? How big? How tall? What shape? What color? Do they have hair? What color? Do they have eyes? Do they have distinctive markings? Do they have hands or claws? What direction do their joints bend?
- Were they created or did they evolve? Where? What environmental pressures combined to give them their advantages and disadvantages?
- How do they live? How do they govern themselves? Are they gregarious or solitary in nature? If they are gregarious, do they favor large cities, small villages, or family groups?
- How do they think? Do they have a racial philosophy? Do they have a religion? Do they have many religions? How do they react in an emergency? Do they like new things, or are they complacent? Can they be trusted?
- How do they get along with others? Do they fight among themselves? How do they react to new races? Suspiciously? Enthusiastically? Do they trade with other races? Are there other races they particularly like or dislike?

Character Cost vs. Racial Strength

Many GMs will want to create at least a few races with powers far beyond those of normal humans. In game terms, this means a high racial cost. This may create an apparent contradiction in the campaign: “If these guys are so great, why don’t they control the whole world?”

The most obvious answer is “They do!” There’s no reason why humanity has not to be the dominant race of the campaign. Mankind could be an insignificant minor race or an audacious upstart to the ancient civilizations of the nonhumans!

However, the GM needn’t forsake superhuman races in an anthropocentric campaign. The factors that allow individuals to excel are quite different from those that allow one race to dominate another. An anthropocentric story or campaign usually assumes that humanity has several advantages, relative to other races, that would never show up on a character sheet.

Humans are prolific. A woman can easily bear six to 12 children in her lifetime; a man can father children with a huge number of women. Other races might be strictly monogamous, tied to a complex fertility cycle, or generally infertile, allowing humanity to dominate them through sheer numbers. This is borne out in nature, where extremely capable species – such as the dominant carnivores – inevitably have smaller populations than “lesser” species.

Humans are aggressive. They tend to want money, property, and power for its own sake. A pragmatic race might let the humans move in and assume the burden of running things! They might insist on a few basic rights, but not necessarily political power. Of course, an extremely powerful or supernatural race might pursue goals that humans cannot comprehend, leaving humanity to do as it pleases.

Humans are organized. A super-race might never need to band together for protection from nature as humanity’s ancestors did. Such a race might be unable to withstand an organized human military campaign or political program. Indeed, such a race might find real economic and cultural benefit in accepting organization by humanity.

This discussion applies equally to extremely low-powered races vis-à-vis humanity. The members of a hive mind or primitive horde might be no match for us individually, but be more prolific, aggressive, and organized than we are as a race!
An “animal” is any nonsapient natural creature; for instance, a rhinoceros or a tiger. A “monster” is any fantastic or unnatural creature – either sapient, like a dragon, or nonsapient, like a flesh-eating slime – that lacks a civilization. Both are considered characters, with racial templates (see Chapter 15) that show how they differ from human beings.

Since animals are normally nonsapient and have few or no skills, and since monsters are most often intended as adversaries for the PCs, the GM need not create them as fully fleshed-out characters. If the GM controls a creature, he can simply refer to its unmodified racial template – or just list a few combat statistics, if the thing is intended as an opponent.

However, animals and monsters intended as PCs always require full statistics. The GM might wish to create some animal and monster NPCs as fully realized characters, too. This is the difference between “a wolf” and “the canny old wolf that terrorized the village”!

COMMON ANIMALS

Below are descriptions of a few commonly encountered beasts. Use these as guidelines when assigning statistics to animals not listed here.

Apes

Apes are intelligent – too intelligent to be really predictable. Animal Handling rolls are at -1 with such creatures. Apes attack in close combat by grappling and biting, rather than by punching or kicking.
Chimpanzee
A peaceful plant-eater. A chimp won't fight unless it or its young are threatened.

ST 11; DX 12; IQ 6; HT 12.
Will 10; Per 10; Speed 6; Dodge 9;
Move 7.
SM 0; 140 lbs.

Traits: Arm ST +3; Bad Grip 2;
Brachiator; DR 1; Sharp Teeth;
Wild Animal.

Skills: Climbing-14.

Gorilla
A great ape.

ST 15; DX 12; IQ 6; HT 12.
Will 10; Per 10; Speed 6; Dodge 9;
Move 7.
SM +1; 400 lbs.

Traits: As chimpanzee.

Skills: Climbing-14.

Bears
When making reaction rolls for bears, remember that grizzly, polar, and cave bears are mostly carnivorous and ill-tempered. Any mother bear with cubs will be aggressive: -3 to reactions!

A bear walking or running on four legs is a two-hex creature. When it stands on its hind legs to fight, it is a one-hex creature.

Black Bear
A small, omnivorous bear.

ST 14; DX 11; IQ 4; HT 13.
Will 12; Per 10; Speed 6; Dodge 9;
Move 7.
SM 0; 300 lbs.

Traits: Blunt Claws; DR 2; No Fine Manipulators; Semi-Upright; Sharp Teeth; Temperature Tolerance 2; Wild Animal.


Grizzly Bear
ST 19; DX 11; IQ 4; HT 13.
Will 11; Per 10; Speed 6; Dodge 9;
Move 8.
SM +1; 800 lbs.

Traits and Skills: As black bear, plus Bad Temper (9).

Polar Bear
ST 20; DX 11; IQ 4; HT 13.
Will 11; Per 10; Speed 6; Dodge 9;
Move 7 (Water Move 3).
SM +1; 1,000 lbs.

Traits and Skills: As grizzly bear; plus Swimming-13.

Cave Bear
A prehistoric creature.

ST 23; DX 11; IQ 4; HT 13.
Will 11; Per 10; Speed 6; Dodge 9;
Move 7.
SM +1; 1,400 lbs.

Traits and Skills: As grizzly bear.

Cats
Cats are only domesticated in the sense that they tend to hang around human settlements. It is a very rare trainer who can teach a cat a trick it doesn't feel like learning . . .

House Cat
A domestic feline, kept as a pet, familiar, or mouser.

ST 4; DX 14; IQ 4; HT 10.
Will 11; Per 12; Speed 6; Dodge 10;
Move 10.
SM -3; 10 lbs.

Traits: Catfall; Combat Reflexes;
Domestic Animal; Night Vision 5;
Quadruped; Sharp Claws; Sharp Teeth.

Skills: Brawling-16; Jumping-14;
Stealth-14.

Lion
A big, lazy cat, found in both plains and jungle. Lions hunt in small groups.

ST 16; DX 13; IQ 4; HT 11.
Will 11; Per 12; Speed 6; Dodge 9;
Move 10.
SM +1 (2 hexes); 500 lbs.

Traits: DR 1; Laziness; Night Vision 5;
Quadruped; Sharp Claws; Sharp Teeth; Temperature Tolerance 1; Wild Animal.


Tiger
A solitary hunting cat, usually a jungle dweller.

ST 17; DX 13; IQ 4; HT 11.
Will 11; Per 12; Speed 6; Dodge 10;
Move 10.
SM +1 (2 hexes); 500 lbs.

Traits: Combat Reflexes; DR 1; Night Vision 5; Quadruped; Sharp Claws; Sharp Teeth; Temperature Tolerance 1; Wild Animal.

Skills: Brawling-15; Stealth-13;
Deer

Deer are swift herbivores, frequently hunted for food.

Red Deer

A large deer, common in medieval Europe and still widespread today.

ST 12; DX 13; IQ 3; HT 12.
Will 10; Per 10; Speed 6.25; Dodge 9; Move 9.
SM +1 (2 hexes); 200 lbs.

Traits: Hooves; Impaling Striker (Antlers); Quadruped; Weak Bite; Wild Animal.


Dogs

Domesticated dogs are used for hunting or as pets (or, if large enough, as draft animals). There are many breeds; statistics can vary greatly. Cost ranges from negligible to $10,000+. A healthy, trained dog – even a mongrel – is always worth at least $200.

Large Guard Dog

ST 9; DX 11; IQ 4; HT 12.
Will 10; Per 12; Speed 5.75; Dodge 8; Move 10.
SM 0; 90 lbs.

Traits: Chummy; Discriminatory Smell; Domestic Animal; Quadruped; Sharp Teeth.

Skills: Brawling-13; Tracking-13 (bloodhounds have Tracking-15 or better!).

Falcons

These birds of prey are commonly used for sport hunting. A trained falcon – or one disturbed by a stranger – might attack a human. A diving falcon can reach Move 70!

Large Falcon

ST 3; DX 14; IQ 3; HT 10.
Will 10; Per 12; Speed 6; Dodge 9; Move 2 (Ground).
SM -4; 5 lbs.

Traits: Acute Vision 3; Domestic (or Wild) Animal; Enhanced Move 1 (Air Speed 24); Flight (Winged; Air Move 12); No Fine Manipulators; Sharp Beak; Sharp Claws.

Skills: Brawling-16.

Sharks

Some sharks are almost docile, feeding primarily on whatever fish happen to swim by at the wrong moment. Those sharks aren't any fun at all.

Tiger Shark

A large, aggressive shark.

ST 19; DX 13; IQ 2; HT 12.
Will 10; Per 12; Speed 6.25; Dodge 10; Move 7 (Water).
SM +2 (4 hexes); 900 lbs.

Traits: Bad Temper (9); Combat Reflexes; Crushing Striker (Snout); Discriminatory Smell; Doesn't Breathe (Gills); Enhanced Move 1 (Water Speed 14; Costs Fatigue 2);
PETS AND TRAINED ANIMALS

Ordinary trained animals are properly purchased with cash, not advantages bought with points. The GM controls their actions — but the better a beast's training, the more likely it is to do what its owner wishes.

These rules do not apply to unique animal companions, such as familiars. For a creature like that, determine its point total as a character, and then see Allies (p. 36) to find its point cost as an advantage.

**ANIMAL TRAINING**

To train an animal, you must know the appropriate specialty of Animal Handling skill (p. 175). The level of training an animal can absorb depends strictly on its IQ:

- **IQ 2** — *Average reptile*. It can learn to come when called for food and recognize its master; and not to attack him (usually!).
- **IQ 3** — *Average horse or hawk*. It can learn commands appropriate to its work — hunting commands for a hawk, riding or pulling commands for a riding or draft animal, etc. — and general tolerance for all humans or for specific masters (trainer's choice). It knows its name and comes when called (if it feels like it).
- **IQ 4** — *Average dog*. As above, plus “fetch,” “attack,” “find,” “sit,” etc., as appropriate for the species. It tries to warn its owner of dangers it perceives, and fights — and even dies — for its master.
- **IQ 5** — *Average monkey*. As above, but with more complexity. The GM may allow anything he ever saw a trained animal do in the movies . . .

Find training time by comparing the IQ level of the training to the animal’s actual IQ score on the table on p. 459. These times assume the trainer works with the creature for about four hours a day, in a pair of two-hour sessions.

This table gives the time needed to train the animal to the general level given above. To teach a specific new trick — if the GM agrees the animal can learn it — allow 14 days for an IQ 5 creature, 30 days for one of IQ 4, or 90 days for an IQ 3 animal.


### Value of Trained Animals

Training may affect the value of a domestic animal, as follows:

- **IQ 2 creatures** can learn so little that training doesn’t enhance their value.
- **IQ 3 creatures** are of little use unless trained. **Decrease** the value of an IQ 3 domestic animal by 1/3 if it is “unbroken” (that is, untrained). Any young specimen is automatically unbroken and therefore cheaper.
- **IQ 4 creatures** are assumed to be trained to IQ 3 level when bought; if not, decrease price by 1/3, as above. When an IQ 4 creature is fully trained to IQ 4 level, increase its base value by 50%.
- **IQ 5 creatures** follow the IQ 4 rule. In addition, when an IQ 5 creature is fully trained to IQ 5 level, double its base value.

If a domestic animal (anything with the Domestic Animal meta-trait) has higher IQ than normal for its species, it is worth much more when fully trained: multiply by 4 for +1 IQ or by 10 for +2 IQ. For example, an IQ 5 horse is worth 10 times base value.

If a wild animal (anything with the Wild Animal meta-trait) is captured and trained, its value goes up markedly – especially if the creature is intelligent or ferocious. Details are up to the GM. All Animal Handling rolls to train wild beasts are at -5.

### RIDING AND DRAFT ANIMALS

Below are descriptions of several domestic animals kept for riding and draft purposes. If you are using miniatures, a horse is considered a three-hex figure, with the rider in the middle hex. Donkeys and small mules are two-hex figures. For mounted combat rules, see p. 396.

**Cost:** The costs listed assume a beast trained to IQ 3 level (see above). Several factors can increase this price:

- Increases in **ST** raise cost by a percentage equal to the ST increase. (Very strong specimens might be worth more than this formula would indicate!)
- Increases in **IQ** raise cost as described under Value of Trained Animals.
- Increases in **Move** drastically raise a riding animal’s value! Double cost for +1 Basic Move, and quadruple it for +2 Basic Move. Remember to multiply Basic Move for Enhanced Move, if any.

Other changes are up to the GM.

### Camels

A dry-plains native, the camel can go for four days without drinking. Its stubborn temper gives -4 to Animal Handling rolls.

- **ST 22; DX 9; IQ 3; HT 12.**
- **Will 11; Per 12; Speed 5.25; Dodge 8; Move 7.**
- SM +1 (3 hexes); 1,400 lbs.

**Traits:** Bad Temper (12); Domestic Animal; Enhanced Move 1 (Ground Speed 14); Hooves; Peripheral Vision; Quadruped; Reduced Consumption 3 (Water Only); Stubbornness; Weak Bite.

**Skills:** Survival (Desert)-12.

**Cost:** $1,500.

### Donkeys, Horses, and Mules

These animals were domesticated in Europe and Asia before recorded history. They were introduced to the Americas in the late 15th and 16th centuries.

#### Cavalry Horse

A light warhorse.

- **ST 22; DX 9; IQ 3; HT 12.**
- **Will 11; Per 12; Speed 5; Dodge 9; Move 8.**
- SM +1 (3 hexes); 1,400 lbs.

**Traits:** Combat Reflexes; Domestic Animal; Enhanced Move 1 (Ground Speed 16); Hooves; Peripheral Vision; Quadruped; Weak Bite.

**Skills:** Brawling-10; Mount-12.

**Cost:** $4,000.

### Donkey

Sturdy, but too small for an adult to ride.

- **ST 15; DX 10; IQ 3; HT 11.**
- **Will 11; Per 12; Speed 5.25; Dodge 8; Move 5.**
- SM +1 (2 hexes); 500 lbs.

**Traits:** Domestic Animal; Enhanced Move 1/2 (Ground Speed 8); Hooves; Quadruped; Weak Bite.

**Cost:** $1,000.

### Draft Horse

- **ST 25; DX 9; IQ 3; HT 12.**
- **Will 10; Per 11; Speed 5.25; Dodge 8; Move 6.**
- SM +1 (3 hexes); 2,000 lbs.

---

### War-Trained Mounts

War-trained riding animals are worth more than other mounts. Before TL4, they are taught to enter battle and fight savagely, even if their rider is unhorsed. A trained warhorse is likely to attack anyone other than its owner who approaches it! At TL4+, they are not taught to fight, but to be reliable transportation, not afraid of gunfire or screams.

At any TL, it takes a year of war training (after “basic” training to IQ 3 level) to get the mount fit to ride into battle. This doubles its value. The statistics and cost given for the cavalry horse and heavy warhorse under Riding and Draft Animals assume a beast with this training.

Up to three more years of training are possible, giving +1 per year on all Riding and Animal Handling rolls in combat, and increasing base value by 50% per year.
**Fantasy Monsters**

**Damage for Animals**

Basic damage for a beast is thrust for its ST, found by consulting the Damage Table (p. 16). Modify this as follows:

A **bite** does thrust-1. Weak Bite, common for large herbivores, gives an extra -2 per die. A bite is crushing unless the creature has Sharp Teeth (cutting) or Fangs (impaling).

A **claw** does thrust-1, like a punch. Blunt Claws give +1 per die, and damage is crushing. Sharp Claws give no bonus, but inflict cutting damage.

A **kick** does thrust. Blunt Claws or Hooves give +1 per die, and inflict crushing damage; Sharp Claws give no bonus, but cause cutting damage. The Quadruped meta-trait includes Horizontal (p. 139), which gives -1 per die to kicking damage to creatures without Claws. For large herbivores, this cancels out the +1 per die for Hooves.

Most other attacks (horns, tusks, etc.) are Strikers (p. 88). These inflict thrust damage, at +1 per die. Damage type depends on the Striker.

Predators and combat-trained animals often have Brawling at DX+2 level or better. This adds +1 per die to basic thrust damage for any of these attacks!

---

**Damage Table**

<table>
<thead>
<tr>
<th>ST</th>
<th>DX</th>
<th>IQ</th>
<th>HT</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>12</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>18</td>
<td>10</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>16</td>
<td>8</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>12</td>
<td>11</td>
</tr>
</tbody>
</table>

**Elephants**

- Often domesticated. Intelligent, loyal, and hardworking.
- **ST 45; DX 12; IQ 5; HT 12.**
- Will 10; Per 10; Speed 4; Dodge 7; Move 4.
- SM +3 (10 hexes); 12,000+ lbs.
- **Traits:** Crushing Striker (Tusks); Domestic (or Wild) Animal; DR 4; Enhanced Move 1 (Ground Speed 8); Peripheral Vision; Quadruped (but replace No Fine Manipulators with One Arm); Trunk (Extra-Flexible; Long, +1 SM; Weak, 1/4 ST); Weak Bite.
- **Cost:** $10,000.

**Oxen**

- Oxen are steers trained to work in the fields. They are hardier and easier to keep than horses.
- **ST 27; DX 8; IQ 3; HT 12.**
- Will 12; Per 10; Speed 5; Dodge 8; Move 4.
- SM +2 (3 hexes); 2,500 lbs.
- **Traits:** Domestic Animal; DR 2 (Skull only); Enhanced Move 1 (Ground Speed 8); Impaling Striker (Horns); Neutered; Quadruped; Weak Bite.
- **Cost:** $1,500.

---

Here are three sample monsters from fantasy. If the GM changed the names and filed off the serial numbers, they could work equally well in a science-fiction background!

**Basilisk**

- This creature resembles a small snake with a hideous face and a crested head. It attacks with a “death gaze”: if it meets its victim’s eyes, it can kill using the power of its mind.
- **ST 2; DX 12; IQ 3; HT 12.**
- Will 10; Per 10; Speed 6; Dodge 9; Move 4.
- SM -3; 2 lbs.
- **Traits:** DR 1; Toxic Attack 3d (Malediction 1; Psychokinetic; Vision-Based); Vermiform; Wild Animal.

**Gryphon**

- The gryphon is a beautiful creature, with the head, wings, and forefeet of an eagle, and the hindquarters of a lion. It is immune to abilities that affect...
Animals in Combat

To play animals realistically, remember that:

- Most animals fear man and flee rather than attack. Exceptions include a mother defending her young; an insect swarm defending its nest; an old or wounded “man-eater” predator; a creature so stupid it doesn’t realize men are dangerous; a creature so powerful men aren’t dangerous; or a large herbivore (bison, rhino, Triceratops), which might charge anything out of sheer orneriness.
- In a balanced ecology, predators are comparatively rare, prey species common.

Use the combat rules in Chapters 11-13 for animals, just as you would for humans, with special attention to Multi-Hex Figures (p. 392) and Trampling (p. 404). A few other notes:

Reach: A beast’s reach is “C” (“close combat only”) unless its description notes otherwise. Most animals initiate combat with a grapple or a slam, followed by an attempt to crush the foe or tear him to pieces in close combat.

Defense: Animals usually defend by dodging. Dodge is Basic Speed + 3, dropping all fractions. Most animals have No Fine Manipulators (included in Ichthyoid, Quadruped, and Vermiform) and, therefore, cannot parry. Those with manipulators (e.g., apes) can parry. Unarmed Parry is (DX/2) + 3 or (Brawling/2) + 3. No natural animal can block. Many animals have Combat Reflexes, which adds +1 to defenses.

Traits: Acute Vision 3; Combat Reflexes; DR 2; Enhanced Move 1 (Air Speed 24); Flight (Winged; Air Move 12); Quadruped; Sharp Beak; Sharp Claws; Wild Animal.

Skills: Brawling-14.

Strix

A strix (plural striges) is a blood-sucking, birdlike creature about the size of a crow, with a long beak and large eyes. Striges are nocturnal. A strix attacks with its long, barbed beak. If the attack penetrates armor, the strix sucks its victim’s blood.

Use the combat rules in Chapters 11-13 for animals, just as you would for humans, with special attention to Multi-Hex Figures (p. 392) and Trampling (p. 404). A few other notes:

Reach: A beast’s reach is “C” (“close combat only”) unless its description notes otherwise. Most animals initiate combat with a grapple or a slam, followed by an attempt to crush the foe or tear him to pieces in close combat.

Defense: Animals usually defend by dodging. Dodge is Basic Speed + 3, dropping all fractions. Most animals have No Fine Manipulators (included in Ichthyoid, Quadruped, and Vermiform) and, therefore, cannot parry. Those with manipulators (e.g., apes) can parry. Unarmed Parry is (DX/2) + 3 or (Brawling/2) + 3. No natural animal can block. Many animals have Combat Reflexes, which adds +1 to defenses.

Traits: Acute Vision 3; Combat Reflexes; DR 2; Enhanced Move 1 (Air Speed 24); Flight (Winged; Air Move 12); Quadruped; Sharp Beak; Sharp Claws; Wild Animal.

Skills: Brawling-14.

Strix

A strix (plural striges) is a blood-sucking, birdlike creature about the size of a crow, with a long beak and large eyes. Striges are nocturnal. A strix attacks with its long, barbed beak. If the attack penetrates armor, the strix sucks its victim’s blood.

Striges have excellent aim, and can even attack through the eyeslits of a helm. Only two striges can strike thus in a second, but a successful hit can also blind the eye!

ST 5; DX 15; IQ 4; HT 11.
Will 10; Per 10; Speed 6.5; Dodge 9;
Move 2 (Ground).
SM -1; 18 lbs.

Traits: Bloodlust (9); Flight (Winged; Air Move 12); Night Vision 5; No Fine Manipulators; Vampiric Bite; Wild Animal.

Skills: Brawling-17.

Swarm Attack Examples

Bats. A “swarm” is about a dozen carnivorous bats. Flies at Move 8. Does 1d cutting damage per turn. Armor protects with its normal DR. Dispersed after losing 8 HP.

Bees. A “swarm” is about 1,000 common bees. Flies at Move 6. Stings for 1 HP of injury per turn unless the victim is completely protected. Dispersed after losing 12 HP. Will give up the attack if foe is chased 50 yards from hive. Note that bothering a hive may get several such swarms after you!

Rats. A “swarm” is about a dozen rats. It has Move 4. Does 1d cutting damage per turn. Armor protects with its normal DR. Dispersed after losing 6 HP.

Armored: A creature’s hide, shell, fur, etc. may give DR, as indicated in its Traits entry.

Swarm Attacks

Treat a group of small creatures as a unit when it attacks. This “swarm” fills one hex on a combat map. A swarm attacks the victim(s) in its own hex (if you are not using a combat map, it attacks one person per second), and will not change victims without a good reason.

A swarm attack hits automatically – there is no attack or defense roll. Every turn until it is dispersed, it does the listed damage to its victim(s).

Special clothing (a wetsuit or beekeeper’s suit, or high-tech airtight armor) may protect against some types of swarm. Against tiny creatures like insects, ordinary clothing gives complete immunity for two seconds, while low-tech armor protects for five seconds; then the bugs get in and the protection becomes worthless! Against larger creatures like rats, armor protects indefinitely with its normal DR.

Special tactics may work on some types of swarms. For instance, one can destroy bees with insecticide or baffle them by leaping into a pond. This is up to the players’ cleverness and the GM’s common sense.

Attacking a Swarm: Any attack against a swarm hits automatically. The swarm gets no defense roll. (A swarm of hard-to-hit creatures just requires more damage to disperse.) A swarm takes damage as if it were Diffuse – see Injury to Unliving, Homogenous, and Diffuse Targets (p. 380). Shields can crush flying creatures; a shield does 2 HP per turn, and can attack at the same time as a weapon. Stomping does 1 HP per turn to nonflying vermin, and can be done while attacking with a weapon.
Nearly every game world features gadgetry of some kind, ranging from primitive to futuristic . . . and often including things which are magical or just weird. These rules describe how to create and use all kinds of devices, what happens when they are damaged, and how to fix them.

VEHICLES

A vehicle might be little more than a means of getting somewhere. But it could be a source of extra firepower . . . or even part of a character concept! A fighter plane or mecha might be the high-tech equivalent of a knight’s trusty steed, and a party on the move might call a pirate ship or star cruiser “home” for adventure after adventure.

VEHICLE STATISTICS

The tables in this section give statistics for common vehicle types, and note the skills required to operate them. Some vehicle systems, such as sensors or weapons, may require additional skills not listed here.

ST/HP: The vehicle’s ST and HP. These are equal for a powered vehicle: the vehicle’s mass determines both how powerful its engine must be (ST) and how hard it is to destroy (HP). For an unpowered vehicle, this score is marked with a †, and represents HP only; ST is 0. Unpowered vehicles have Injury Tolerance (Homogenous); others have the Machine meta-trait (p. 263), which includes Injury Tolerance (Unliving).

Hnd/SR: The first number is Handling; the second is Stability Rating. See Control Rolls (p. 466) for details.
**TECHNOLOGY AND ARTIFACTS**

*Drive capabilities.* Use the entry to give faster-than-light Spacecraft either omit this statistic or limit range. FP of the rowers or draft animals, and water limit range. “F” means the speed of light (186,000 miles/second). 

**Move:** The first number is Acceleration and the second is Top Speed, in yards/second (double this to get mph). These statistics are equivalent to a character’s Move and his top speed with Enhanced Move. For ground vehicles, a “” indicates a roadbound vehicle, while a “” indicates one that must follow rails. For spacecraft, divide Acceleration by 10 to find it in Earth gravities (G), and note that c means the speed of light (186,000 miles/second).

**LWt.:** Loaded Weight, in tons (1 ton = 2,000 lbs.), with maximum payload and a full load of fuel. Actual weight is often lower.

**Load:** The weight, in tons, of occupants and cargo the vehicle can carry, including the operator. To find cargo capacity, subtract the weight of occupants (for simplicity, assume 0.1 ton/person, including gear). To find “curb weight” (with fuel but no other payload), subtract Load from LWt.

**SM:** The vehicle’s Size Modifier. 

**Occ.:** The number of occupants the vehicle can carry in reasonable comfort, given as “crew-passengers”; e.g., 2+6 means two crew and six passengers. “A” indicates a vehicle built for long-term accommodation, with room to sleep, cook, etc. If the vehicle affords the occupants special protection, there is an additional code: “S” for Sealed (p. 82), “P” for Pressure Support (p. 77), or “V” for Vacuum Support (p. 96).

**DR:** The vehicle’s DR. Some vehicles have different DR on various faces or locations. The table lists the two most important DR scores – for ground vehicles, this is usually the front DR and the average of side and rear DR.

**Range:** The travel distance, in miles, before the vehicle runs out of fuel. For unpowered or exotic vehicles, “” means only provisions (food and water) limit range. “F” means the FP of the rowers or draft animals, and stored provisions, limit range. Spacecraft either omit this statistic or use the entry to give faster-than-light drive capabilities.

**Cost:** The vehicle’s cost, in $. “K” means thousands; “M” means millions.

**Locations:** The vehicle’s hit locations, besides its body. If a vehicle has multiple instances of a location, a quantity precedes the abbreviation; e.g., “3M” for a three-masted ship, or “14D” for 14 draft animals. A vehicle’s hit locations determine both how it moves (see Basic Vehicle Movement, below) and what parts can be hit in combat (see Vehicle Hit Location Table, p. 554).

---

**Are you telling me that you built a time machine... out of a DeLorean?”**

“The way I see it, if you’re going to build a time machine into a car, why not do it with some style?”

— Marty McFly and Doc Brown, *Back to the Future*

---

<table>
<thead>
<tr>
<th>Code</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>arm</td>
</tr>
<tr>
<td>C</td>
<td>caterpillar tracks</td>
</tr>
<tr>
<td>D</td>
<td>draft animals</td>
</tr>
<tr>
<td>E</td>
<td>exposed rider</td>
</tr>
<tr>
<td>G</td>
<td>large glass windows</td>
</tr>
<tr>
<td>g</td>
<td>small glass windows</td>
</tr>
<tr>
<td>H</td>
<td>helicopter rotors</td>
</tr>
<tr>
<td>L</td>
<td>leg</td>
</tr>
<tr>
<td>M</td>
<td>mast and rigging</td>
</tr>
<tr>
<td>O</td>
<td>open cabin</td>
</tr>
<tr>
<td>R</td>
<td>retractable</td>
</tr>
<tr>
<td>S</td>
<td>large superstructureor gondola</td>
</tr>
<tr>
<td>s</td>
<td>small superstructure</td>
</tr>
<tr>
<td>T</td>
<td>main turret</td>
</tr>
<tr>
<td>i</td>
<td>independent turret</td>
</tr>
<tr>
<td>W</td>
<td>wheel</td>
</tr>
<tr>
<td>Wi</td>
<td>a pair of wings</td>
</tr>
<tr>
<td>X</td>
<td>exposed weapon mount</td>
</tr>
</tbody>
</table>

**Long-Distance Movement**

When covering significant distances, the following factors can be more important than Top Speed and Range.

**Cruising Speed:** Travel conditions, safety considerations, and the need to conserve fuel or energy mean that in practice, ground and air vehicles typically use only 60-70% of Top Speed when traveling long distances. An animal-drawn or rowed vehicle can only use its Top Speed for a few minutes – for the beasts or rowers, this is as fatiguing as running! The highest sustainable speed is about 75% of this, which is as fatiguing as hiking. If the beasts or rowers drop below 1/3 FP, halve Top Speed.

**Endurance:** Divide Range in miles by cruising speed in mph to determine endurance in hours for situations where “loiter” capability matters more than range. The vehicle must carry provisions in order to take advantage of endurance in excess of one day. Food and water are about 12 lbs. per person per day, but won’t keep for more than a month before TL5 (at TL5+, canned goods and similar rations are available).
## Ground Vehicle Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Locations</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Dogsled</td>
<td>27†</td>
<td>0/2</td>
<td>12c</td>
<td>6/6</td>
<td>0.29</td>
<td>0.14</td>
<td>+1</td>
<td>1</td>
<td>2</td>
<td>F</td>
<td>$400</td>
<td>14DER</td>
<td>[1]</td>
</tr>
<tr>
<td>1</td>
<td>Chariot</td>
<td>22†</td>
<td>0/2</td>
<td>11c</td>
<td>4/9*</td>
<td>0.29</td>
<td>0.2</td>
<td>+1</td>
<td>1+1</td>
<td>1</td>
<td>F</td>
<td>$330</td>
<td>2DE2W</td>
<td>[1]</td>
</tr>
<tr>
<td>3</td>
<td>Wagon</td>
<td>35†</td>
<td>-3/4</td>
<td>12c</td>
<td>4/8*</td>
<td>0.84</td>
<td>0.5</td>
<td>+2</td>
<td>1</td>
<td>2</td>
<td>F</td>
<td>$680</td>
<td>2DE4W</td>
<td>[1]</td>
</tr>
<tr>
<td>4</td>
<td>Coach</td>
<td>53†</td>
<td>-2/3</td>
<td>12c</td>
<td>4/9*</td>
<td>2.4</td>
<td>1.2</td>
<td>+3</td>
<td>1+9</td>
<td>2</td>
<td>F</td>
<td>$11K</td>
<td>4DO4W</td>
<td>[1]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DRIVING/TL (LOCOMOTIVE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Locomotive</td>
<td>152</td>
<td>-2/5</td>
<td>11f</td>
<td>1/35*</td>
<td>28</td>
<td>0.2</td>
<td>+5</td>
<td>1+1</td>
<td>8</td>
<td>700</td>
<td>$45K</td>
<td></td>
<td>8W</td>
</tr>
<tr>
<td>7</td>
<td>Bus</td>
<td>100</td>
<td>-2/4</td>
<td>11f</td>
<td>1/30*</td>
<td>14.7</td>
<td>6.7</td>
<td>+6</td>
<td>1+66</td>
<td>4</td>
<td>400</td>
<td>$120K</td>
<td>G6W</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Semi-Truck</td>
<td>104</td>
<td>-1/5</td>
<td>12f</td>
<td>2/55*</td>
<td>10.3</td>
<td>0.3</td>
<td>+4</td>
<td>1+2</td>
<td>5</td>
<td>1,200</td>
<td>$60K</td>
<td>G6W</td>
<td>[2]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DRIVING/TL (HEAVY WHEELED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2 1/2-Ton Truck</td>
<td>88</td>
<td>-1/4</td>
<td>11f</td>
<td>1/24*</td>
<td>8.5</td>
<td>3</td>
<td>+4</td>
<td>1+2</td>
<td>5</td>
<td>375</td>
<td>$17K</td>
<td>G6W</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Bus</td>
<td>100</td>
<td>-2/4</td>
<td>11f</td>
<td>1/30*</td>
<td>14.7</td>
<td>6.7</td>
<td>+6</td>
<td>1+66</td>
<td>4</td>
<td>400</td>
<td>$120K</td>
<td>G4W</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Semi-Truck</td>
<td>104</td>
<td>-1/5</td>
<td>12f</td>
<td>2/55*</td>
<td>10.3</td>
<td>0.3</td>
<td>+4</td>
<td>1+2</td>
<td>5</td>
<td>1,200</td>
<td>$60K</td>
<td>G6W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DRIVING/TL (MOTORCYCLE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Hvy. Bike</td>
<td>33</td>
<td>+1/2</td>
<td>10f</td>
<td>5/32*</td>
<td>0.4</td>
<td>0.1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>200</td>
<td>$1.5K</td>
<td>E2W</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Scooter</td>
<td>29</td>
<td>+1/2</td>
<td>10f</td>
<td>3/27*</td>
<td>0.3</td>
<td>0.1</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>190</td>
<td>$1K</td>
<td>E2W</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Hvy. Bike</td>
<td>33</td>
<td>+1/2</td>
<td>11f</td>
<td>8/55*</td>
<td>0.5</td>
<td>0.2</td>
<td>0</td>
<td>1+1</td>
<td>4</td>
<td>200</td>
<td>$8K</td>
<td>E2W</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Sports Bike</td>
<td>30</td>
<td>+2/2</td>
<td>10f</td>
<td>9/78*</td>
<td>0.42</td>
<td>0.2</td>
<td>0</td>
<td>1+1</td>
<td>3</td>
<td>150</td>
<td>$11K</td>
<td>E2W</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>APC</td>
<td>111</td>
<td>-3/5</td>
<td>11f</td>
<td>1/20</td>
<td>12.5</td>
<td>1.6</td>
<td>+4</td>
<td>2+11S</td>
<td>50/35</td>
<td>300</td>
<td>$120K</td>
<td>2CX</td>
<td>[3]</td>
</tr>
</tbody>
</table>

---

[1] Draft animals are dogs for the dogsled, and horses for the chariot, wagon, and coach.
[2] Hauls a 48’ semi-trailer. With the trailer, Hnd/SR is -3/4 and Move is 1/30*. Trailer is HP 100†, Load 24, SM +5, and DR 3.
[3] “APC” means “armored personnel carrier.” The higher DR applies only to attacks from the front. Mounts a machine gun (7.62mm or .50) on an external mount on the roof.

## Watercraft Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Draft</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Canoe</td>
<td>23†</td>
<td>+1/1</td>
<td>12c</td>
<td>2/2</td>
<td>0.3</td>
<td>0.2</td>
<td>+1</td>
<td>2</td>
<td>2</td>
<td>F</td>
<td>$200</td>
<td>O</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Inflatable</td>
<td>20</td>
<td>+2/2</td>
<td>11f</td>
<td>2/12</td>
<td>0.6</td>
<td>0.5</td>
<td>+1</td>
<td>1+4</td>
<td>2</td>
<td>100</td>
<td>$2K</td>
<td>O</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Speedboat</td>
<td>50</td>
<td>+1/3</td>
<td>11f</td>
<td>3/20</td>
<td>2</td>
<td>1</td>
<td>+2</td>
<td>1+9</td>
<td>3</td>
<td>200</td>
<td>$18K</td>
<td>O</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Penteconter</td>
<td>85†</td>
<td>-4/3</td>
<td>11c</td>
<td>1/5</td>
<td>12.5</td>
<td>7.5</td>
<td>+8</td>
<td>55</td>
<td>3</td>
<td>F</td>
<td>$14K</td>
<td>MO</td>
<td>6</td>
<td>[1, 2]</td>
</tr>
<tr>
<td>3</td>
<td>Cog</td>
<td>147†</td>
<td>-3/4</td>
<td>12c</td>
<td>0.1/4</td>
<td>85</td>
<td>60</td>
<td>+7</td>
<td>18</td>
<td>5</td>
<td>–</td>
<td>$23K</td>
<td>M</td>
<td>13</td>
<td>[1, 3]</td>
</tr>
<tr>
<td>6</td>
<td>Tramp Steamer</td>
<td>750</td>
<td>-3/6</td>
<td>11f</td>
<td>0.01/6</td>
<td>14,000</td>
<td>9,000</td>
<td>+10</td>
<td>41+29A</td>
<td>30</td>
<td>7,200</td>
<td>$15M</td>
<td>g2S</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

---

[1] A “penteconter” is a Greek war galley with a sail and a single bank of oars, favored by raiders and pirates. A “cog” (or “roundship”) is a single-masted medieval sailing ship.
[2] Using oars, with 50 rowers. Under sail, Range is “–” and Move is 1/4 in a fair wind. Has a bronze ram, which adds +1 per die of collision damage.
### Aircraft Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Stall</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>“Barnstormer” Biplane</td>
<td>43</td>
<td>+2/3</td>
<td>10f</td>
<td>2/37</td>
<td>0.9</td>
<td>0.2</td>
<td>+3</td>
<td>1+1</td>
<td>3</td>
<td>85</td>
<td>$55K</td>
<td>O2WWi</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Light Monoplane</td>
<td>45</td>
<td>+2/3</td>
<td>10f</td>
<td>3/70</td>
<td>1.15</td>
<td>0.3</td>
<td>+4</td>
<td>1+1</td>
<td>3</td>
<td>500</td>
<td>$150K</td>
<td>G2WWi</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

### PILOTING/TL (LIGHTER-THAN-AIR)

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Stall</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Blimp</td>
<td>120</td>
<td>-4/3</td>
<td>10</td>
<td>1/38</td>
<td>18</td>
<td>4</td>
<td>+10</td>
<td>10A</td>
<td>1</td>
<td>2,300</td>
<td>$3M</td>
<td>S</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### PILOTING/TL (HEAVY AIRPLANE)

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Stall</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Twin-Prop Transport</td>
<td>100</td>
<td>-2/3</td>
<td>12f</td>
<td>2/114</td>
<td>12.8</td>
<td>3</td>
<td>+7</td>
<td>2+21</td>
<td>4</td>
<td>1,500</td>
<td>$340K</td>
<td>g3WWi</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Business Jet</td>
<td>84</td>
<td>0/3</td>
<td>11f</td>
<td>4/275</td>
<td>9.2</td>
<td>1.6</td>
<td>+6</td>
<td>2+6P</td>
<td>5</td>
<td>1,300</td>
<td>$10M</td>
<td>G3WWi</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

### PILOTING/TL (HELICOPTER)

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Stall</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Light Helicopter</td>
<td>47</td>
<td>+2/2</td>
<td>10f</td>
<td>2/90</td>
<td>1.5</td>
<td>0.5</td>
<td>+4</td>
<td>1+3</td>
<td>3</td>
<td>225</td>
<td>$400K</td>
<td>GH3Wr</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Utility Helicopter</td>
<td>70</td>
<td>0/2</td>
<td>10f</td>
<td>2/65</td>
<td>4.7</td>
<td>1.4</td>
<td>+5</td>
<td>2+12</td>
<td>3</td>
<td>300</td>
<td>$2M</td>
<td>gH2R</td>
<td>0</td>
<td>[1]</td>
</tr>
<tr>
<td>8</td>
<td>Utility Helicopter</td>
<td>87</td>
<td>+1/2</td>
<td>11f</td>
<td>3/110</td>
<td>10</td>
<td>3.5</td>
<td>+5</td>
<td>3+14</td>
<td>5/20</td>
<td>370</td>
<td>$8M</td>
<td>gH3W</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### PILOTING/TL (VERTOL)

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Stall</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Air Car</td>
<td>45</td>
<td>+2/3</td>
<td>11f</td>
<td>4/190</td>
<td>1.2</td>
<td>0.4</td>
<td>+3</td>
<td>1+3P</td>
<td>4</td>
<td>900</td>
<td>$500K</td>
<td>G4W</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### PILOTING/TL (CONTRAGRAVITY)

<table>
<thead>
<tr>
<th>^</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Range</th>
<th>Cost</th>
<th>Loc.</th>
<th>Stall</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>^</td>
<td>Grav Bike</td>
<td>30</td>
<td>+4/2</td>
<td>11</td>
<td>20/80</td>
<td>0.4</td>
<td>0.2</td>
<td>0</td>
<td>1+1</td>
<td>3</td>
<td>1,000</td>
<td>$25K</td>
<td>E</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>^</td>
<td>Grav Jeep</td>
<td>50</td>
<td>+3/3</td>
<td>12</td>
<td>10/100</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1+5</td>
<td>4</td>
<td>2,000</td>
<td>$400K</td>
<td>O</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

[1] Rotors have DR 20; all other locations have DR 5.

### Spacecraft Table

<table>
<thead>
<tr>
<th>TL</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move (G)</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Cost</th>
<th>Locations</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Orbital Clipper</td>
<td>170</td>
<td>-2/3</td>
<td>10fx</td>
<td>30/9,000 (3G)</td>
<td>515</td>
<td>10</td>
<td>+9</td>
<td>2+4SV</td>
<td>4</td>
<td>$350M</td>
<td>–</td>
<td>[1]</td>
</tr>
</tbody>
</table>

### PILOTING/TL (AEROSPACE)

<table>
<thead>
<tr>
<th>^</th>
<th>Vehicle</th>
<th>ST/HP</th>
<th>Hnd/SR</th>
<th>HT</th>
<th>Move (G)</th>
<th>LWt.</th>
<th>Load</th>
<th>SM</th>
<th>Occ.</th>
<th>DR</th>
<th>Cost</th>
<th>Locations</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>^</td>
<td>Shuttlercraft</td>
<td>136</td>
<td>+2/4</td>
<td>12</td>
<td>20/c (2G)</td>
<td>100</td>
<td>25</td>
<td>+6</td>
<td>1+10SV</td>
<td>100</td>
<td>$35M</td>
<td>3Rr</td>
<td>[2]</td>
</tr>
<tr>
<td>^</td>
<td>Star Freighter</td>
<td>500</td>
<td>0/5</td>
<td>11</td>
<td>15/c (1.5G)</td>
<td>1,000</td>
<td>400</td>
<td>+9</td>
<td>2+18ASV</td>
<td>100</td>
<td>$100M</td>
<td>3Rr2t</td>
<td>[2, 3]</td>
</tr>
</tbody>
</table>


[2] Uses reactionless or gravitic thrusters to accelerate to light speed (c) – or whatever fraction of c the GM sets as a limit. Star drives and force fields, if any, are up to the GM.

[3] Has hyperspectral sensors (Hyperspectral Vision, with 360° Vision and Telescopic Vision 10) and radar (Radar, 500,000 yards, Targeting). Its two independent turrets can, at extra cost ($0.5M apiece), mount laser cannon: Damage 6d¥5(2) burn, Acc 10, Range 100,000/300,000, RoF 4, Rcl 1.
Convoys: Multiple vehicles traveling in convoy or formation move at 80% of the speed of the slowest vehicle, due to the need for station keeping. On a successful Leadership roll, use 100% of the speed of the slowest vehicle. For long journeys, roll daily.

**Control Rolls**

A vehicle operator must make a “control roll” – against Boating, Driving, Piloting, etc., as appropriate – in any potentially hazardous situation. The GM may require a roll every few hours in an ongoing situation such as a fierce storm, or every few seconds in combat!

**Modifiers:** The vehicle's Handling (Hnd) statistic modifies all control rolls. For sudden deceleration or tight turns, see Pushing the Envelope (p. 395). Visibility modifiers (-1 to -9 for darkness, fog, etc.; -10 for total darkness) apply if there is risk of collision; they aren’t important when trying to weather a storm at 30,000 feet or in the mid-Atlantic, but they’re crucial if you’re zigzagging through mountains, landing or taking off in an aircraft, sailing just off a rocky coast, etc. See the relevant vehicle skill for other modifiers. The GM may assess situational modifiers as he sees fit.

On a failure, the operator does not perform the maneuver properly, or fails to avoid the hazard. Failure by no more than the vehicle's Stability Rating (SR) is a minor problem; e.g., a car skids off the road, or a ship loses a few hours of travel. More severe failure means a major problem; e.g., a crash. The GM may allow a second control roll, at a hefty penalty, to keep a major problem from becoming a total disaster; the modifiers should depend on the exact action(s) the operator takes. On a critical failure, disaster is inevitable!

Large vehicles may require a roll against both the master’s Shiphandling skill and the crew’s average Crewman skill. Use the average margin of success or failure.

**Ground Travel**

A ground vehicle moves on wheels, runners, tracks, or legs, as indicated by the notation in its Locations entry. The average speed it can sustain on a journey depends on the terrain and the weather. See Hiking (p. 351) for definitions of terrain and weather conditions.

**Terrain:** Figure cruising speed in mph from Top Speed in yards/second as follows:

- **Very Bad** (deep snow, swamp): Top Speed × 0.1 mph on wheels or runners, Top Speed × 0.15 mph on tracks, Top Speed × 0.2 mph on legs.
- **Bad** (hills, woods): Top Speed × 0.25 mph on wheels, Top Speed × 0.5 mph otherwise.
- **Average** (dirt road, plains): Top Speed × 0.5 mph on wheels, Top Speed × 1 mph otherwise.
- **Good** (paved road, salt flats): Top Speed × 1.25 mph.

For a road-bound vehicle (e.g., a normal car), use Top Speed only when traveling on a road. Off road, use the lower of Top Speed and 4 × Acceleration in these formulas.

**Example:** A luxury car with Move 3/57 gets an average travel speed of 57 × 1.25 = 71 mph on a paved road (Good). On a dirt road (Average), it could manage 57 × 0.5 = 28 mph. But off road in Average terrain, it would drop to 3 × 4 × 0.5 = 6 mph!

For a vehicle that follows rails (e.g., a locomotive), treat the rails as Good terrain. However, the vehicle cannot move at all off the rails!

These rates assume sustained travel at a safe cruising speed. A vehicle going flat out can move up to 60% faster (e.g., Top Speed × 2 mph over Good terrain, like a road), but the GM may require hourly control rolls to avoid a mishap, such as a collision.

**Weather:** This affects ground vehicles just as it does hikers. Treat sleds and snowmobiles as skates on ice and as skis on snow.

**Water Travel**

A powered vessel moves at Top Speed × 2 mph. A sailing craft moves at Top Speed × 2 mph in ideal wind conditions; actual speed can drop to a fraction of this – or even zero – depending on wind direction and strength. A rowed vessel can only sustain a speed of Top Speed × 1.5 mph (and even this will eventually fatigue the crew).

Currents can increase or reduce speed directly – typically by a few mph, depending on the current. Heavy seas (caused by high winds) usually reduce speed. An unpowered vessel faced with a storm may require Shiphandling and Seamanship rolls by captain and crew to avoid being blown off course or worse.

**Draft:** “Draft” is the distance between the vessel’s waterline and its keel. In water shallower than this, it will run aground. Re-floating it requires waiting for a change in tide, or jettisoning ballast or payload. In waters of unknown depth, it is best to proceed slowly and cautiously! (Roll against Area Knowledge to recall depth, or against Navigation (Sea) to read charts.)

**Air Travel**

An aircraft’s cruising speed is about Top Speed × 1.6 mph. Powered aircraft can reach Top Speed × 2 mph at the cost of burning 50% more fuel, reducing Range. Supersonic aircraft (Move 360+) can only use their full Top Speed at high altitudes where the air is thin (15,000’ and above). At low altitudes, Top Speed rarely exceeds 350-400 (700-800 mph).

The GM should require control rolls for landings during bad weather or visibility, and when traveling at high speeds at very low altitudes or through mountains. Winds and storms affect balloons and airships much as they do sailing vessels.

**Ground Speed:** A powered air vehicle can usually taxi at up to 2/3 its stall speed.

**Space Travel**

It takes about (0.10 × velocity in yards/second)/(Acceleration in G) seconds to reach a given cruising velocity. A spacecraft moving at that velocity takes roughly (0.5 × distance in miles)/(velocity hours) to travel a given distance. For comparison, the moon is around 0.25 million miles from Earth, and Mars is 34 million miles away at its closest approach.

**Example:** To accelerate to a velocity of 90,000 yards/second in a spacecraft with an acceleration of 1.5G would take (0.1 × 90,000)/1.5 = 6,000 seconds, or about 1.7 hours. At a velocity of 90,000 yards/second, you would reach Mars in (0.5 × 34,000,000)/90,000 = 189 hours.
It is common to give interplanetary distances in “astronomical units” (AU). One AU is 93 million miles, the average distance from the Earth to the Sun. Interstellar distances are often given in light-years (5.865 trillion miles) or parsecs (3.26 light-years). Earth’s nearest stellar neighbor, Alpha Centauri, is 4.3 light-years away.

For a spacecraft that uses a Newtonian reaction drive (e.g., any real-life rocket), Top Speed is really “delta-v”: the maximum change of velocity it can perform before running out of reaction mass (rocket fuel, etc.). Each acceleration or deceleration “costs” a fraction of this delta-v.

To lift into low Earth orbit requires Move 8,700. To achieve planetary escape velocity and leave orbit requires an extra Move 3,600. For other planets, multiply these velocities by the square root of (M/R), where M is planetary mass in Earth masses and R is planetary radius in Earth radii. In addition to having sufficient delta-v, the spacecraft’s acceleration must exceed the planet’s gravity (1G, for Earth).

Travel through interplanetary space requires using up the required delta-v to achieve the desired velocity, coasting as described above, then using delta-v to slow to the velocity needed to enter orbit at the destination.

**Example:** A spacecraft in Earth orbit has a delta-v of 200,000. It uses 3,600 to break orbit and 90,000 to accelerate to a cruising velocity (Move 90,000). It drifts at that speed for 1.5 hours to reach the moon, and then use another 88,500 to decelerate to the moon’s orbital velocity. Its remaining delta-v is 200,000 - 3,600 - 90,000 - 88,500 = 17,900.

Some superscience space drives don’t have to worry about delta-v – the spacecraft can accelerate constantly! The only requirement for such a spacecraft to leave a planet is that its acceleration exceeds the planet’s gravity. When it travels long distances, it requires time in hours equal to the square root of (50.8 x distance in millions of miles/Acceleration in G) to complete the trip.

If a spacecraft is capable of faster-than-light travel, its performance depends on what kind of superscience exists. The GM should design a drive to suit his campaign. See the Hyperjump enhancement on the Warp advantage (p. 97) for one possibility.

### Vehicle Weapon Mounts

Any weapon built into a vehicle is considered “mounted.” The type of mount determines the weapon’s stability and arc of fire. For the effects of these mounts on ranged attacks from moving vehicles, see **Ranged Attack Modifiers** (p. 548).

**Arm Mount** (TL8): If a vehicle has arms or strikers, these may contain weapons or have hands to carry them. They attack using the rules for handheld weapons.

**Carriage** (TL3): Some ships have weapons on wheeled carriages or sleds, either on deck or firing through ports. Treat these as fixed mounts, but skill is not limited to control skill, as the gun crew can use ropes to aim the weapon.

**External Open Mount** (TL1): Also called a pintle mount, deck gun, etc. Such a weapon can elevate to fire upward or swivel to fire in other directions. However, it isn’t actually *in* the vehicle; the weapon and its crew have no protection.

**External Stabilized Open Mount** (TL7): As above, but with gyro-stabilization to reduce penalties for firing on the move.

**Fixed Mount** (TL1): You aim the gun by aiming the vehicle; e.g., a cannon in the nose of a jet fighter. The weapon can only shoot in one direction. The mount specifies which: [F] to the front, [R] to the right, and so on. The operator rolls against the *lower* of his Gunner skill or his control skill to hit.

**Hardpoint** (TL6): Aircraft often mount weapon pods, bombs, or missiles on pylons under their body or wings. Treat these as fixed mounts, but apply a -1 to Accuracy. External weapon loads like this count as encumbrance.

**Stabilized Turret** (TL7): As above, but with gyro-stabilization to keep the weapon aimed at the target regardless of the vehicle’s motion.

**Turret** (TL5): This is a turret (or head) with weapons built into it. It can swivel to change facing independently of the vehicle. Large turrets are usually powered.

### Basic Vehicle Combat

“Vehicle combat” is any combat that involves handheld weapons fired from within a vehicle (e.g., bank robbers shooting from a getaway car), weapons mounted on a vehicle (such as a fighter jet, tank, mecha, or spy car), or attacks that use the vehicle itself as a weapon (ramming, punching and kicking with the arms and legs of a mecha, etc.).

In the rules below, a vehicle’s “operator” is the person at the controls. A “control skill” is the skill the operator uses to direct his vehicle; e.g., Driving or Piloting. An “occupant” is *anyone* in or on the vehicle – operator, crew, or passenger.

**Tactical Combat with Vehicles:** When using the rules in Chapter 12 with vehicles, you can represent vehicles with models or multi-hex counters drawn at three feet to the inch.

**Maneuvers**

Treat a vehicle as an extension of its operator. It moves on the operator’s turn, at his place in the turn sequence (as determined by his Basic Speed). To control his vehicle, the operator must take a Move or Move and Attack maneuver on his turn – but it’s the *vehicle* that moves or attacks, while the operator remains at the controls. If the operator takes any other maneuver, or is stunned or otherwise incapacitated, his vehicle plows ahead with the same speed and course it had on the previous turn.
The vehicle’s other occupants take their turns at their place in the turn sequence. They may use vehicle systems, provided they are stationed next to the appropriate controls and take a suitable maneuver: Concentrate to use instruments or electronics, Attack or All-Out Attack to fire vehicular weapons, etc.

Occupants leaning out windows, standing on a deck, etc. may find Attack or even All-Out Defense preferable to All-Out Attack, as they will have a defense if someone attacks them instead of the vehicle. This matters most for vehicles with an exposed rider (E), glass windows (G or g), or open cabin (O), and for crew manning exposed weapon mounts (X).

Bailing Out of a Moving Vehicle: Anyone who jumps or falls from a moving vehicle and hits the ground suffers a collision with an immovable object, at the vehicle’s speed. If the vehicle was flying, add falling damage as well. For details, see Collisions and Falls (p. 430). To jump between two moving vehicles, make a DX or Jumping roll. Apply the penalty for relative speed given on the Size and Speed/Range Table (p. 550).

Movement During Combat

As explained under Vehicle Statistics (p. 462), a vehicle’s Move score is split into two numbers: Acceleration and Top Speed. Acceleration functions just like Basic Move for a character; at this speed or less, the vehicle has no special restrictions on movement. At higher speeds—anything up to Top Speed—use the High-Speed Movement rules (p. 394), but substitute control rolls (see Control Rolls, p. 466) for DX rolls.

Acceleration: A vehicle can accelerate up to its Acceleration each turn. A diving flyer may add $10 \times$ local gravity in Gs (1G on Earth) to this.

Deceleration: A powered, wheeled ground vehicle can decelerate by 5 yards/second per turn. An animal-drawn or tracked, walking, or slithering ground vehicle can decelerate by 10 yards/second per turn. Most air and water vehicles can decelerate by $(5 + \text{Handling})$ yards/second per turn (minimum 1 yard/second). These rates assume safe deceleration. It is possible
to decelerate further with a successful control roll, as explained under Pushing the Envelope (p. 395); failure means a loss of control.

**Control Rolls**

The operator must make a control roll whenever he attempts a risky maneuver or encounters an obstacle, and whenever his vehicle suffers knockback or major damage. On a failure, he loses control of the vehicle. If you are using a rulebook that supplies a "crash table" for that type of vehicle, roll on the table; otherwise, see the applicable paragraph below. In addition to these results, a failed control roll always erases any accumulated bonuses for Aim maneuvers, and gives a penalty equal to the margin of failure to any attack from the vehicle until the operator’s next turn.

**Air Vehicle:** Failure by the vehicle's Stability Rating (SR) or less means the vehicle loses 5 yards of altitude and decelerates by 10 yards/second. If it was flying dangerously low or slow, it could hit the ground or stall; otherwise, it just blunders ahead. Failure by more than SR, or critical failure, means an uncontrollable dive, tailspin, etc. If the vehicle was climbing, it stalls, then starts to fall; otherwise, it dives at Top Speed each turn. Either way, on subsequent turns, the operator must make a Piloting-5 roll to pull out! **Ground Vehicle:** Failure by SR or less means the vehicle skids and fails to go in the intended direction if you were trying to turn – or veers randomly left or right otherwise. The GM determines if it hits something. Failure by more than SR, or critical failure, means it rolls or spins out and crashes. It skids or rolls for a distance equal to 1/3 its current velocity before coming to a stop, and suffers falling damage based on the velocity it had when it lost control.

**Water Vehicle:** Failure by SR or less means exactly what it does for a ground vehicle. In addition, anyone standing on an open deck must make a ST or ST-based Seamanship roll to hold on or be washed overboard. Failure by more than SR, or critical failure, means the vehicle capsizes! Those on deck are tossed overboard automatically. An "unsinkable" vehicle like a surfaced sub, rubber raft, or canoe can be righted. Other vehicles simply sink.

**Shooting through a window is unwise if the vehicle is sealed, pressurized, or has vacuum support.**

**Weapon Fire from a Moving Vehicle**

When using a weapon from a moving platform – be it a Tommy gun from a getaway car, or a javelin from atop one of Hannibal’s elephants – it’s usually harder to hit your target when you’re standing still or moving yourself. The penalty depends on how rough the ride is and whether you’re using a weapon mount or a handheld weapon – see Ranged Attack Modifiers (p. 548).

It’s even harder to shoot straight if you don’t know when the vehicle will weave or dodge! If the vehicle dodged and you aren’t the operator, you have an extra -2 to hit, or -4 if flying.

Aiming on the move is particularly difficult. The combined bonuses from aiming (Accuracy, extra turns of Aim, targeting systems, and bracing) cannot exceed the SR of a moving vehicle unless the sights or mount are stabilized. Also apply this limit when firing from a stationary vehicle that is bobbing in the water or floating in turbulent air. In space, only apply this limit when maneuvering, not when moving in a straight line.

It is also important to consider apparent relative speed. If two cars are racing toward each other on a collision course, the speed of one, relative to the other, may be over 120 mph, but the apparent relative speed is zero. Only apply speed penalties for crossing targets. Ignore the speed of targets moving more or less directly toward or away from you.

**Attack**

**Mounted Weapons:** Vehicle occupants can attack with the vehicle’s built-in weapons, provided they are manning weapon stations. At TL6+, many armed vehicles have targeting systems (optical sights, radar, computerized laser or radar-directed fire control, would give +2). A typical TL7-8 system, with computerized laser or radar-directed fire control, would give +3.

Ramming: The vehicle operator can use the vehicle itself as a weapon; see Collisions and Falls (p. 430).

Melee Attacks: If the vehicle has arms or legs, the operator can use it to punch, kick, grab, etc. as if it were an extension of his body.

Handheld Weapons: The viability of handheld weapons depends on the vehicle and the situation. Shooters in or on open vehicles, like jeeps and motorcycles, can fire in almost any direction. Occupants of enclosed vehicles must shoot through or lean out of an open window, door, hatch, port, or firing slit. Shots fired through a glass windscreen “star” it, rendering it opaque; it takes a Ready maneuver to clear away the broken glass. Shooting through a window is unwise if the vehicle is sealed, pressurized, or has vacuum support – it may result in a leak or explosive decompression!
If the operator fires a handheld weapon, he must take a Move and Attack maneuver. This gives him -2 to hit or a penalty equal to his weapon's Bulk, whichever is worse – his attention is divided between driving and shooting. Do not apply this penalty to mounted weapon attacks, ramming attempts, or vehicular melee attacks.

**Defense**

A vehicle’s operator may maneuver evasively to avoid attacks on his vehicle. Treat this as a dodge; see *Dodging* (p. 374). A vehicle's Dodge score is (operator's control skill/2) + vehicle's Handling, rounded down. For example, a biker with Driving (Motorcycle)-14 on a motorcycle with Handling +1 has a Dodge of 14/2 + 1 = 8.

The GM may require Dodge rolls to avoid other hazards, such as baby carriages and potholes, or to maneuver through tight spots. These could be instead of control rolls, or to avoid disaster after failed control rolls!

Occupants who are free to move (not strapped in, etc.) may dodge attacks specifically targeted on them, but they get no defense against stray shots or attacks that penetrate the vehicle and go on to strike them.

**Combat Results**

A vehicle suffers damage like any other artifact. Certain hit locations have special damage effects – see the *Vehicle Hit Location Table* (p. 554) for details.

**Collisions and Fall**

When a vehicle and another vehicle collide, the operator may choose to swerve, ram, or apply the brakes. If the operator swerves, he may roll 1d each turn to attempt to avoid collisions. If a vehicle rolls over, it may immediately fall to the ground, or may be damaged by the impact. Damage to vehicles is in addition to damage suffered by any passengers or crew. In a collision, occupants may go flying. If an occupant is thrown out of a vehicle, he may either continue to roll with the vehicle, or attempt to roll with the ground. If an occupant is thrown out of a vehicle, he may take damage equal to the vehicle’s total HP divided by 10. If an occupant is thrown out of a vehicle, he may continue to roll with the vehicle, or attempt to roll with the ground. If an occupant is thrown out of a vehicle, he may take damage equal to the vehicle’s total HP divided by 10. If an occupant is thrown out of a vehicle, he may take damage equal to the vehicle’s total HP divided by 10.

**Bleeding**

If a vehicle suffers damage to its Hit Points, the occupants may take damage as well. Damage to the vehicle is in addition to damage suffered by any passengers or crew.

**Leaking**

A vehicle that suffers a leak must make a repair roll to stop the leak before the damage is added to the total HP. If the leak is not stopped, the vehicle will suffer damage equal to the vehicle’s total HP divided by 10.

**Who’s at the Wheel?**

There are usually dire consequences when a vehicle's operator is taken out of action (killed, fell off, abandoned the controls, etc.). A one- or two-wheeled vehicle, or a mecha walking on two or three legs, rolls over as if it had lost control. Other types of vehicle just charge ahead until they hit something – but roll 1d each turn. On a 6, or any roll greater than the vehicle's SR, the vehicle goes out of control. Someone else can regain control, but may need a few seconds to reach the controls, depending on where he was. If the former operator is incapacitated, skill rolls will be at -2 or worse while his body remains in the way!

**Leaking**

A leak occurs when a floating vehicle suffers penetrating damage to the body below its waterline, a balloon or airship takes any penetrating damage to the body, or a submerged vehicle takes penetrating damage to any location but an external mount. Use the *Bleeding* rule (p. 420), but replace the First Aid roll to stop bleeding with a Crewman roll to patch the hole.

**Scaling Damage**

Large vehicles such as tanks, warships, and starships can have huge DR and HP scores, and their weapons can inflict massive amounts of damage. To avoid excessive die rolling, it is best to adjust the damage scale.

**Decade Scale**

Use this for battles involving tanks or ships – or even supers. Divide DR, HP, and damage dice by 10 before combat starts. Round fractions of 0.5 or more up. (Exception: If the converted damage is under 1d, treat fractions up to 0.25 as 1d-3, fractions up to 0.5 as 1d-2, and larger fractions as 1d-1.) Convert damage multipliers to dice first; e.g., 6d×25 becomes 150d, which scales to 15d. Do not divide armor divisors.

**Century Scale**

Use this for combats involving huge vehicles, such as giant space battleships. Follow the rules above, but divide by 100 instead of by 10.

**Example:**

A tank has DR 700 and 300 HP; its main gun does 6d×30(2) and its machine gun does 7d. In D-scale, it would have dDR 70 and dHP 30; its main gun would do 6d×3(2) and its machine gun would do 1d-1.

After the battle, multiply remaining HP by 10 or 100, as appropriate, to convert back.

**There are usually dire consequences when a vehicle’s operator is taken out of action.**

Hit locations for a given vehicle appear in the Locations column on the relevant vehicle table, or in the vehicle's text description. Assume that attacks are aimed at the vehicle's body (equivalent to the torso on a living being) unless the attacker specifically stated that he was targeting another location. Alternatively, roll randomly for hit location. In all cases, only exposed locations can be hit; e.g., if a tank is behind a hill and only its turret is visible, the turret is the only valid target.

**An attacker can sometimes target a vehicle's occupants directly.**

This is only possible if the vehicle has an exposed rider (E), glass windows (G or g), or an open cabin (O), or if the occupants are on a ship's deck, cargo bed, etc. A rider has no cover; someone in an open or glass-windowed vehicle has partial cover (legs, groin, and half the torso). There is an extra -1 to shoot into or out of a window unless the occupant is actually leaning out.

An attacker can sometimes target a vehicle’s occupants directly. This is only possible if the vehicle has an exposed rider (E), glass windows (G or g), or an open cabin (O), or if the occupants are on a ship’s deck, cargo bed, etc. A rider has no cover; someone in an open or glass-windowed vehicle has partial cover (legs, groin, and half the torso). There is an extra -1 to shoot into or out of a window unless the occupant is actually leaning out.

**Who’s at the Wheel?**

There are usually dire consequences when a vehicle’s operator is taken out of action (killed, fell off, abandoned the controls, etc.). A one- or two-wheeled vehicle, or a mecha walking on two or three legs, rolls over as if it had lost control. Other types of vehicle just charge ahead until they hit something – but roll 1d each turn. On a 6, or any roll greater than the vehicle’s SR, the vehicle goes out of control. Someone else can regain control, but may need a few seconds to reach the controls, depending on where he was. If the former operator is incapacitated, skill rolls will be at -2 or worse while his body remains in the way!

**Leaking**

A leak occurs when a floating vehicle suffers penetrating damage to the body below its waterline, a balloon or airship takes any penetrating damage to the body, or a submerged vehicle takes penetrating damage to any location but an external mount. Use the *Bleeding* rule (p. 420), but replace the First Aid roll to stop bleeding with a Crewman roll to patch the hole.
ELECTRONICS

There is a wide variety of electronic gadgets in most TL6+ game worlds. Among the most important of these – for adventurers, at least – are communicators, sensors, and computers.

COMMUNICATORS

Standard communicators are radios. They transmit signals by modulating the intensity, frequency, or phase of long-wavelength electromagnetic radiation. This limits them to the speed of light (186,000 miles per second); as a result, they are effectively instantaneous for planetary communications but have a noticeable delay over interplanetary distances. Note also that ordinary radio frequencies cannot penetrate more than a few yards of water.

Depending on the TL and equipment, communicators can send code, voice, text, video, or data. Many TL8+ communicators incorporate satellite links or computer systems as well. See Communications and Information Gear (p. 288) for the range, cost, and weight of some sample communicators.

Communicators use the rules under the Telecommunication advantage (p. 91), except that Electronics Operation (Communications) skill rolls replace IQ rolls. To extend range, make an Electronics Operation (Communications) roll at -1 per 10% added to range, to a maximum extension of 100%.

The Telecommunication rules also give several alternatives to radio, including laser and infrared communications. More exotic options are available in some settings.

SENSORS

Sensors grant the operator one or more sensory advantages (Infravision, Telescopic Vision, etc.) while used. Statistics for a number of sensors appear in Chapter 8; see Law Enforcement, Thief, and Spy Gear; Optics and Sensors; and Weapon and Combat Accessories (all p. 289).

Sensors fall into four broad categories:

- **Hands-Free Sensors**: Sensors worn as goggles, glasses, helmet visors, etc. They require a Ready maneuver to switch on or off, and function constantly once activated. Visual sensors replace unaided vision while active, but typically restrict peripheral vision. To get around this, take a Ready maneuver to switch off or remove the sensor.
- **Manual Sensors**: Binoculars, hand telescopes, metal detectors, radar guns, and similar handheld devices are generally more powerful and longer-ranged than hands-free units, but require one or two hands to operate. To use the sensor, the operator must take continuous Aim maneuvers, which prevents him from moving quickly or attacking.
- **Sights**: Sensors attached to a weapon, camera, etc. – usually to help aim it. To use the sights, the device to which they are attached must be ready (occupying one or two hands). If the sensor is attached to a weapon, the user benefits from it only while making an aimed attack. To observe through the sights without firing requires Aim maneuvers, just as for a manual sensor.
- **Vehicular or Mounted Sensors**: Long-range sensors mounted in a vehicle or on a tripod. Most display information on a screen or similar readout. The user must sit, kneel, or stand next to the sensor to operate it. Some such sensors are “manual” (e.g., TL6-7 “analog” radar and sonar sets); the user must operate the controls by hand. Others are “hands-free” (e.g., digital sensors that display data on a head-up display); the user can take other actions while using them.

Using Sensors

If a sensor provides the user with a completely new sense (e.g., radar; for a human), he must roll against Electronics Operation (Sensors). If it just augments a sense he already possesses, he need only make an ordinary Sense roll – although an unusually complex sensor might call for a roll against Electronics Operation or another skill. For example, a human would make a Vision roll to use an ordinary telescope, but a large astronomical telescope might require an Astronomy roll.

Passive Visual Sensors

These systems work like normal vision, but extend the limits of human sight. They are available in all four categories described above.

**Telescopic Optics**

Telescopes, binoculars, electro-optical scopes, etc., give Telescopic Vision (p. 92):

<table>
<thead>
<tr>
<th>Magnification</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3x</td>
<td>1</td>
</tr>
<tr>
<td>4-7x</td>
<td>2</td>
</tr>
<tr>
<td>8-15x</td>
<td>3</td>
</tr>
<tr>
<td>16-31x</td>
<td>4</td>
</tr>
</tbody>
</table>

Further levels follow the same progression.

**Image Intensifiers**

Most often called “night vision” devices, these electronically amplify ambient light to generate a monochrome (usually green) picture. They do not work in total darkness, fog, etc. They grant Night Vision (p. 71); the level varies from 7 at early TL7 to 9 at TL8+. Better systems include electro-optical magnification, giving Telescopic Vision 1-4 on portable systems, more on vehicular systems.

**Thermal Imaging Sensors**

These detect the infrared spectra emitted by objects at different temperatures, and use this information to build up a false-color television image of the environment. They do work in total darkness, smoke, etc. The user sees as if he had Infravision (p. 60), often with Telescopic Vision 1-3. Most are two to three times as heavy and four to six times as costly as image intensifiers.

**Hyperspectral Imaging Sensors**

These sensors process infrared, visible, and ultraviolet light to create a single image. This makes them extremely effective at picking out camouflaged objects. They give Hyperspectral Vision (p. 60) and Telescopic Vision. These devices are rare and expensive at TL8, but become standard vehicular sensors at TL9+, replacing thermal imaging sensors.
Active Sensors

“Active” sensors detect objects by bouncing energy off them and analyzing the returned signal. Radar (TL6), imaging radar (TL7), and ladar (TL8) emit electromagnetic radiation, while sonar (TL6) uses sound.

Active sensors never suffer darkness penalties. They can sense objects out to their rated maximum range at no range penalty; each doubling of range beyond that gives -2 to skill. The major limitation of all such sensors is that specialized but inexpensive detectors can detect the scanning pulse at up to twice their range. Each technology also has a number of specific capabilities and drawbacks; for details, see the Scanning Sense advantage (p. 81).

Before TL9, only vehicular or mounted units are likely to provide an actual picture of the surroundings. At TL6-8, a portable active sensor (e.g., a police radar gun) usually only gives the range and speed of objects it detects.

Computers

The programmable digital computer first appears at TL7 and rapidly becomes smaller, cheaper, and faster at higher TLs. In some settings, computers might even attain sufficient computing power to achieve sentience!

Complexity

Every computer has a “Complexity” rating. This is an abstract measure of processing power. Each Complexity level represents roughly a tenfold increase in overall capability over the previous level. A computer’s Complexity determines what programs it can run. Each piece of software has a Complexity rating, too, and can only run on a computer of that Complexity level or higher; e.g., a Complexity 2 program requires a Complexity 2 computer or better.

Complexity also determines how many programs a computer can run simultaneously. It can run two programs of its own Complexity, 20 programs of one Complexity level less, 200 programs of two Complexity levels less, and so on. For instance, a Complexity 2 computer could run two Complexity 2 programs or 20 Complexity 1 programs – or one Complexity 2 program and 10 Complexity 1 programs.

The best mid-TL8 (2004-era) desktop systems are Complexity 4; more typical systems are Complexity 2-3.

Data Storage

Every computer has a data-storage capacity, rated in megabytes (MB), gigabytes (GB), or terabytes (TB). One GB is about 1,000 MB; one TB is roughly 1,000 GB or 1 million MB. Some computers have removable media (e.g., disks) as well; their capabilities depend on the setting.

Data Storage Table

<table>
<thead>
<tr>
<th>Data</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lengthy novel</td>
<td>10 MB</td>
</tr>
<tr>
<td>Complete national road atlas</td>
<td>100 MB</td>
</tr>
<tr>
<td>Navigation charts of entire ocean or country</td>
<td>1,000 MB (1 GB)</td>
</tr>
<tr>
<td>Plans of 100 small or 10 complex vehicles</td>
<td>1 GB</td>
</tr>
<tr>
<td>Detailed global navigation charts</td>
<td>100 GB</td>
</tr>
<tr>
<td>Public or school library</td>
<td>100 GB</td>
</tr>
<tr>
<td>City or college library</td>
<td>1,000 GB (1 TB)</td>
</tr>
<tr>
<td>Big city or university library</td>
<td>10 TB</td>
</tr>
<tr>
<td>Large university or copyright library</td>
<td>100 TB</td>
</tr>
<tr>
<td>Human mind</td>
<td>100 TB</td>
</tr>
</tbody>
</table>

Other Capabilities

A computer requires at least one “terminal” if humans are to use it. The computer may be integrated into this terminal or located remotely. At TL7-8, a terminal is, at minimum, a keyboard and monitor. At late TL8 and beyond, voice recognition, virtual-reality glasses and gloves, neural interfaces, etc. might replace such clumsy hardware.

It is possible to connect a single terminal to multiple computers, giving the user access to them all. Without special hardware, however, the user can only work with one computer at a time, and must take one second to switch between computers.

If two computers are compatible (GM’s decision), it is possible to link them via cable or communicator. The person trying to establish contact must know the “address” of the other computer (telephone number, number, location on a network, etc.) and any relevant passwords. Once in contact, two computers with suitable software can share data, and the less-powerful computer can act as a terminal for the more capable one.

Finally, any TL8+ computer equipped with a microphone or camera can act as a digital recorder, to the limit of its data-storage capacity.

Software

The programs available depend on the setting. Some general notes:

- Complexity: Every program has a Complexity rating, as defined above.
- Capabilities: Some programs simply provide entertainment (e.g., a video game) or a practical function (e.g., e-mail).
- Others give the user a bonus to perform a specific task. For instance, financial software might give +1 to Accounting when preparing taxes. Treat such bonuses identically to those for good equipment (see Equipment Modifiers, p. 345).

Still others are mandatory for some tasks – notably technical tasks at TL8+. Without them, the user’s skill will operate at a lower TL. For example, an engineer might require a Complexity 3 CAD/CAM program to design a jet; without it, his Engineer/TL8 (Aircraft) skill might function as Engineer/TL7. These programs are generally Complexity 2 at TL7, Complexity 4 at TL8, Complexity 6 at TL9, and so on. A program of higher than minimum Complexity provides a bonus or reduces the time required.

Programs intended for robots may grant advantages, disadvantages, skills, or even pre-programmed personalities! These can be hardwired or modular (see Modular Abilities, p. 71).

Cost: Most programs have a cost in $. This is the price of a single, legal copy, with documentation. Each computer requires its own copy. It is possible to copy software for free, but this is often illegal. But a computer can run as many instances of a program as its Complexity allows; it does not require a separate copy per instance.
The GM may wish to let PCs invent new technology in the course of the campaign. The rules below cover realistic innovation at the inventor’s tech level – or one TL in advance of that, at most. For rules governing larger-than-life inventors who can build more fantastic gadgets, see Gadgeteering (p. 475).

Before starting, the player must describe to the GM what he wants to invent and how he thinks it will work. This will help the GM determine the skills and equipment required, the cost and time involved, and the difficulty of the task. If the player’s description is especially clear or clever, the GM should give +1 or +2 to all invention-related skill rolls.

**REQUIRED SKILLS**

First, the GM decides on the “invention skill” needed for the task, based on the player’s description of the invention. The inventor must know this skill to have any chance of success. Armor, vehicles, weapons, etc. require the relevant Engineer specialty. Other inventions might call for different skills: Alchemy for magic potions, Bioengineering for biotechnology, Computer Programming for software, Thaumatology for magic spells, and so on.

At the GM’s discretion, a particular invention might also require skill in one or more related subjects. For instance, inventing a new telescope might require Astronomy skill. If so, the inventor rolls against the lower of this skill or his invention skill in the rules below.

**CONCEPT**

Next, determine the “complexity” of the invention. This is entirely up to the GM, who can assign complexity arbitrarily, base it on the minimum skill level required to come up with the invention, or relate it to the retail price of the item (especially for gadgets listed in worldbooks or real-world catalogs). Use the following table for inspiration:

<table>
<thead>
<tr>
<th>Complexity</th>
<th>Required Skill Level</th>
<th>Retail Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>14 or less</td>
<td>Up to $100</td>
</tr>
<tr>
<td>Average</td>
<td>15-17</td>
<td>Up to $10,000</td>
</tr>
<tr>
<td>Complex</td>
<td>18-20</td>
<td>Up to $1,000,000</td>
</tr>
<tr>
<td>Amazing</td>
<td>21 or more</td>
<td>Over $1,000,000</td>
</tr>
</tbody>
</table>

For computer programs, use the numerical Complexity rating instead. If a cost or time calculation requires one of the four ratings above, treat Complexity 1-3 as Simple, 4-5 as Average, 6-7 as Complex, and 8+ as Amazing.

Modifiers: -6 if the invention is Simple, -10 if Average, -14 if Complex, or -22 if Amazing (for a computer program, apply a penalty equal to twice the Complexity rating instead). +5 if you have a working model you’re trying to copy, or +2 if the device already exists but you don’t have a model; +1 to +5 if the item is a variant on an existing one; -5 if the basic technology is totally new to the campaign (regardless of TL); -5 if the device is one TL above the inventor’s TL.

Each inventor may roll once per day. Complexity doesn’t affect the time required – the basic concept for an Amazing device is often a simple insight . . . it’s the implementation that can get tricky.

On a success, proceed to the next step. On a failure, the inventor makes no breakthrough but may try again the next day at no additional penalty. On a critical failure, the inventor comes up with a “flawed theory” that looks good but that will never work in practice – go on to the next step, but note that it is doomed to failure.

Of course, if the inventor has somehow obtained actual blueprints for the device, he can skip this stage altogether!

**PROTOTYPE**

A success – or critical failure – on the Concept roll gives the inventor a theory he can test in the laboratory. The next step is to construct a prototype (working model). This requires a second roll against invention skill. The GM makes this “Prototype roll” in secret.

Reinventing the Wheel

Adventurers may wish to “invent” devices of a lower TL than their own. Reduce complexity by one step per TL by which the inventor’s TL exceeds that of the invention, to a minimum of Simple. If suitable historical reference materials are available, use the higher of the inventor’s Research skill or his invention skill for the Concept roll.
**Testing and Bugs**

The majority of prototypes have shortcomings, or “bugs.” Critical success on the Prototype roll means there are no bugs; success by three or more gives 1d/2 minor bugs; and any other success gives 1d/2 major bugs and 1d minor bugs. Minor bugs are annoying, but not critical. Major bugs are catastrophic to the function of the device—and sometimes to the user as well!

To find bugs requires testing. Once per week of testing, roll vs. operation skill (e.g., Driving for a car, Electronics Operation for a radio) at -3. Each success finds one bug; a critical success finds all bugs. A failure triggers a major bug, if present, or finds nothing. A critical failure causes a problem similar to a major bug without encountering any real bugs; alternatively, the tester is convinced, erroneously, that no bugs remain.

**Funding**

As explained under Tech Level and Starting Wealth (p. 27), the higher the tech level, the greater the starting wealth. However, the cash outlay required for inventing and gadgeteering doesn’t scale with TL—it’s fixed. Thus, the lower the TL, the higher the relative cost of innovation.

This might model reality well, but it takes a lot of the fun out of being a low-tech gadgeteer. The GM may use these optional (but realistic) rules to remedy this:

- **Patrons:** Historically, many inventors had wealthy patrons to pay their way. If you have a Patron with the +100% “Equipment” enhancement, you may attempt a single roll against your Patron’s frequency of appearance when you start a new invention. On a success, the Patron foots the bill. Most Patrons will demand access to the invention; if you deny this, you are likely to lose your Patron!
- **Professional Inventors:** You can pay the costs gradually by building the tools, facilities, etc. yourself. You must pay at least 10% “up front.” Divide the remainder by your monthly income and add that many months to the time required. You earn no money during this time, but you must still pay your monthly cost of living. Independent Income (p. 26) can be helpful here—it might represent royalties from your last invention.
- **Investors:** If your invention promises to be profitable, others might be willing to cover your costs. Make a Finance roll with the same modifiers as your Concept roll (this represents perceived risk). On a success, you receive funding. Note that your investors own shares of your invention and any profits!

**Production**

Building a copy of the invention costs 20% of the retail price if you only need to buy parts, or full retail price if you must pay for parts and labor. Time required to produce each copy is half that required for a Prototype roll. For instance, each copy of a Complex item takes 1d/2 months.

**Modifiers:** All modifiers listed for Concept rolls; +1 per assistant with skill 20+ in one of the skills required for the invention, to a maximum of +4; -1 to -10 (GM’s discretion) if the inventor must make do with anything less than the most advanced tools and facilities for his TL.

On a success, the inventor proves his theory and creates a prototype. On a failure, he may try again, provided he has the time and money (see below). On a critical failure, an explosion or accident occurs. This inflicts at least 2d damage to the inventor and each assistant—and destroys the facilities, which must be rebuilt at full cost before making another attempt.

If the inventor was working with a flawed theory, he will never create a working prototype (this is why the GM rolls in secret!), but a critical success on the Prototype roll lets him realize that his theory was bad.

**Time Required**

Each Prototype roll requires 1d-2 days if the invention is Simple, 2d days if Average, 1d months if Complex, or 3d months if Amazing. Physically huge items (e.g., spaceships and military vehicles) may take longer, at the GM’s discretion. Divide time required by the number of skilled people working on the project. Minimum time is always one day.

**Cost**

The facilities required to build a prototype cost $50,000 if the invention is Simple, $100,000 if Average, $250,000 if Complex, or $500,000 if Amazing. Triple these costs if the invention is one TL above the inventor’s TL. Divide costs by 10 if the inventor has appropriate facilities left over from a related project of equal or higher complexity. Each inventor who wishes to attempt a Prototype roll must pay the facilities cost “up front” before making his first attempt.

In addition, each attempt to produce a prototype has a cost equal to the retail price of the item being built, as given in the appropriate game supplement or real-world source, or as set by the GM. Triple this cost if the invention is one TL in advance of the inventor’s TL.

Bugs that remain after testing surface on any operation skill roll that fails by 5 or more. A major bug always surfaces on a critical failure.

The facilities required to build a prototype have a cost equal to $250,000 if Complex, or $500,000 if Average, $100,000 if Simple, $50,000 if the invention is one TL above the inventor’s TL.
Fiction is full of inventors who can design devices that are far ahead of their time. Below is advice on how to relax the requirements and restrictions of the New Inventions rules for such “gadgeteers.” These benefits apply only to inventors with the Gadgeteer advantage (p. 56).

**Inventing Gadgets**

Before beginning, the player must describe the proposed gadget to the GM in a logical manner, and offer an explanation of how it is supposed to work. The item should not actually violate physical laws (which eliminates FTL travel, antigravity, teleportation, etc.) unless the GM rules that such “superscience” is possible in the game world.

The GM is free to accept or reject the design, depending on its feasibility. If he accepts the item, he assigns it a tech level (see Tech Levels, p. 511). The stronger, smaller, or more effective the gadget is, relative to an item that performs a similar function at the campaign’s TL, the higher its TL should be.

**Required Skills**

This is unchanged from New Inventions. A gadgeteer must have a good understanding of the field in which he is working. The Gadgeteer advantage represents a broad, intuitive capacity for inventing – it does not grant specific scientific or technical knowledge. Most gadgeteers focus on one or two skills to start out with.

**Complexity**

Use the usual complexity levels, but do not confuse complexity with tech level. A ray gun that sells for $1,000 at TL10 is most likely an Average item, however amazing it might be in a TL8 setting.

**Concept**

Gadgeteers have far milder penalties on their Concept rolls. There is no penalty at all for a Simple invention, and only -2 for an Average one, -4 for a Complex one, or -8 for an Amazing one. For software, use Complexity (not twice Complexity). Ignore the -5 for a technology that is totally new to the campaign.

A gadgeteer is not limited to inventions only one TL advanced. He may attempt to create a device of any TL, at a flat -5 per TL above his own.

**Prototype**

All the benefits listed for Concept rolls apply equally to Prototype rolls. Furthermore, the GM may choose to waive the penalty for questionable equipment. Many fictional gadgeteers work out of a basement or a garage!

**Time Required:** This is unchanged. However, the times under New Inventions assume an eight-hour day, which might not be enough for a cinematic gadgeteer! If the inventor pulls long shifts, he must make daily HT rolls as described under Long Tasks (p. 346). On a failure, he has no skill penalty – he just loses FP. If he reaches 0 FP, he collapses and must rest for 1d days to recover. Add this to the time required.

**Cost:** Calculate the cost of the necessary facilities using the table above. Use Base Cost for an item at the campaign TL, and add the amount under TL Increment for each TL beyond that. A gadgeteer may divide these costs by 10 if he has already paid for facilities for a similar project of equal or higher complexity and tech level.

**Example:** A gadgeteer working on a Complex item must pay a Base Cost of $250,000 for the necessary facilities. If his invention is a device three TLs above the campaign TL, he must add three times the TL Increment for a Complex gadget, or $32,000, bringing the total to $1,750,000.

As with regular inventions, there is also a cost for each attempt to build a prototype. For an invention at the campaign TL, this is just the retail price of the item. For a device from above that TL, start with the item’s retail price at its native TL, double this for each TL of difference, and accumulate the cost!

<table>
<thead>
<tr>
<th>Complexity</th>
<th>Base Cost</th>
<th>TL Increment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>$50,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Average</td>
<td>$100,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Complex</td>
<td>$250,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>Amazing</td>
<td>$500,000</td>
<td>$1,000,000</td>
</tr>
</tbody>
</table>
Gadget Bugs Table

When a gadgeteer invents a gadget of a higher TL than his own, the GM should roll 3d on the following table for each bug (or simply pick something appropriate).

3 – Roll 3d per use or hour of constant use. On a 6 or less, the gadget attracts the unwelcome attention of aliens, time travelers, Men in Black, Things Man Was Not Meant To Know, etc. (GM’s choice.)
4 – The gadget is huge! If it would normally be handheld, it is so large that it needs a vehicle to move it around; if it would normally be vehicle-borne, it must be mounted in a really big vehicle (like a battleship) or a building; and so on.
5 – Each use or hour of constant use consumes $250 worth of resources – exotic chemicals, radioactives, etc.
6 – The device has 1d+1 side effects; see the Random Side Effects Table (p. 479).
7 – Anyone carrying the gadget is so inconvenienced by its awkward shape and balance that he has -2 to DX. Vehicles or vehicular gadgets give -2 to vehicle control rolls.
8 – The gadget has 1d-2 (minimum one) side effects.
9 – A powered device requires a big power supply – for instance, a vehicle power plant. If it would normally require this much power, it needs to be tied into a continental power grid, and causes brownouts whenever used. If the device is unpowered, treat this result as 10.
10 – The gadget is twice as large, twice as heavy, and uses twice as much power as it should. If it’s a weapon, halve its damage, range, and Accuracy instead.
11 – The gadget gets too hot to handle after being used, and must cool down for 10 minutes before it can be used again. (If used before it cools off, it burns out in a shower of sparks and inflicts 1d burning damage on the user.)
12 – Each use or hour of constant use consumes $25 worth of resources.
13 – The gadget is unreliable, and fails on any operation skill roll of 14 or more.
14 – The gadget requires minor repairs after every use, and does not work until repaired.
15 – The device recoils like a heavy projectile weapon (even if it isn’t a gun). The user must make a DX roll for every use or be knocked down.
16 – The gadget is very unreliable, and fails on any operation skill roll of 10 or more.
17 – The device is overly complicated. If it is a weapon, it takes five seconds to ready (this represents pushing buttons, setting dials, etc.). Other gadgets require two hours of painstaking preparation before each use.
18 – On any critical failure using the device, it self-destructs . . . spectacularly. The user must make a DX roll at -2 or suffer 2d injury as a result. The gadget is gone – it cannot be repaired or cannibalized for parts.

Testing and Bugs

For a gadgeteer, success by 3 or more results in no bugs, while a lesser success gives 1d/2 minor bugs. There is no chance at all of a major bug. If the device is above the gadgeteer’s TL, roll once on the Gadget Bugs Table (box) for each “minor” bug.

Production

The standard rules apply, but use the tech level-adjusted retail price in all calculations. In the example above, retail price would be $60,000 (not $4,000) for production purposes.

QUICK GADGETEERING

Inventors with the Quick Gadgeteering advantage require very little time or money to do their work. They can throw together a useful gadget in minutes, using only the contents of a random glove compartment. This talent is completely unrealistic; most GMs will want to restrict it to highly cinematic campaigns!

Quick gadgeteers use the Inventing Gadgets rules (p. 475) like regular gadgeteers, with the following modifications.

Concept

Apply the favorable modifiers given for regular gadgeteering, but each Concept roll requires only 1d minutes!

Prototype

Apply the modifiers given for regular gadgeteering to the Prototype roll.

Time Required: A Simple gadget takes only 2d minutes to assemble, an Average one calls for 1d-2 hours (a roll of 1 or 2 indicates a 30-minute assembly time), a Complex one requires 1d hours, and an Amazing one takes 4d hours.

Cost: The quick gadgeteer is a master at cannibalizing parts and scrounging for equipment. If there are many sources of parts, the GM should allow a Scrounging roll to locate usable components. If the available resources are more limited, the GM may require a roll against a specialized skill; e.g., if the only thing available is a wrecked ’65 Mustang, the GM might call for an Engineer (Automobiles) or Mechanic (Automobiles) roll to find the necessary hardware. These rolls are at no
modifier for a Simple gadget, -2 for an Average one, -6 for a Complex one, and -10 for an Amazing one. On a success, the total cost for the project is only \((1d-1) \times \$100\), with a roll of 1 indicating no cost.

If the gadgeteer must buy the needed items, calculate facilities and prototype costs as for a regular gadgeteer, and then divide by 100.

A critical failure on the Prototype roll ruins the parts – the gadgeteer must find new ones before construction can resume.

**GADGETEERING DURING ADVENTURES**

Gadgeteers can also analyze and modify gadgets encountered during adventures.

**Analysis**

To figure out a mysterious piece of equipment, the gadgeteer rolls as if he were making a Concept roll to invent the item from scratch, using the same skills and modifiers. This takes \(1d\times10\) minutes for a regular gadgeteer, or \(1d\) minutes for a quick gadgeteer.

**Modification**

After successfully analyzing a gadget, the gadgeteer may attempt to modify it. He rolls as if he were making a Prototype roll, using the same skills and modifiers. This takes \(1d\times10\) minutes for a regular gadgeteer, or \(1d\times10\) minutes for a quick gadgeteer. All modifications in function are subject to GM approval!

**Gadgets for Non-Gadgeteers**

Anyone can own and use gadgets. Only those who can alter their capabilities or invent new ones must buy the Gadgeteer advantage. But it would be unfair to let non-gadgeteers have gadgets for free – Gadgeteer costs points as much for the gadgets themselves as for the ability to build them. The GM should adopt one of the following rules to maintain game balance.

**Gadgets Cost Money**

The GM may permit the PCs to hire a gadgeteer to design and build gadgets for them. Finding such a hireling should be an adventure in itself! In addition to the hireling's pay, the PCs must pay the standard facilities cost for development and 150% of the prototype cost per item. Work out these costs as described for regular (not quick) gadgeteering.

This option has a “hidden” point cost: to cover these expenses, the heroes almost certainly need to take high Wealth (p. 25) or trade points for money (see Trading Points for Money, p. 26).

**Gadgets Require an Unusual Background**

The GM might require gadget users to have one of these Unusual Backgrounds:

**Unusual Background (Gadgeteer Friend):** If an adventurer has a gadgeteer friend who equips him with useful inventions, he has an Unusual Background. This is an unabashed game-balance measure – it is unbalancing to let a single gadgeteer outfit an entire party at no point cost, however realistic that might be. **15 points.**

**Unusual Background (Invention):** The character possesses one specific gadget without being a gadgeteer: This must be a unique invention; if it weren’t, it would just be Signature Gear (p. 85). The player must explain how his character came to have the item: he invented it through a lucky accident, his inventor grandfather left it to him, aliens planted the blueprints in his head telepathically, etc. The points in this trait buy a single, bug-free item. The owner can copy it, but he must pay the usual production costs. **5 points if the gadget is Simple, 15 points if Average, 30 points if Complex, or 50 points if Amazing.**
Adventurers sometimes encounter advanced or alien devices. These rarely come with instruction manuals, and often rely on scientific principles unknown at the heroes' tech level. Gadgeteers may use the Gadgeteering During Adventures rules (p. 477) to deduce the function of mysterious artifacts. Everybody else must use the rules below.

First, the experimenter chooses an operation skill. This choice is often a guess – although the GM might provide clues that make it an educated guess. Those with the Intuition advantage can use it to narrow down their choice of skills.

Next, the GM decides whether the chosen skill is appropriate. An “appropriate” skill is one used to operate a device known to the experimenter that serves a purpose similar to that of the artifact. It need not be the artifact’s operation skill. This choice is appropriate. An “appropriate” skill is one used to operate a device known to the experimenter that serves a purpose similar to that of the artifact. It need not be the artifact’s operation skill.

Then the experimenter rolls against the chosen skill. If this is an actual operation skill. For instance, Guns is appropriate for a ray gun fired using Beam Weapons skill, while First Aid is wholly inappropriate.

Each attempt takes one minute. Repeated attempts are possible, but the roll on the table is at a cumulative -1 per attempt after the first. Someone else can start from scratch, though – other people often bring fresh insights to a problem.

**Modifiers:** A bonus equal to the margin of success, or a penalty equal to the margin of failure; +2 for Danger Sense; +4 for Intuition; +2 if the device has labels in a language the experimenter can read – or +4 for actual manuals (at the GM’s option, a Research roll at -5 might turn these up); +1 to +5 for a simple device, or -1 to -5 for a complex one; -1 for manipulating the device at a “safe” distance using psi or magic, -2 for probing it using tools or robotic manipulators, or -4 for poking it with a stick, hitting it with a hammer, etc.; -1 per attempt after the first.

- **0 or less** – The experimenter takes 3d damage and the device is destroyed. (If the device is indestructible, it vaporizes everything within 10 yards . . .)
- **1** – The device’s primary effect is applied to the experimenter, if possible; if not, he takes 3d damage from the device.
- **2** – The device’s primary effect is applied to someone nearby, if possible; if not, someone nearby takes 3d damage.
- **3** – The experimenter takes 2d damage.
- **4** – Someone nearby takes 2d damage.
- **5** – The experimenter takes 1d damage.
- **6** – Someone nearby takes 1d damage.
- **7** – The experimenter suffers superficial damage (e.g., his eyebrows are burned off).
- **8** – Someone nearby suffers superficial damage.
- **9** – The experimenter suffers an embarrassing mishap: he gets a body part stuck to (or in) the device, or suffers an unpleasant minor side effect.
- **10** – The experimenter forms an erroneous theory concerning the device’s purpose, possibly being misled by a secondary function or side effect.
- **11** – Nothing happens. The experimenter gains no useful insight into the device’s nature or operation, but at least it didn’t do anything nasty . . .
- **12** – The experimenter locates one of the device’s less-obvious controls (but doesn’t learn what it does).
- **13** – The experimenter discovers the on/off switch (or safety, for a weapon).
- **14** – The experimenter gets a clue concerning the purpose of the device.
- **15** – The experimenter gets a clear demonstration of the device’s primary function (possibly by blowing a large hole in something inanimate – and expensive – nearby). He can now operate this function, at -4 to skill.
- **16** – The experimenter discovers how to activate a single secondary function reliably (that is, with no skill penalty).

**Anachronistic Devices**

The tech levels given for equipment assume a “realistic” campaign. The GM is free to have any technology appear at an earlier TL – especially in a cinematic campaign. For each TL by which the listed TL of a device exceeds that of the campaign, double the cost and weight of the device.

**Example:** Steam engines are normally TL5, but dwarves in a TL3 fantasy setting might use steam-powered mining machinery. Such equipment would cost and weigh four times as much as usual.
17 – The experimenter deduces the location and general nature of all controls pertaining to the device's secondary functions, and can use these functions at -4 to skill.

18 – The experimenter figures out how to activate the primary function of the device at no skill penalty.

19 – The experimenter discovers all of the device's functions, and can use them at no skill penalty.

20 or more – As 19, plus the experimenter finds a totally serendipitous – and useful – application of the device that the creators never thought of!

WEIRD TECHNOLOGY

“Alien” does not begin to describe some technology: gadgets that defy natural laws (including a few we haven’t discovered); devices from bizarre dimensions; artifacts that mix magic with science, or that contain (or are) demons . . . Such things are best described as “weird.”

Weird technology need not be advanced – it might have been around since the Bronze Age! In fact, weirdness rarely has anything to do with tech level. Part of what makes a technology weird is that it defies the standard notions of scientific progress. It’s different, and even geniuses are at a loss to explain it.

Weird Science

An inventor may choose to roll against Weird Science skill (p. 228) to get a bonus to his Concept and Prototype rolls. This bonus is +5 if he is using the New Inventions rules (p. 473). It is only +1 if he is using Gadgeteering (p. 475), as those rules already give large bonuses for the borderline-weird concepts used by gadgeteers. The drawback is that the invention will have weird side effects. Roll 1d-3 for the number of side effects (minimum one), and then roll that many times on the Random Side Effects Table, below.

Gadgets

As mentioned above, even gadgeteers who do not use Weird Science are venturing into the realm of the weird. A buggy gadget can occasionally have weird side effects – see the Gadget Bugs Table (p. 476).

Experimental Devices

The GM can roll on the Random Side Effects Table whenever adventurers use an experimental device given to them by or stolen from a mad scientist.

Magic Items

There is no reason to limit strange side effects to technological devices! At the GM’s option, when a wizard fails his roll to create a magic item by only 1, the enchantment works but the magic item acquires 1d-3 side effects (minimum one), determined by rolls on the Random Side Effects Table.

Random Side Effects Table

Roll 3d, or choose something appropriate.

- Each use inflicts 1d injury on the user (ignore DR).
- Each use causes a small, cumulative change in the user’s body (mind). Roll against HT+4 (IQ+4) once per use. On a failure, the user acquires -1 point toward a physical (mental) disadvantage of the GM’s choice.
- Each use inflicts 1d injury on the operator (ignore DR).
- The gadget transforms someone within 10 yards into something else (alien, animal, plant, etc. – GM’s choice) for 10 seconds.
- The device makes an incredibly annoying, high-pitched noise when used. This gives everyone within 20 yards a headache for 10 minutes (-2 to DX, IQ, and self-control rolls), and the user gets a migraine (-4 to these rolls) for 20 minutes. Earplugs don’t help, although Deafness does.
- Use of the gadget disrupts electronics: TVs and radios within one mile get nothing but static, other electronics within 100 yards fail on a roll of 7 or less on 3d. Within 10 yards, even simple electrical devices are affected. This is a classic side effect for UFOs! Magic items produce local mana disruptions instead, giving -3 to all spell rolls within 10 yards for the next 10 seconds.
- The device produces noxious fumes in a four-yard radius. Anyone in the area must make a HT+3 roll every second. On a failure, they are nauseated (see Irritating Conditions, p. 428) for five minutes.
- The gadget produces a loud hum in operation (+3 to Hearing rolls to notice it).
- Impressive but harmless special effects – beams of light, showers of sparks, etc. – accompany the use of the device. The source of the effects is obvious to any observer. Anyone in the area gets a Vision roll at +5 to notice something is going on.
- The gadget emits dense clouds of steam or smoke over a four-yard radius while in operation. Treat as a Fog spell (p. 253).
- Each use of the gadget attracts a swarm of vermin of the GM’s choice. The swarm disperses 10 minutes after the device is shut off.
- Using the gadget renders the operator unconscious for 1d minutes.
- Each use of the device attracts the attention of demons or ghosts, or punches holes into random dimensions through which strange creatures appear.
- The device inflicts 1 point of injury (ignore DR) per use on everyone within 10 yards, including the user.
- Each use of the gadget opens a gate into a random dimension for one second. The user must make a DX roll to avoid falling into the hole before it closes.
- Roll for a different random side effect each time the device is used. (If this result comes up again, roll for two side effects, and so on!)
Objects of magical power are a staple of fantasy. The following rules are intended for game worlds that use the magic system in Chapter 5, and make a few basic assumptions:

- Anyone can use any magic item that doesn’t explicitly require Magery.
- Wizards manufacture magic items using magic spells that produce fairly predictable results. However, magic is not technology, and magic items can have unpredictable side effects.
- Magic items retain their power indefinitely – their magic does not “wear out.” But if the item breaks or wears out, it loses all of its magical properties and ordinary repairs cannot restore the magic.

The GM is free to change some or all of these assumption to suit his campaign!

## ENCHANTMENT SPELLS

These spells allow mages to create magic items. They appear here instead of in Chapter 5 because enchantment creates magical artifacts, and uses many special rules that do not apply to ordinary spellcasting.

### Enchant (VH)

**Enchantment**

This spell is a prerequisite for all other Enchantment spells. To enchant an item, the caster must also know this spell. The caster rolls against the lower of his skill with this spell and the specific spell he wishes to place on the item. If he has assistants, they must have skill 15+ with both spells, but the roll is based on the caster’s skill.

**Duration:** Magic items are permanent until destroyed.

**Cost and Time:** See Enchanting (p. 481).

**Prerequisites:** Magery 2, and at least one spell from each of 10 other colleges.

### Accuracy

**Enchantment**

Makes a weapon more likely to hit by adding to the user’s effective skill.

**Cost:** See table below. Divide cost by 10 if the subject is a missile (e.g., an arrow or a bullet).

<table>
<thead>
<tr>
<th>Bonus</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>250</td>
</tr>
<tr>
<td>+2</td>
<td>1,000</td>
</tr>
<tr>
<td>+3</td>
<td>5,000</td>
</tr>
</tbody>
</table>

**Prerequisites:** Enchant, and at least five Air spells.

### Deflect

**Enchantment**

Adds a Defense Bonus to armor, clothing, a shield, or a weapon. This adds to all active defense rolls made by the user.

**Cost:** See table below.

<table>
<thead>
<tr>
<th>DR Bonus</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>50</td>
</tr>
<tr>
<td>+2</td>
<td>200</td>
</tr>
<tr>
<td>+3</td>
<td>800</td>
</tr>
<tr>
<td>+4</td>
<td>3,000</td>
</tr>
<tr>
<td>+5</td>
<td>8,000</td>
</tr>
</tbody>
</table>

**Prerequisites:** Enchant and Recover Energy.

### Fortify

**Enchantment**

Increases the DR of clothing or a suit of armor.

**Cost:** See table below.

<table>
<thead>
<tr>
<th>DR Bonus</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>50</td>
</tr>
<tr>
<td>+2</td>
<td>200</td>
</tr>
<tr>
<td>+3</td>
<td>800</td>
</tr>
<tr>
<td>+4</td>
<td>3,000</td>
</tr>
<tr>
<td>+5</td>
<td>8,000</td>
</tr>
</tbody>
</table>

**Prerequisites:** Enchant.

### Power

**Enchantment**

Makes a magic item partially or completely “self-powered.” Each point of Power reduces the energy cost to cast or to maintain any spell on the item by 1. Halve this bonus in a low-mana area (round down); double it in a high- or very high-mana area. Power has no effect on the energy cost of the user’s spells!

If Power reduces the cost to maintain a spell to 0, treat the item as “always on” after the cost to cast is paid – but the wearer must stay awake to maintain the spell. If Power reduces the cost to cast to 0, the item is “always on” for all purposes, although the owner may turn it off if he wishes.

**Cost:** See table below.

<table>
<thead>
<tr>
<th>Power</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 point</td>
<td>500</td>
</tr>
<tr>
<td>2 points</td>
<td>1,000</td>
</tr>
<tr>
<td>3 points</td>
<td>2,000</td>
</tr>
<tr>
<td>4 points</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Double the cost for each additional point.

**Prerequisites:** Enchant and Recover Energy.
**Puissance**

*Enchantment*

Adds to the basic damage a weapon does when it hits.

**Cost:** See table below. *Divide cost by 10* if the subject is a missile (e.g., an arrow or a bullet). *Double cost* if the subject is a missile weapon (e.g., a bow or a gun).

<table>
<thead>
<tr>
<th>Damage Bonus</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1</td>
<td>250</td>
</tr>
<tr>
<td>+2</td>
<td>1,000</td>
</tr>
<tr>
<td>+3</td>
<td>5,000</td>
</tr>
</tbody>
</table>

**Prerequisites:** Enchant, and at least five Earth spells.

**Staff**

*Enchantment*

Enchants a magic staff – see *Magic Staffs* (p. 240) for details. Though many magic items must be in the form of a wand or staff, they do not have to have this spell on them.

**Cost:** 30.
**Prerequisites:** Enchant.

---

**Enchanting**

“Enchanting” is the process of creating a magic item. It is a special kind of spell casting; see *Casting Spells* (p. 235). The caster must use ceremonial magic (see *Ceremonial Magic*, p. 238), and he and any assistants must know both the Enchant spell (see p. 480) and the specific spell being put on the item at level 15+ – or at level 20+ in a low-mana area. Unskilled spectators cannot contribute energy.

Enchanting always requires time and energy. A particular enchantment might also require a specific item or material (e.g., a gem), or the expenditure of cash for “generic” magic supplies.

A given magic item may carry any number of spells. Each one requires a separate enchantment. The presence of an enchantment has no effect on later enchantments.

**Power of a Magic Item**

Each magic item has a “Power,” set when it is created. An item’s Power equals the caster’s skill with the Enchant spell or the spell contained in the item, whichever is lower. Since enchanting is ceremonial magic, the caster can spend extra energy to raise his effective skill, and hence the Power of the item.

Record Power for each magic item created or found (to learn the Power of a found item, the PCs must use Analyze Magic). If an item has several spells on it, each spell has its own Power. Whenever it would be important to know the skill level of a spell cast by a magic item, use the item’s Power.

An item’s Power must be 15 or more for the item to work. Apply a temporary -5 to Power in a low-mana area; thus, an item with less than Power 20 does not work at all in a low-mana zone. No magic item works in a no-mana region!

---

**Interruptions**

If a mage is interrupted while enchanting using the “slow and sure” method, note the following:

- He will be fatigued. Assume he is missing 1d FP.
- He must keep concentrating on his enchantment; therefore, any other spell use is at -3. (If he stops concentrating, he loses the day’s work.)

A wizard who is bothered while not actively working on his enchantment is at no disadvantage!

---

**Success Rolls for Enchanting**

The GM makes all rolls to enchant magic items. As with other ceremonial magic, a roll of 16 fails automatically and a roll of 17-18 is a critical failure.

On a success, the item is enchanted. On a critical success, increase the Power of the item by 2d – and if the success roll was a natural 3, the item might have some further enhancement (GM’s discretion). The caster knows that his spell went well, but he must use Analyze Magic to know how well.

On a failure, the results depend on the method used to enchant the item – see below. A critical failure always destroys the item and all materials used.

**Quick and Dirty Enchantment**

Use this method to create a magic item quickly. It requires one hour per 100 points of energy required (round up). Make the success roll at the end of that time. Succeed or fail, all the energy is spent when the GM rolls the dice.

A lone caster is limited to the energy provided by his FP and HP, but he may have assistants, who can contribute their own FP and HP as described for ceremonial magic. The caster is at -1 to skill for each assistant; therefore, the number of assistants allowed is the number that would reduce the caster’s effective skill to 15. With more assistants, the enchantment won’t work.

If anyone but the caster and his assistants is within 10 yards, the spell is at a further -1.

---

**On a failure, the enchantment is perverted in some way. It might acquire unpleasant side effects (see *Random Side Effects Table*, p. 479), become an entirely different spell, or anything else the GM likes. The caster won’t know his spell went wrong unless he uses Analyze Magic or tries the item!**

**Slow and Sure Enchantment**

Use this method when the enchanter wants to be sure it’s done right. It takes one “mage-day” per point of energy required. A mage-day represents a full eight-hour workday for one mage. For instance, an item that requires 100 energy points would take one mage 100 days, two mages 50 days, and so on. A mage may work on only one enchantment at a time; he may not “work two shifts,” either on the same or different items.
All of the caster’s assistants must be present every day. If a day’s work is skipped or interrupted, it takes two days to make it up. Loss of a mage ends the project!

Make the success roll at the end of the last day. There is no FP or HP cost to the enchanters – they invested the energy gradually as the spell progressed.

On a failure, the enchantment didn’t work. The time was wasted, and any materials used in the spell are lost. (Exception: If the enchanters were adding a spell to an already-enchanted item, it is unharmed, though extra materials are lost.)

**Spells for Enchantment**

The *Magic Items Table* provides information on several common enchantments.

- **Spell:** The name of the spell.
- **Energy:** The energy cost required to enchant an item with the spell. Note that this is not the same as the cost to cast that spell normally! See also *Enchantment Spells* (p. 480).
- **Item:** The class of item required:
  - A armor or clothing
  - J jewelry; e.g., an amulet or ring
  - S staff – any rod-shaped piece of organic material up to 6 feet long
  - Sh shield
  - W weapon

### Notes:

- Special rules for creation or use.

#### USING MAGIC ITEMS

Magic items follow the rules given for the spell(s) they contain. Many give the user the power to cast the spell – perhaps only on himself, possibly on any subject. Some are “mage only”; that is, they only work for users who possess Magery. Unless specified otherwise:

- **There is no ritual.** The user just wills the item to work.
- **Casting time is as described for the spell.** High Power doesn’t affect this.
- **Energy cost is the same as for a normal casting of the spell.** High Power does not affect this (but the Power spell does – see p. 480).

- **Determine success normally.** Use the item’s Power as the caster’s base skill and apply all the usual modifiers for the kind of spell being cast. Power is at -5 in low-mana areas. A Resisted spell allows a normal resistance roll; use the item’s modified Power as the caster’s skill in the Quick Contest.

- **Only one person at a time can use the item.** If two people attempt to use it, only the first to touch it can use it. If one can’t use it – for instance, the item is “mage only” and he lacks Magery – his touch doesn’t count.

- **All other effects are as usual for that spell.**

#### “Always On” Items

Certain magic items are “always on.” For the item to work, the user must wear or carry it in the usual manner (a ring on a finger, a sword in a hand, and so on). These items don’t let the wearer cast the spell – they automatically cast the spell on the wearer at no energy cost.

The powers of such items are not always obvious to a new owner. In the case of found items, the GM should try not to drop inadvertent clues to the item’s true nature!

For all “always on” items, unless specified otherwise:

- **Ritual, casting time, and energy cost are all irrelevant.**
  - The item does not let the wearer cast the spell – it puts the spell on him, at no cost, as soon as he wears or wields the item.

- **All other effects are as usual for that spell.**

#### BUYING MAGIC ITEMS

The cash price of magic items is up to the GM. In fantasy settings where “enchanter” is just another profession...
and magic items are for sale in shops, a suggested price is $25 per energy point. For instance, a sword with Accuracy +2 would cost an extra $25,000.

In game worlds like this, enchanters might mass-produce low-energy cost items using the "quick and dirty" method. The GM is the final arbiter of what is possible, but note that a talented enchanter with skill 20 and five partners could spend 50 FP without breaking a sweat, much less drastically reduce the price of minor magic items.

At the GM's option, any magic item that a "typical" collaboration of wizards in the setting could enchant with an hour's work costs only $1 per energy point. In the example above, the cutoff might be 50 energy points – one arrow with Accuracy +1 or Puissance +1 would be $25, a magic staff would be $30, and a shirt with Fortify +1 would be $50... but that sword with Accuracy +2 would still cost $25,000.

In game worlds with few enchanters, magic items will be rare and prized, and even the most minor items will sell for $50 or more per energy point. This is likely to be the case in settings with secret magic – especially if the reason for the secret is an enchanters' monopoly.

In game worlds where magic is basically unknown, magic items will not have a fixed, fair price. If the buyer knows the item is authentic, the seller can often name his price! In all cases, add the cost of magical materials (if any) and the cost of the item being enchanted to the cost for the enchantment itself.

**Damage to Objects**

For the purpose of these rules, any nonliving, fabricated object – including a character with the Machine meta-trait (p. 263) – is an "artifact." Handle attacks on artifacts just like attacks on living beings (see *Damage and Injury*, p. 377), with the following exceptions:

*Rounding to Hit:* Roll to hit normally, applying the object's Size Modifier. If an object's SM is not given, find it from the *Size and Speed/Range Table* (p. 550). **Inanimate** objects are often motionless and don't hit back; this makes them good targets for an All-Out Attack. No artifact gets a defense roll unless it is under sentient control (e.g., a robot, a weapon in hand, or a vehicle with a driver).

*Damage Resistance (DR):* An artifact has a DR that represents its innate "toughness." Wooden or plastic tools, gadgets, furniture, etc. usually have DR 2. Small metal, metal-wood, or composite objects, like guns and axes, typically have DR 4. Solid-metal melee weapons have DR 6. Some artifacts may be *armored*; for instance, a quarter-inch of mild steel is DR 14.

*Injury Tolerance:* Most artifacts have some level of Injury Tolerance (p. 60). Complex machines are Unliving. Solid objects, like furniture or weapons, are Homogenous. Things like nets and mattresses are Diffuse. See *Injury to Unliving, Homogenous, and Diffuse Targets* (p. 380) for the effects on damage.

*Health (HT):* This rates the likelihood the object will break under stress or abuse. Most machines and similar artifacts in good repair are HT 10. Swords, tables, shields, and other solid, Homogenous objects are HT 12. Cheap, temperamental, or poorly maintained items get -1 to -3 to HT; well-made or rugged ones get +1 or +2. Characters with the Machine meta-trait use their HT score.

*Hit Points (HP):* The amount of damage the object can take before it is likely to break or cease to function. For weapons and equipment without a listed HP score, consult the *Object Hit Points Table* (p. 557) to find HP based on weight and construction.

**Effects of Injury**

Injury to artifacts works much like injury to living beings (see *Injuries*, p. 418), with the addition of a few special rules.

*Less than 1/3 HP left –* An artifact damaged this badly may suffer halved (or otherwise reduced) effectiveness, at the GM's discretion.

*0 HP or less –* Roll vs. the artifact's HT each second while it is under stress (but not if it isn't being used); a chair rolls each second someone sits on it, a car rolls each second its engine is running, and so on. On a failure, the object suffers a severe malfunction and is disabled. Most disabled artifacts don't function at all until repaired. Sentient machines fall "unconscious." Homogenous objects, such as swords, bend or break, but might remain partially usable (see *Broken Weapons*, p. 485). Ropes, cables, etc., are cleanly severed – not chopped to bits.
**Damage to Shields**

Most medieval shields were wood, or wood with a thin layer of metal. After one good battle, a shield was worthless. Do not use this rule unless you are willing to tolerate some bookkeeping in the name of more realistic combat!

See Shields (p. 287) for the Defense Bonus (DB), DR, and HP of shields. If your shield’s DB makes the difference between success and failure on any active defense (not just a block), the blow struck the shield squarely, and may damage it.

Apply the attack’s damage to the shield. Subtract the shield’s DR. If no damage penetrates the shield, there is no effect . . . but you experience full knockback!

If damage penetrates the shield’s DR, mark it off against the shield’s HP. Use the standard Damage to Objects rules; ordinary shields are Homogenous, with HT 12. If the shield is disabled or destroyed, it no longer provides its DB, but it still encumbers you until dropped. If it is completely destroyed (-10xHP), it falls off.

A powerful blow may punch through your shield! The shield acts as cover, with “cover DR” equal to its DR + (HP/4). Damage in excess of cover DR penetrates the shield and possibly injures you; see Overpenetration (p. 408). When using hit locations, roll 1d: on 1-2, apply damage to your shield arm; on 3-6, apply it to the location targeted by the attacker.

**Repairs**

Most artifacts cannot heal naturally (although there are exceptions; e.g., exotic “living metal” machines). If they become disabled, they cannot recover until repaired. If they are crippled, the relevant parts require repair or replacement – they can’t recover on their own.

To fix a damaged, disabled, or malfunctioning device requires a suitable skill: Armoury, Electrician, Electronics Repair, Machinist, Mechanic, etc. See individual skill descriptions for what each skill covers. The GM is the final judge of the necessary skill.

**Minor Repairs:** Each attempt to repair damaged equipment that still has positive HP requires half an hour and a successful skill roll. See Equipment Modifiers (p. 345) and Time Spent (p. 346) for common modifiers. As well, if the device costs $1,000 or less, roll at +1. Roll at -1 if it costs $10,001-$100,000, at -2 if it costs $100,001-$1,000,000, or at -3 if it costs over $1,000,000. Success restores 1 HP times the margin of success (minimum 1).

**Major Repairs:** An artifact reduced to zero or negative HP requires spare
parts that cost 1d × 10% of its original price. After obtaining these parts, use the rules above, except that all rolls are at an extra -2.

Replacement: If a device is destroyed (failed a HT roll to avoid destruction, or went to -5xHP or less), it is beyond repair. Replace it at 100% of its original cost.

Hiring Help: Those incapable of doing their own repairs can hire technicians. A typical rate is $20/hour – or higher, if unusual skills are required. Typical skill level is 9 + 1d.

**Breakdowns**

Most real-life equipment failure is due to mistreatment or routine wear – not combat damage. The GM may apply these rules to any complex artifact (anything Unliving).

**Maintenance**

Artifacts that have moving parts, that are unusually complex, or that are routinely under stress require regular maintenance to work properly. This definitely includes all weapons and vehicles, precision optics (cameras, night-vision gear, etc.), and any other equipment more elaborate than a screwdriver or a knife.

Machinery like this requires periodic “maintenance checks” against a suitable technical skill, as explained for the Maintenance disadvantage (see p. 143). The frequency of such maintenance varies. Most commercial ground vehicles require one or two man-hours of maintenance a week. Weapons, especially guns, need cleaning every day or so of use. Large, complex items, such as factories and fighter jets, require numerous man-hours of maintenance per day – if not constant care.

Missed or failed maintenance checks result in HT loss. This HT loss is cumulative, and affects all HT rolls described under Effects of Injury (p. 483) and Slime, Sand, and Equipment Failure (below). To restore lost HT, use the Repairs rules, above. Treat each point of HT restored as a separate major repair.

This rule does not apply to items without moving parts, equipment in storage (not just sitting out in the open!), or any artifact just sitting there, unused, if it has a sealed case.

**Slime, Sand, and Equipment Failure**

Harsh conditions may result in more frequent breakdowns, regardless of maintenance. Whenever an artifact that requires maintenance is carelessly exposed to the elements (e.g., dropped in a swamp, left out in a sandstorm, or buried in volcanic ash), make a HT +4 roll for it. Use its current HT – including any reductions for missed maintenance. If the item lacks a HT score, assume HT 10. In extreme environments (desert, swamp, jungle, etc.), make one extra roll per item per day, in addition to any rolls for specific mistreatment.

On a failure, the equipment breaks down, jams, or otherwise fails; it cannot function at all without minor repairs. On a critical failure, it requires major repairs. The GM may wish to keep the results secret and let the operator discover the malfunction during normal use!

Modifiers: +1 if the PCs take significant time out each day to clean and maintain their gear (GM’s judgment); -1 or -2 if the abuse or the environment is unusually brutal.

**Broken Weapons**

If a weapon is destroyed – that is, it failed a HT roll at -1xHP or below, or went to -5xHP – it is completely useless. But if it is just disabled, it might still be usable.

An extremely light weapon (anything weighing 1 lb. or less, such as a dagger) or a missile weapon (sling, bow, firearm, etc.) is useless even when merely disabled.

Other weapons sometimes remain partially usable when disabled. Roll 1d and consult the appropriate paragraph below. Where the weapon effectively becomes a different kind of weapon, figure skill and damage according to the new weapon type!

**Axe/Mace Weapons:** On 1-3, the head breaks off, leaving you holding a light club. On 4-6, the weapon is smashed beyond use.

**Polearms:** On 1-2, you’re left holding an 8-foot pole; treat as a long spear that does thrust+2 crushing damage. On 3-4, you’re left with a quarterstaff, and there’s a very clumsy (-4 to hit) axe with reach 1 lying in front of you. On 5-6, you’re left with a light club and there’s a clumsy (-2 to hit) “great axe” with reach 2 lying on the ground.

**Rapiers and Small swords:** On 1-3, treat a broken smallsword as a dagger and a broken rapier as a smallsword; damage is still impaling! On 4-6, the blade snaps off at the hilt; the weapon is useless.

**Spears:** On 1-3, the head breaks off where it joins the shaft, leaving you with a quarterstaff. On 4-6, the spear breaks further down; you have a baton, and there’s a spear with reach 1, doing normal damage, lying in front of you.

**Swords (broadswords, greatswords, katanas, shortswords, etc.) and Sabers:** On 1-3, the blade breaks off at the halfway mark, losing its tip. It can still make a cutting attack at -2 to damage, but it is useless as an impaling weapon: a thrust does thrust crushing damage. If the sword was reach 2, it is now reach 1. On 4-6, the blade snaps off at the hilt; the sword is useless.

**Two-Handed Axe/Mace Weapons:** On 1-3, the head breaks off where it joins the shaft, leaving you with a quarterstaff. On 4-6, the weapon breaks further down; you have a light club, and there’s a very clumsy (-4 to hit) axe with reach 1 lying in front of you.

**Other Weapons:** Use the closest weapon listed above. The GM has the final say, and may choose to roll if there is more than one way for the weapon to break.
The Game Master (GM) is the referee of a roleplaying game. But that’s putting it too simply. He is like a mystery writer . . . a storyteller . . . an umpire . . . a cosmic bookkeeper . . . the “house” at a gambling casino . . . and (to the characters) a minor deity.

The GM is the final authority. Rules are guidelines . . . the designers’ opinion about how things ought to go. But as long as the GM is fair and consistent, he can change any number, any cost, any rule. His word is law!

Many things are left up to the GM to decide. A game world gets realism from its completeness. The GM adds all the details that make it come alive. With a good GM, even a bad set of rules can be a lot of fun. With a good set, the sky’s the limit. We semi-moderately believe that GURPS is a very good set of rules indeed – but without the GM, the rules are nothing.

Read on . . .

**Customizing the Rules**

Throughout Basic Set, we have included assistance for GMs who wish to tailor the rules to their liking. For quick reference:

- New Advantages (p. 117), New Disadvantages (p. 165), Creating Techniques (p. 229), Alternative Magic Systems (p. 242), Other Powers (p. 257), and Creating Templates (Chapter 15) provide guidelines for creating and customizing character abilities.
- Character Development (Chapter 9) presents options for handling character advancement.
- Tactical Combat (Chapter 12) and Special Combat Situations (Chapter 13) add optional extra detail to Combat (Chapter 11) for action-oriented campaigns.
- Sections titled “Optional Rule” offer tested, optional add-ons. Examples include Limited Enhancements (p. 111), Wildcard Skills (p. 175), Malfunction (p. 407), Maintaining Skills (p. 294), Influencing Success Rolls (p. 347), and Extra Effort in Combat (p. 357). Even a novice GM can quickly customize the rules by specifying which options are “turned on” in his campaign.

**Choosing a Campaign Type**

Before you make any other decisions, you should discuss the style of your campaign with your players. There are many alternatives:

- “By-the-book” vs. “tweaked” (with many GM rules interpretations).
- “Realistic” vs. “cinematic” (see The Cinematic Campaign, p. 488).
- “Humorous” vs. “serious.”
- “Puzzles and mysteries” vs. “combat and adventure.”
- “Death is common and permanent” vs. “death is rare or easily remedied” (by magic or high technology).
All of these are legitimate approaches to roleplaying, but if the players and GM have different expectations, everyone will end up disappointed. The game should be a story that develops in play – not a battle between the players and the GM*. To achieve this, a little mutual understanding is necessary. A few minutes of pre-game discussion can increase everyone’s enjoyment.

“I want a story about great battles and wars and bravery and heroes and villains.”
“I see . . . And what does your sister want?”
“. . . She says she wants to hear a true story.”
“Very well, then. I will give you both what you want. A story about great deeds. About armies of light and soldiers of darkness. About the places where they lived and fought and loved and died. About great empires and terrible mistakes. A true story.”

– Luc Deradi and Emperor Londo Mollari, Babylon 5: In the Beginning

**POWER LEVEL**

A crucial step in choosing a campaign type is determining the number of character points the PCs start out with. This has a direct impact on the campaign style: powerful heroes stampede through realistic challenges with cinematic ease, while a lighthearted romp for supers might be a deadly nightmare for normal humans.

As the GM, the surest way to choose a suitable power level is by “feel.” During the course of your first few campaigns, you’ll learn how your players spend their points – and how their PCs cope with the adventures you cook up. You can use this experience to choose a good power level for your next campaign. But that won’t help you this time, so you might wish to choose the most appropriate power level off the list below.

Some example power levels, with suggested starting points for the heroes:

**Feeble (under 25 points):** Small children, mindless thralls, zombies, etc.

**Competent (50-75 points):** Athletes, cops, wealthy gentry . . . anyone who would have a clear edge over “average” people on an adventure.

**Average (25-50 points):** Ordinary folks, such as accountants and cab drivers.

**Heroic (100-200 points):** People at the realistic pinnacle of physical, mental, or social achievement; e.g., Navy SEALs, world-class scientists, and millionaires. Most full-time adventurers start their careers at around 150 points.

**Larger-than-Life (200-300 points):** Leading roles in kung fu movies, fantasy novels, etc. Typical of the professional adventurer who has already made a name for himself.

**Legendary (300-500 points):** Protagonists of epic poems and folklore. This is the best power level for “gritty” supers and for mortals who rub shoulders with gods.

**Superhuman (500-1,000 points):** Those who have transcended humanity (e.g., supers who can take on tanks barehanded) and powerful creatures of fantasy (e.g., dragons who can best entire armies).

**Exceptional (75-100 points):** Star athletes, seasoned cops, etc. With a little experience, these individuals could become full-time adventurers.

**Superhuman (500-1,000 points):** True demigods who can do as they please most of the time.

**HIGH-POWERED CAMPAIGNS**

Player characters built on a high point total can tax the GM’s ability to provide meaningful challenges, weaken the integrity of the game world, and push the limits of game balance. As a result, high-powered gaming merits special discussion.

“High-powered” is a subjective term – these guidelines assume PCs with well over 200 points. Even so, most of this advice stands at any power level!

**Character-Design Problems**

Some players spend lots of points in one area, resulting in PCs with abusive levels of ability. Others use their ample points to prepare for almost every conceivable situation, thereby poaching on the territory of more focused PCs. And still others try to do both, investing many points in a single trait and then coming up with “creative” ways to use that ability in place of almost everything else. A few countermeasures:

**Offer a broad selection of abilities.** In a high-powered game, there should be all manner of expensive options available to soak up points: great wealth, exotic advantages, magic, psionics, powerful racial templates . . . preferably several of these. Let your players know what is available, and use the expanded rules for special abilities whenever possible.

**Divide starting points between “base points” and “experience points.”** Consider giving the players only a fraction of their starting points to begin with. Ask them to create focused, balanced characters for your approval. Once you approve a PC, give the player the rest of his points to spend as if they were earned in play – which means he cannot acquire large numbers of new advantages, or new skills that don’t fit his character story.

* For those who want a battle between the players and the GM, we recommend our Munchkin RPG series: www.sjgames.com/munchkin/rpg/. Really.
Require certain abilities. Heroes can be worth a lot of points without giving the players control over every last point. A modest discretionary budget in combination with a fixed set of abilities works well. For instance, every super might have a package of “mutant abilities” (effectively a racial template) and get 200 points to spend however he wants; every commando might start with a 100-point “basic training” template and get 50 points to customize with.

Require certain categories of abilities. If required abilities seem too rigid, consider requiring PCs to have a certain number of points in a few classes of abilities. For instance, secret agents might have to spend at least 10% of their points on each of “social traits,” “combat abilities,” and “technical skills”; supers might have to spend at least 20% of their points on each of an attack, a defense, and a movement power.

Limit attribute levels. Attributes affect so many things in the game that a PC with lots of points in attributes can sometimes cause problems. To combat this, set an upper limit on individual attribute scores or on total points allowed in attributes.

Emphasize the value of relative skill level. When a character concept calls for many skills, there is a temptation to buy high attributes and put relatively few points into skills. This might be a cheap way to get good skill levels, but it leads to “attribute inflation.” To encourage more balanced designs, tell your players that you intend to make heavy use of the Relative Skill Level rules on p. 171.

**GM Limitations**

Even balanced high-powered PCs can wreak havoc on your adventure or game world if you aren’t ready for them! Here are a few ways to prepare for a high-powered game:

Know the heroes’ abilities. There is a lot of information on the character sheet of a powerful PC. If you are not familiar with all of it, the game can grind to a halt when the player invokes a rarely used ability. Even worse, a forgotten ability can lay waste to your careful plans!

Know the rules. The more abilities the heroes have, the greater the number of special rules that will see use during the game. Do your reading before the game begins. This keeps things moving and prevents players who like to abuse high-powered abilities from ruining the game for everyone.

**Fit the challenges to the heroes.** Read through your campaign notes with the PCs’ character sheets in hand. This simple procedure will often alert you to foes, mysteries, and dangers that will not challenge the heroes’ abilities, and gives you an opportunity to patch these holes before the players drive trucks through them.

**Present a variety of challenges.** Make sure the heroes cannot meet every challenge with Guns-20 or Fast-Talk-25. Run the game in such a way that single-focus characters have to rely on their friends for help. At the same time, be sure that a few success rolls involve sufficiently large penalties that jack-of-all-trades characters have to defer to the true experts in the group.

Know the stakes. Campaign power level doesn’t just determine the heroes’ abilities and the scale of the threats they face – it sets an upper limit on any imbalance between the two. Challenges that are merely amusingly weak or annoyingly tough in a low-powered game might become boring or lethal when scaled up to a higher-powered one. Be ready to think on your feet! If the heroes are chewing up the opposition so easily that the players are yawning, have tougher reinforcements show up; if they are getting mauled, give them a lucky break.

Be flexible. Powerful PCs can do more, which makes it tricky to second-guess them. Again, you must think on your feet. Don’t penalize your players when they finesse your plot with their abilities . . . but when they use their powers as blunt instruments to knock holes in the plot, be ready to come up with creative countermeasures that look like you planned them all along.

**System Limitations**

**GURPS** is designed to work at any power level, but it is impossible to offer a special rule for every combination of “problem abilities” possible in a high-powered game. When the rules do not handle a situation well, try one of these fixes:

Use optional rules. In many cases, optional rules exist specifically to deal with high-powered characters – for instance, *Maintaining Skills* (p. 294). Such rules can often make the difference between a playable and unplayable game.

“Psychic, though? That sounds like something out of science fiction.”

“We live on a spaceship, dear.”

– Wash and Zoe, Firefly

Exercise judgment. If a rule implicitly assumes a certain power level, and the PCs are beyond this, feel free to extrapolate. For instance, *Task Difficulty* (p. 345) lists penalties down to -10, but if your campaign includes heroes with skills of 25 or 30, there is nothing wrong with assigning a penalty of -15 or -20!

**The Cinematic Campaign**

For the most part, **GURPS** stresses realism. Heroes can get disappointed, injured, sick, or even dead. So it goes. The GM is expected to stretch realism in an emergency (defined as “whenever realism would ruin the game”), but the rest of the time, realism rules.

The “cinematic” campaign is one where realism doesn’t rule – because if it did, it would constantly get in the way of the story. In a cinematic campaign, swashbuckling heroes can defeat dozens of foes because the story calls for it. Spacecraft whoosh or roar in the silence of space because fast things whoosh and powerful engines roar. *Rightness* always overrules mere correctness.

The cinematic style of play requires both players and GM to understand...
A place in the world. Cinematic heroes have loved ones, mentors, lovers, ex-lovers, enemies, birthrights, family curses, and so on. They do not simply appear, play their role, and vanish – they need to be part of the game world, since their story is part of what defines the game world.

Cinematic Play

Cinematic campaigns have certain conventions:

A cinematic world is ordered. Events have reasons – reasons that relate to the story. These might not be obvious, but few things happen arbitrarily and nothing significant happens at random. This doesn’t mean that the plot has to be linear or predestined. Reversals of fortune are common setbacks, and even if the final goal is set in stone, the way to get there is not.

The only details of importance are those that directly advance the story. Unnecessary detail is the bane of cinematic gaming. The GM must know the difference between important details and irrelevant ones. For instance, if the heroes must cross the Burning Wastes to reach the Dark Tower; they will find enough water along the way; the story would be very short if they didn’t, and it would not advance the story much to play out their searches.

The GM must be prepared to overrule any die roll. If the dice determine every outcome, the players learn to put probability ahead of dash and style. Furthermore, the dice can be as tyrannical as a heavy-handed GM; the players are likely to revolt if a brave adventurer dies suddenly from a random disaster! On the other hand, the GM must not overrule the dice so often that the players feel as though nothing they attempt can change the outcome of the story.

The GM must allow dramatic actions to succeed. If the hero tries to swing from the chandelier, the player must have confidence that the GM will not sneer at him and announce that he has broken his back – and must now play a quadriplegic – because his hands slipped off the wax caked onto it. The GM certainly shouldn’t bog down play by requiring endless skill rolls modified by the dimness of the tavern!

The players must not take inappropriate advantage of conventions. Yes, the heroes will make it across the Burning Wastes – but they must still make proper preparations. A player who remarks, “Don’t worry about water. We’re heroes; we’re sure to find some,” is playing in the wrong campaign. The players must provide dialog and attitudes in keeping with the style of the campaign.

The GM must handle heroic deaths satisfyingly. An epic death cannot be purposeless. If a PC dies, he dies gloriously – bravely saving his comrades’ lives, or taking an impressive number of foes with him. Fate (in the person of the GM) will be generous. There is no need for stinginess, as the PC won’t be around to be a problem later on! The players must not abuse this convention. A dying hero might be almost invincible . . . but only if he’s selling his life to take action that directly advances the plot.

Damn the Rules, Full Speed Ahead!

Many gamers prefer a “rules-light” game, in which the action moves along quickly rather than being bogged down in die roll after die roll. This is similar to cinematic gaming, but it is possible to have a quick, realistic game just by choosing which rules you use. For instance, combat slows down a lot when the GM uses hit locations or critical hit and miss tables – so leave them out. Rather than fuss with the detail of selecting a dozen skills to round out a character, use a wildcard skill – and maybe a Talent or two (p. 89) to boost that skill even more. If the GM and players want a free-wheeling, fast-paced game, it’s easy to do – just pare GURPS down to its essential elements and be willing to make a lot of judgment calls on the fly.
STARTING A GAME SESSION

There are a few things the GM should do before play actually starts, to make things easier for himself and the players:

Introduce the characters. If you are in the middle of a continuing campaign, you can skip this step! But if you are just starting out, each player should have the opportunity to describe “himself” or “herself.” If there is an artist in the group, he may help by drawing the characters as they are described.

Check for skills, etc. improved since the last play session. In a continuing campaign, the PCs earn character points that they can spend to improve their abilities. Sometimes the PCs can study, work at jobs, etc. between play sessions. Therefore, some characters may have better skills or abilities than they did last game session. This is the time for the players to work out such matters with the GM. (If everyone in the group has net access, it might be better to work on this via e-mail between games, to avoid slowing things down.)

Fill out the GM Control Sheet. While the players are getting to know each other (or each other’s characters), the GM should check over the character sheets, make sure everything balances, and copy necessary information onto a GM Control Sheet. This reference lists attributes, secondary characteristics, special advantages and skills, etc. for each PC. When the GM rolls in secret to determine who sees something, who understands something that everyone sees, who resists a spell, or who that bad-tempered dwarf takes a dislike to, this sheet is valuable.

Brief the players. Tell them what’s going on, give them some idea what the adventure will be about, and (in a continuing campaign) refresh their memory about the last game session. There are many ways to do this. You can always just tell them. But it’s much more fun to start play and then “set the scene.” Let the characters immediately find a map or old book . . . meet someone who tells them an interesting rumor . . . befriend someone in need of help . . . witness a wrong that needs righting . . . or whatever.

Let the game begin!

Advance Preparation

There are several things for the GM to do well in advance, before the players arrive on the scene:

Prepare the adventure. If you are playing a prepared adventure, all you need to do is read through it, and possibly make up some character sheets. But if you are designing your own adventure, you may spend weeks of work – a labor of love – before it is ready for the players. In any event, be sure you’re fully familiar with the adventure before the players show up!

Brief the players about the adventure. If your players are already familiar with the system, you should tell them in advance (before they arrive to start the game) what sort of characters are “legal” and how much money, equipment, etc. they are allowed – and perhaps give a hint about useful skills. If everyone has his character made up in advance, you’ll be able to get right to the action when the players arrive.

Set up the play area. You need pencils, paper, and dice; maps and miniatures if you are using them (and a table to play them on); and a supply of snacks (for yourself, if not for the whole group)!

Who’s Got the Sheets?

Much of the advice in this chapter assumes that you, as GM, have access to the character sheets during the planning process, or at least are maintaining a detailed GM Control Sheet. Some GMs ask the players to leave their character sheets with them, both because it helps them plan and because then the players can’t lose them. However, there are situations (for instance, a campaign in which GM duties rotate through the group) where that’s impractical – and some players really don’t like to give up that much control. You should at least have a control sheet with each PC’s primary abilities, updated as major changes happen. It’s not as good as having the actual character sheets, but it’s much better than trying to plan and run the game blind. Of course, a photocopy or digital copy is even better!

To Screen or Not to Screen?

Many GMs prefer to use folders, books, or other opaque items to screen their notes and die rolls from the players. Others find that it distances them from the game, and like being right out with everyone else. This is largely a matter of taste; we point out only that there are situations in which a GM should roll secretly, and you should have some easy way to do that.

Maps

The GM may wish to prepare maps in advance, to help him plan and to keep track of events. He may also give maps to the players as clues. And the players themselves might want to map their progress – whether it be through jungles, dungeons, or downtown New York City – to make sure they can find their way back . . .

Maps in GURPS use hexagons, or “hexes,” to regulate movement and combat. Each hex is adjacent to six other hexes. See Hexes (p. 384).
Player-Made Maps

Whenever the PCs enter an area for which they have no map – be it a dungeon, a laboratory complex, or a network of jungle trails – the players will want to map it themselves. (That is, they will if they are smart!)

However, mapping is not trivial. Unless the party carries a tape measure and spends a lot of time using it, you should *not* tell them, “You go 12 yards down the stairs and turn north. The tunnel is seven feet wide and nine feet high. It goes north for 120 yards and then turns northeast. In another 20 yards, it opens out into a room 10 yards by 6 yards.” That sort of information would require several minutes per measurement and a skill roll against Mathematics (Surveying) – not just a stroll through the tunnel!

Instead, give them information like this:

“You walk down the stairs – they go down a little farther than an ordinary flight of stairs. At the bottom, there’s a tunnel going right. It’s wide enough for two to walk side by side, and so high you can barely touch the ceiling with your swords. It goes on for a ways in a fairly straight line . . .”

“How far?” asks a player.

“Is somebody pacing it off? Okay. Around 128 paces. It then turns to the right a bit . . .”

“How much?”

“Did you bring surveying tools? Anybody got Absolute Direction? No? All right. Standing at the intersection, with the old tunnel behind you at six o’clock, the new tunnel looks like it turns away at between one o’clock and two o’clock. Got that? Now, it goes along for another 19 or 20 paces, and then opens out into a big room. The door is in the middle of the long wall. The room is roughly rectangular. From where you stand, it might be 10 yards long, 6 or 7 yards wide.”

Very different, yes? But also much more realistic. The players receive only the information the PCs actually get with their senses. In the example above, the GM fudged all the distances a little bit, assuming that whoever was pacing would have a standard pace a bit less than a yard.

If you do this, the players might come up with ingenious ways to measure time and distance. Let them!

Note that if mapping is difficult in ordinary circumstances, it becomes next to impossible if the party is in a hurry! Suppose the group is being chased through the area described above. The GM would say:

“Okay. You’re running? Stop mapping. Here’s where you go. Down the stairs! Turn right! Run for several seconds! The tunnel bends to the right! Run a little farther! You’re in a room!”

And so on. When the party stops running, they can sit down and try to remember where they went. (Eidetic Memory is a big help here!)

Mapping Overland Journeys

If the PCs are traveling through unexplored territory, the players may wish to keep a large-scale map. The GM may make it automatic if they are following rivers, canyons, and the like. If they are trekking through featureless wastes, or trying to map a specific tiny inlet of a great river, making a map good enough for others to follow requires a Cartography roll. This defaults to IQ-5, Geography-2, Mathematics (Surveying)-2, or Navigation-4. Absolute Direction is good for +3 to the roll.

This can be an adventure in itself: the party is sent to explore and map the trackless waste, virgin planet, mysterious dungeon, steaming jungle, dead city, or whatever.

Travel Maps

Draw these maps to any convenient scale. Examples include maps of continents, highways, and cities. These are purely for information; they are not “playing boards.” In a modern adventure, the players have access to travel maps. In a far-past or far-future campaign, the travel map might be the GM’s secret. (*Finding* a map can be a great adventure objective.)

Area Maps

The standard scale for these maps is 1” = 18’ (6 hexes). Each hex is still one yard across – it is just drawn to a smaller scale. Use this scale to map an entire building, dungeon, arena, etc., and use a different sheet for each floor or level, indicating shafts and stairways. Mark each room (or other point of interest) with a letter or number for use with a map key.

For each room, the map key should give:

- **Its size (although this might be clear from the area map).**
- A general description.
- A description of the people or creatures in the room, if any. This may be as simple as “Two ordinary wolves,” or as complex as “This room is empty except between midnight and 9 a.m., when two guards are there. There is a 50% chance that each one is asleep. They are ordinary guards from the Character List, but one of them also has a gold ring worth $200. They will surrender if outnumbered more than 2 to 1, but will not cooperate, even if threatened with death.”

- If necessary, any special notes about the room, and descriptions of anything that might be found if the room were examined carefully.

- If necessary, a room map (see below) to show the precise location of furniture, characters, etc.
The GM should keep this sort of map secret from the players – although they can try to make their own map. He may wish to place a marker on the area map to show where the party is at any given moment.

**Room Maps**

Draw these maps to any convenient scale. A useful scale is 1” = 6’ (2 hexes) – half the size of a combat map. Use these maps when you need to sketch a room in some detail but do not want to draw up a combat map.

**Combat Maps**

Combat maps are drawn to a scale of 1” = 3’; each hex is three feet, or 1 yard, across. When the characters enter an area where combat might occur, lay out a map and have them place their figures on it to show exactly where they are. If combat occurs, play out the fight on the combat map.

Treat any partial hex as equal to a full hex. This allows a realistic representation of either a hex-walled room or an irregular cavern.

---

**RUNNING THE GAME**

The GM’s task during the game is simple. All he has to do is listen to the players describe what they’re doing, then use the rules of the game to tell them what happens, so they can describe what they want to do next . . . and so on. Well, perhaps it’s not quite that simple!

The sections below will help you, as GM, determine “what happens next” in a variety of situations. But the most important things are not “rules” at all, but guidelines for good GMing.

*Use common sense.* When any rule gives a silly result, follow common sense instead. No matter how much we playtest, no rules are perfect – including these. Don’t let the players turn into “rules lawyers.” Your decision is final.

*Be fair.* Give all the players an even chance, and try to keep all of them involved in the action. And when you change a rule or make a special exception, apply it equally to everybody.

*Keep the action moving.* A roleplaying game is like a story. As the GM, you’re the author. Your main characters have free will, and often the story goes where they want it to go! But when things lag, it’s your job to liven them up. Improvise an encounter . . . introduce a clue . . . do something to get things back on track, or to help the players get some ideas.

*Don’t lean on formulas.* This definitely includes the various formulas in the rules! Use them when you need them – but don’t let them become crutches. And don’t let adherence to a formula spoil the game. For instance, if the hero really needs to lift that rock to keep the action going, let him lift it.

*Thou shalt not kill.* Not much, anyway. In some RPGs, life is cheap. A GM doesn’t think he’s doing a good job unless he slaughters half the party within the first hour of play. But most players don’t find this fun. GURPS allows complete, detailed character creation. It’s a shame to turn such carefully crafted characters into cannon fodder. Remember: good adventure stories don’t kill off their heroes without a reason. This is discussed in greater detail below; see *Keeping The Characters Alive* (p. 496). Of course, if you and your players really like hack-and-slash games, go right ahead . . .

---

**SETTLING RULES QUESTIONS**

In any question of rules, the GM’s word is law. The GM decides which optional rules to use, and settles any specific questions that come up. A
good GM discusses important questions with the players before deciding – and a good player accepts the GM’s decisions.

The GM should know the rules thoroughly. When the rules do not cover a situation – or when a decision about the “real world” is needed – the GM can use several techniques:

Success rolls. A “success roll” is a roll that tests one of a character’s attributes, skills, etc. – see Chapter 10. Use a success roll when a question arises about someone’s ability to do some particular thing.

Random rolls. A random roll is often best for a question like “Are the keys in the car?” or “Does one of the soldiers have a horse the same color as mine?” The GM decides what the chances are, then rolls the dice. Some things have a 50-50 chance; others are highly unlikely. The GM decides what the odds should be, and leaves the rest to fate.

Arbitrary fiat. You don’t have to use the dice at all. If there is only one “right” answer to fit the plot of the adventure – then that’s the answer: “Luckily for you, the grenade bounced down the stairwell. Nobody was hurt. But now the guards are alerted!”

DEALING WITH THE PLAYERS

Players are individuals, with opinions and biases, and there will be times when the GM needs to keep the peace. Here is some advice for doing just that.

Arguments

As the GM, you should always listen to reasonable suggestions from the players – and if you make a mistake, you should be willing to reverse your decision. But you are the final authority, and the court of last resort. If you make a decision that you think is fair, and someone insists on arguing . . . invite him to leave the game, temporarily or permanently. Games are fun. Arguments aren’t. (The other players may step in and shut this down before you get a chance. Let them!)

“I changed my mind!”

Certain players try to “take back” actions when they suffer bad consequences. Don’t let them do it unless they could realistically have changed their minds in time to avoid trouble.

If George says, “I’m dropping the nitroglycerine,” and you roll the dice and tell him, “It just blew up. Take 3d damage,” George can’t take it back. But if George says, “I’m setting fire to the building,” and then changes his mind – let him. “All right. You lit the match and found some newspaper, but then you changed your mind. Stomp out the newspaper: Buildings don’t burn that quickly, so George had time to reconsider. (If George had used a flamethrower, of course, it would be different!)

In general, if a player announces that he is performing an irrevocable act . . . he really did it, and that’s that.

Follow the Leader

If the players select a leader, the leader should speak for the party, telling the GM what they are doing – except in emergencies. Then, it’s every man for himself. The leader can give orders, but he cannot enforce them unless his character can enforce them in the game world. If the leader appeals to you for help, tell him, “You’re the leader. You keep discipline.”

Table Talk

If your players are too noisy, tell them, “If you say it, your character says it.” This means that the characters cannot be stealthy unless the players are quiet, and the characters cannot make a speedy decision unless the players decide quickly. Enforcing this rule can save the GM’s sanity, especially if he has a large group.

PLAYING THE NPCs

A “nonplayer character” (NPC) is anyone played by the GM. The GM gets to play dozens of characters throughout an adventure – from chance-met travelers to powerful patrons and villains.

As the GM, you may create your NPCs in any way you like. You should design important NPCs just like player characters, but you can give “cannon fodder” and “bit players” logical abilities by using templates (see Character Templates, p. 445) or by assigning appropriate traits on the spur of the moment without regard to point value.

Once you create an NPC – major or minor – play the role! Your NPCs will try to earn money, look important and admirable, protect their skins, and achieve their goals – just like anybody else! The more skilled you become at roleplaying, the better a GM you will be and the more fun you (and your players) will have.

Some of your NPCs will automatically be friendly to the PCs; others will be “natural enemies.” These reactions will be preset when you work out the scenario. But many NPCs have no “automatic” response to the PCs. Instead, you will use the Reaction Table (p. 560) to see how they respond.

Playing the Adversary

When the GM plays an NPC who is an enemy of the PCs, he should try to limit his knowledge to those things that the NPC would really be aware of. The GM knows all about the party’s strengths and weaknesses – but their enemies don’t. One good way to solve this problem is to have another person play the adversary characters.

The GM should tell the Adversary as much as possible about the characters he is to play. But the Adversary should know no more than is “realistic” about the overall situation. In particular, he should know very little about the PCs and their abilities – especially at the beginning of an adventure! For total realism, you might even want two Adversary players – one for knowledgeable enemies who are familiar with the party, and one for stupid cannon fodder.

The Adversary is like an “assistant GM.” His job is to roleplay the foes as well as possible. He should not play them as mindless killing machines (unless they really are). If the “appropriate” thing for those particular enemies to do is to attack, they should attack. But they might also throw rocks from ambush, shout insults, or even run away immediately!

In any disagreement between the Adversary and the GM, the GM’s word is law. But a good GM gives the Adversary as much leeway as possible, and takes any disagreement into another room to avoid distracting the players.

Playing the Adversary is a good way to build up experience if you would like to be a GM someday.
Gaming Online

If you don’t have a gaming group in your area, or you still want to game with college buddies who are scattered all over the country (or the world!), you may want to try roleplaying online. There are a number of ways to go about it:

**Play by e-mail (PBEM).** In this style of play, the GM describes the scene for everyone. Each player then sends his next “move” to the GM, who compiles everyone’s moves, figures out what the NPCs are doing during that time, resolves all the actions, and sends out the next installment.

Advantages: no one is forced into hasty action; just about everyone with any sort of net access has e-mail, and it works just as well on a 10-year-old computer as it does on the newest model; the GM can attach files to the messages if he wants to show the players something their characters would see; games aren’t held up waiting on the perpetually late player to arrive; and no one can steal your munchies.

Disadvantages: it is a lot more work for the GM, especially if he is a poor typist; a single encounter can take weeks to complete if the players are slow about replying; and it’s just about impossible to run any detailed combats – in fact, many PBEMs actively avoid combat.

**Play by real-time chat (IRC, M*, instant message, etc.).** A compromise between e-mail and face-to-face gaming is using an online chat room or instant messaging service. This has many of the good and bad features of both approaches – games have to be scheduled, but the players don’t have to be in the same physical location; it’s possible to have real-time interaction among the players, but if someone is a slow typist, he bogs the game down (or gets left behind); no one steals someone else’s munchies, but no one buys the GM pizza, either. Some chat sites do have dice rollers, however, which makes gaming easier.

**Massively multiplayer online RPGs.** These are computer games that allow the players and GMs to interact online. Some let you use any game system you like; others come with built-in rules.

We have made some efforts along this line, but so far nothing has come of them. It definitely seems that MMPORGs are the future of online gaming for many people. These are getting better all the time, and rather than discuss the state of the art as of this printing (which will be outdated in six months and laughably crude in two years), we’ll just mention them and suggest that you ask around for help getting started.

**Other Online Resources**

Even if you aren’t gaming online, there are lots – no, lots – make that LOTS – of great places to find support for your tabletop GURPS game. Here are a few:

**Pyramid.** Our online magazine is not a “house organ” – it covers games from across the industry – but it does have a lot of GURPS content, with more added just about every week. The archives of the print issues of Pyramid (and its GURPS-only predecessor, Roleplayer) have many articles which have never been adapted in later GURPS publications. With an online chat zone (including gaming areas), message boards, and new content every week, Pyramid is a steal.

**e23.** Our new e-publishing venture has both out-of-print and brand new adventures and source material. It is also growing all the time, so check back frequently to see what new items we’ve added!

**Our website.** The SJ Games web page is loaded with extra content (and, eek, errata fixes) for almost every GURPS book ever published. It also includes downloadable software to help you run games in person or online. Our webforums cover everything we do, including, of course, GURPS, and are a great place to ask questions.

**URLs**

And here are the URLs:

SJ Games main page: www.sjgames.com
GURPS main page: www.sjgames.com/gurps/
Forums: forums.sjgames.com
Pyramid: www.sjgames.com/pyramid/
e23: e23.sjgames.com
GURPS errata: www.sjgames.com/errata/gurps/
GURPS Online: www.sjgames.com/gurps/online –

As of this writing there is nothing at that page but an announcement of a canceled project, but if something new happens, that’s where it’ll be.

REACTION ROLLS

When the PCs meet an NPC whose reaction to them is not predetermined (see below), the GM makes a “reaction roll” on 3d. The higher the roll, the better the reaction. The GM then plays the NPC according to the guidelines on the Reaction Table.

The GM should keep this roll secret from the players. They don’t know, for instance, whether that friendly-looking old farmer is giving them straight advice or sending them into a trap.

A reaction roll is not a success roll. There are three important differences:

1. There is no “target number” to roll against.
2. A high roll is good, not bad.
3. Reaction modifiers apply directly to the die roll. A reaction bonus is any factor that will make NPCs friendlier, while a reaction penalty is something that will bias NPCs against the PCs.

Some common reaction modifiers:

**Personal appearance and behavior.** This is especially true for the PC who does the talking! Above-average
appearance gives a bonus, as do such traits as Charisma, Fashion Sense, Pitable, and Voice. In most situations, so does a high apparent Status. Below-average appearance and many disadvantages give a penalty.

**Skills.** A successful roll against a skill appropriate to the situation can give +2 to reactions. Examples include Administration when dealing with bureaucrats, Carousing when partying, and Politics when interacting with politicians. In a few cases, skill 20+ gives an automatic +2 to reactions. Diplomacy and Fast-Talk work this way if you are allowed to talk – as does Merchant skill, during commercial transactions. The GM may give similar bonuses for other skills.

*Racial or national biases.* Elves don’t like dwarves, Frenchmen don’t care for Germans, and so on. These are usually penalties, and take the form of a Social Stigma disadvantage for the PC or an Intolerance disadvantage on the part of the NPC.

Appropriate behavior by the players! Here’s a chance to reward good roleplaying. A good approach should be worth +1 or more! A wholly inappropriate approach that antagonizes the NPCs should give the party -1 or -2 on the reaction roll. Don’t tell the players, “You blew it!” – just roleplay the offended character, and let them figure it out.

Random reaction rolls are great when they add a note of unpredictability to the game – this is more fun for the GM, too! However, never substitute random die rolls for reason and logic.

**Predetermined Reactions**

Certain NPCs might have reaction modifiers (mostly bad) worked out in advance. For instance, a street gang might have a -5 reaction to anybody.

Predetermined reaction penalties sometimes come with a “best-case” reaction. Treat any reaction better than the best-case reaction as the best-case scenario; do not roll again. For instance, a mountain man might be a loner, with a -2 reaction to any outsider – and no matter what, his reaction will never be better than “Neutral.” In this case, the GM would lower any reaction better than Neutral to Neutral.

**Predetermined bonuses and worst-case reactions** (e.g., “never any worse than Neutral”) are possible for unusually friendly NPCs.

**Second Reaction Rolls**

If the players get a reaction roll they don’t like, they may change their approach and try again (unless the first roll started a fight!). Changes in approach include offering a bribe, offering a better deal, having someone else ask, presenting new information, and using a particular skill (see below). If the NPC, as played by the GM, feels that the PCs are becoming a nuisance, apply a cumulative -2 to each reaction roll after the first! The PCs can avoid this penalty by waiting a reasonable time between requests. “Reasonable” is entirely up to the GM!

**Influence Skills**

The PCs can substitute a roll against Diplomacy, Fast-Talk, Intimidation, Savoir-Faire, Sex Appeal, or Streetwise for a regular reaction roll in certain situations – see *Influence Rolls* (p. 359). The GM still applies any modifiers that would apply to the reaction roll, but treats them as modifiers to the skill roll.

**Knowledge**

One challenge of roleplaying is to limit a character’s knowledge to the things he “should” know.

**PC Knowledge**

Part of the GM’s job is to keep players from making use of information that their characters could not know.

**Anachronistic technology.** Players can’t use high-tech knowledge that their characters could not have. If a medieval character wants to invent gunpowder, or build a compound bow, or use moldy bread for penicillin, you don’t have to let him. Of course, *time travelers* can take knowledge into the past.

Similarly, modern characters should not be allowed free use of ancient techniques. Gunpowder is an example *here*, too . . . how many 21st-century people know exactly what to combine to make gunpowder – or how to mix, grind, sieve, and use it without blowing themselves up? Modern characters can always try to “remember” ancient techniques, by making appropriate (and difficult) rolls against History skill or the particular specialty involved.

**Knowledge of history.** If your game is set in the “real” past of Earth, the players – if they paid attention in school! – have advance knowledge of how things “really” came out. Don’t let them use it – unless, of course, they are time travelers from the future. And remember that, in a game, history can be changed – so some of the things the players know might not be true.

**Literacy.** This is important – and lots of fun. If a PC is illiterate, *don’t let him read anything!* It is amazing how many players claim -3 points for a written comprehension level of None in their native language . . . but assume they can still read maps, street signs, and shop windows!
NPC Knowledge

Likewise, the GM and the Adversary should not use knowledge that their characters could not logically possess. This is the main reason for having an Adversary in the first place . . . so the GM can’t use his total knowledge of the PCs against them. The warnings under PC Knowledge apply equally to NPCs, but there are some additional things to watch out for:

Objectives of the party. The GM knows the players’ true objectives; the Adversary may know. But when he plays “ignorant” characters, he must roleplay his ignorance. This might mean that an NPC acts hostile when he “should” be friendly, or vice versa. It also means that when the party sneaks into the castle, the guards can’t all rush to protect the treasure room. They don’t know for sure where the PCs are going!

Abilities of the party. All NPCs – especially adversary characters – should react according to the apparent strength of the party. A simple example: if the PCs are exploring a dungeon populated by roving bands of orcs, each new band should find out the hard way that the party’s wizard uses the Explosive Fireball spell – until some orc escapes to spread the word.

Special weaknesses of the party. If (for instance) two members of the party are deathly afraid of snakes, the adversary characters shouldn’t know this unless there is a way they could have found out. In fact, the GM shouldn’t tell the Adversary things like this in the first place. Let him find out for himself! But even after he finds out, he can’t use this sort of fact unless he is playing a foe who should know.

KEEPING THE CHARACTERS ALIVE

There is a basic contradiction in RPGs. On one hand, the players are looking for adventure, and adventures are dangerous. On the other hand, nobody wants to get killed! The GM must walk a fine line between a “giveaway” adventure – where nobody is in real danger – and a wholesale massacre.

The GURPS rules are designed for two main things: good roleplaying and realism, in that order. “Realism” means that, in any serious combat, someone is likely to get killed or badly hurt. And, since in real life nobody wants to get killed, “good roleplaying” means that most people try not to fight until they have to! That goes for your NPCs as well as the PCs.

Good roleplaying (and having a good adventure) is the most important thing, though. When good roleplaying conflicts with realism, roleplaying should win out. As the GM, you should try not to let such a conflict occur. But if it does happen, tip the scales toward fun.

If they really ask for trouble, let them have it.

In particular, try not to kill too many of the PCs! In a hack-and-slash game, where the PCs are no more than sets of numbers, a death is no loss. In a true roleplaying game, with fully realized heroes who took a long time to develop, losing a character can hurt. That is not to say that PCs can’t die. They can. But in the best games, they don’t die too often.

Keep in mind that RPGs are meant to be fun. They simulate the “reality” of heroic fantasy, not the reality of day-to-day life. An RPG is a story that the GM and the players write together. And in the best stories, the heroes (most of them, anyway) survive and triumph. This is more important than “logic.” Logically, Luke Skywalker would have been shot down . . . Frodo and Sam would have starved in Mordor . . . Tarzan would have been lion-bait before he was six years old. A classic story defies logic, and still you believe it – because you want to. A good game is like that, too.

There are several techniques you can use to keep from killing off your “main characters.” Some of these are totally contradictory. As GM, you’re the boss. Use whichever methods you like.

Intelligent scenario design. Don’t fill your adventures with traps and foes designed to slaughter the PCs. Design a scenario to make the players think and roleplay, and to give them a fair chance – or perhaps a better-than-fair chance, since they are the heroes.

Realistic NPC behavior. Most realistic NPCs won’t risk their own lives unnecessarily. Not every encounter turns hostile; not every hostile encounter turns violent; not every violent encounter involves weapons. Of course, some game worlds are more violent than others, but “life is cheap” usually makes for a very poor game.

Even in a violent game world, enemy NPCs will often have a reason to take the PCs prisoner rather than kill them outright: interrogation, ransom, imprisonment, slavery, sacrifice, or what-have-you. Capture and escape are staples of adventure fiction, which is what the game is all about!

And if the PCs are winning a fight, your NPCs should try to save their skins. In real life, most guards, beasts, or bandits flee – regardless of duty, hunger, or greed – if a fight goes against them. Play them that way.

Realistic NPC abilities. In most game worlds, the PCs start off with more points than the average person. This means that most NPCs are no match for them, physically or intellectually. There are exceptions . . . interesting, dangerous exceptions. But the “man on the street” should have poorer attributes and fewer abilities than the PCs. For the most part, the PCs should be facing inferior foes. This not only keeps the game in balance – it preserves the “reality” of adventure fiction.

This is not to say that an “average” person cannot be dangerous. A 25-point thug can be a nasty fighter, if he takes a couple of disadvantages that don’t affect combat and specializes in ST, DX, and combat training. He is more than a match for a 100-point intellectual in a fight. But a 100-point fighter can chop him to bits.

Safety-net rules. Make use of rules that serve to keep the PCs alive. Let them expend FP for bonuses to defense rolls (see Extra Effort in Combat, p. 357), or even spend bonus character points to buy successes (see Influencing Success Rolls, p. 347). In action-oriented campaigns, consider making Luck a required advantage to give the PCs “rules protection” from bad die rolls.
Deus ex machina. This is miraculous outside intervention that saves the day. The cavalry comes over the hill . . . the starship beams you up . . . the Governor issues a pardon. When the players did their best and things just went totally wrong, arrange a miraculous escape, against all odds. If it was good enough for Edgar Rice Burroughs, it’s good enough for you. Needless to say, the beneficiaries of a deus ex machina should not gain bonus character points from the situation, since they did not escape on their own.

Cheat! When all else fails, roll the dice where the players can’t see – and then lie about your roll. “It worked! You finally got the door open. You rush through and slam it behind you. The orcs cannot follow.” When an “honest” roll would result in a bloody massacre, it is forgivable for the GM to cheat in the players’ favor.

One last note: There will come a time when the players insist on getting themselves killed – through gross carelessness, total stupidity, or even (we can hope) good roleplaying, right down to the bitter end. You can’t rescue them every time . . . that’s no fun, either! If they really ask for trouble, let them have it. So it goes.

**GAME TIME**

“Game time” is the time that passes in the game world, as determined by the GM. It rarely passes at the same rate as time in the real world.

**Time During Adventures**

Combat is played in “slow” time. A turn in combat equals one second, but it might take a minute or more in the real world to resolve that turn, especially if the players are inexperienced or the battle is a large one. Since combat is usually a life-or-death situation, you need to give your players time to think.

Conversations, planning sessions, attempts to escape from traps, and similar situations are played in “real” time. If the players spend 10 minutes discussing how to best approach an NPC merchant . . . their characters spent 10 minutes talking outside the shop.

Routine travel, long tasks, etc., are handled in “fast” time. For instance, when the party is walking along a trail, the GM can simply skip the time between encounters: “You walk for another two hours, and then, coming toward you, you see two young women with long poles . . .” Tell the players when they meet someone, when they enter a town, when night falls, and so on. Just compress the rest of the time. Under some circumstances – a long sea or space voyage, for instance – the GM could compress months of uneventful time into “Nothing happens until July, unless you make it happen yourself.” This is a good time for the characters to dream up some interesting devilry, or to fill out Time Use Sheets for study and self-improvement (see Time Use Sheets, p. 499).

**Time Between Sessions**

If you can’t finish an adventure in one session, just “pause” the game until the next session. For instance, if the party confronts a rampaging Tyrannosaurus just before the session ends, the Tyrannosaurus gets no closer in the real-world week before you can play again.

---

**When in Doubt, Roll and Shout**

Often, in spite of your most careful preparation, something surprising happens. It could be anything. No matter how much you plan ahead, your players will come up with something you didn’t expect.

That’s all right. If they didn’t come up with anything surprising, your duties as GM would be much less fun. But you still have to cope with the problem.

Let’s say, for instance, that the heroes have just discovered the Shrine of the Mother Goddess. Suddenly, they realize that they have been followed! A dozen huge, ape-like creatures stalk through the door and approach menacingly. There are no other exits.

There are several things the players might do, and you’re prepared. If they want to fight, you know the combat stats for the ape-things. If they try to make friends, you know they’ll be dragged away to the ape-cave and fattened up for dinner. If they try to flee, or use magic to make a barricade, you know there is a secret door behind the altar – if they can find it in time. If they try to call on the Mother Goddess, you’ve decided it won’t work – they don’t know the spells or rituals.

However, one of the younger characters panics when he sees the ape-things. Running to the giant statue of the Mother Goddess, he clasps her around the knees and bawls for help. He doesn’t pray . . . he just pleads, like a terrified child. And you weren’t ready for something like that!

Of course, you can just say, “Nothing happens. It doesn’t work,” whenever your players try something original. But that’s no fun.

Or you can always say, “I wasn’t ready for that. Do something else.” But that’s no fun either.

The good GM uses his imagination to match the players’ creativity. In a really dramatic situation, like the one described above, just go with the flow! There’s a very good chance that the Mother Goddess takes pity on that poor, sincere fool. Maybe she swats the ape-things out the door. Maybe she just picks up that one character and holds him safe, leaving the others to fight the apes. Who knows? You’re the GM. In an unusual situation, anything is right if it’s fair to the players and makes the story better.

Whatever you do, it’s a good idea not to let the players know when you are improvising. Let them think you had it all planned in advance. If you want to admit afterward that you were just “winging it,” that’s up to you. But don’t interrupt the flow of the game. Roll the dice, shout “You did it!” (or “You blew it!”), and keep going.
**Time Between Adventures**

If you are running a continuing campaign, you should keep track of time between adventures, so characters can study, travel, and age. This can always be the same amount of time, or the GM and players can simply agree on a "logical" time to pass between the end of one adventure and the beginning of the next. It is often a good idea to let a month or two go by, to allow time for healing, earning money at “ordinary” jobs, and study of new skills – see *Time Use Sheets* (p. 499).

There is also merit to shaking things up occasionally – ask the players what their PCs are doing, and then interrupt their activities with the next adventure! Once in a while, this can be really effective, especially if the adventure is meant to be a “double red alert” emergency. If the party is widely scattered, this might be a chance to try some new techniques, such as one-on-one adventures or play by e-mail. Let them deal with the crisis alone for a bit before bringing them back together. You don’t want to do this too often, however; especially if some of the PCs were in the middle of training for a new skill or long tasks (enchanting, inventing, etc.). Even fictional heroes need some downtime . . .

Alternatively, you can let X days of real time equal one day of game time, all the time. For instance, if X is 7, one day equals one week; therefore, if it has been seven days since your last adventure, seven weeks have passed in the game world.

---

**ENDING A PLAY SESSION**

At the end of each play session, the GM should do the following:

*Discuss the adventure with the players.* What went right and what went wrong – and why? If the session was part of a continuing campaign, the GM should be careful not to give away any secrets!

*Award character points for good play* (see below).

*File away the play material.* NPC records, GM Control Sheet, etc. will all be useful later – be sure to keep track of them! You can often "recycle" NPCs in later adventures.

*Plan the next session with the players.* This is especially important in a continuing campaign. Decide where the game will take up next week, how much game time will have passed, and anything else that the players need to know before the next session starts.

---

**AWARDING BONUS CHARACTER POINTS**

At the end of each play session, the GM should award bonus character points for good play. “Good play” is anything that advances the heroes’ mission or shows good roleplaying – preferably both. But roleplaying trumps mission success! If a player did something totally outside his character’s personality (for instance, if a total coward performed a brave act), this should not be worth *any* points, even if it saved the day for the rest of the group!

The GM is free to award *any* number of points . . . but in general, he should give each player between zero and five points, averaging two or three points, *per session*. The low end is for bad roleplaying or mission failure, while the high end is for good roleplaying or mission success. Remember that a character gets *no* points for a session in which his Dependent is killed, seriously wounded, or kidnapped and not recovered!

The GM might also wish to give an award – perhaps equal to that for a successful play session – upon the conclusion of a lengthy adventure, story arc, or major plot thread. This is *in addition to* any points for the session during which the plot was resolved!

The GM should award bonus points separately (and probably secretly) to each player. The player should record his points on his character sheet if he intends to play that character again; the GM might also want to keep his own record. The player can use these points to develop and improve his character – see Chapter 9.

These are only guidelines. The GM can award as many or as few points as he wishes. Some games call for faster character advancement than others!

**Avoiding Character Inflation**

As GM, you should try to balance the number of points you give out. Characters should improve fast enough to keep things interesting, but not so fast that they outrun their foes and unbalance your campaign. Also, if the original characters are now
A "Time Use Sheet" is a record prepared by the player that describes how his character spends the time between play sessions. (There's a sample on p. 569.) The GM sets the amount of time covered by each sheet. An even number of weeks works best. At the end of each play session, the GM tells the players how much game time will pass before the next session. When they show up for the next session, they can bring the records of how they spent the intervening time.

When an adventure "stops in the middle" — when one play session ends at night in the inn, and the next one starts the next morning — obviously no Time Use Sheet is necessary. Use one when there is a hiatus in an adventure (for instance, when the PCs must wait two weeks to catch their ship). And use one between adventures, to give the characters a chance to rest, earn money, and improve their skills.

GMs: If this seems like too much bookkeeping, don't do it! Feel free to think of a substitute — or forget all this entirely — if it does not add to your players' enjoyment.

There are three major reasons to keep track of time outside of play:

Long Tasks
Characters may have important missions between play sessions. These might be tedious to game out, but extremely powerful, new players — and their characters — are liable to feel useless unless you specifically bring them into the action.

Some of this depends on the background; superheroic types are expected to improve quickly (and their enemies improve, too), while ordinary cops or soldiers gain skills or promotions at a slower pace. In the final analysis, it's up to the GM to determine what is right for his own campaign and his own players.

Controlling Character Development
Given the chance, some players will spend points without regard for their characters' origins and stated goals. Of course, when a player asks to use bonus points to buy a wholly inappropriate ability, you can always say "no." But there are other options:

Discuss all improvements. Don't just let players buy whatever they want — ask them to explain why, especially if they wish to increase attributes! Attempts to make inappropriate improvements most often occur when the player discovers an unintended weakness in his character design and believes the new ability will compensate for it. If the desired ability doesn't fit the character concept, try to discover the perceived weakness and suggest more appropriate alternatives that address it directly.

Keep awards small enough that players must think about their purchases. If players must save points for many sessions to afford larger purchases (e.g., attribute levels and advantages), there is, in effect, a "waiting period." Many players will reconsider their "need" for character-distorting abilities during this time, and instead use their points to raise skills that will be useful during the current adventure. This leads to well-rounded veterans whose skills reflect their actual activities.

Don't make it too easy to learn new skills. If you let the PCs learn new skills whenever they have enough points, their skill lists will eventually grow indistinguishable from one another. If every PC can tackle every task, the players might conclude that their characters no longer have any need for companions. This can break up the party — and possibly the gaming group. It is realistic to learn some skills quickly under pressure, but you should feel free to rule that others (especially magic spells and secret martial-arts skills) are hard to learn except as part of a dedicated career.

Give awards other than points. Give out the occasional award in the form of specific abilities instead of discretionary points. Social advantages — Patrons, Rank, Reputation, Status, Wealth, etc. — make the best awards, as they often make sense as "rewards" in the game world. Another realistic possibility is direct improvement of a well-exercised ability. Few players will complain if you give them a skill level worth four points in a well-used skill instead of two discretionary points!
Sooner or later, every GM wants to write his own adventures – or at least modify store-bought ones to fit his own group. More power to you! Homegrown adventures can range from simple “dungeons” to entire worlds, intricately worked out over a period of years.

WHERE DO YOU GET YOUR IDEAS?

You can get ideas from novels, movies, comics, RPG supplements, other GMs, and of course the players themselves. Whatever your source, you’ll want to come up with enough new twists to keep your players (and yourself) interested.

Some GMs give their players a lot of voice in the type of adventures they will have. If the players want to hunt for treasure, the GM comes up with a treasure-hunting scenario. Other GMs see themselves as Blind Fate, and the players never know what will happen next. It’s all a matter of taste.

ADVENTURE DESIGN

When you design an adventure, you are writing the outline for a story. The full story will begin when the PCs appear on the scene. To set the stage, you must prepare the plot, maps, character descriptions, etc. and a number of “encounters” involving these things.

Level of Difficulty

The first thing to decide is simply how “hard” your adventure is going to be. Are you planning an adventure for four beginning-level characters – or for a half-dozen experienced adventurers?

The rewards should be commensurate with the risks. In a fantasy campaign, don’t let the PCs butcher two halflings and a senile goblin, and then rush back to town with a chest full of gold! (Or, if you do, have the king’s taxman there to welcome them!) The real rewards in this game come in the form of bonus character points (p. 498). These result from good roleplaying, and have nothing to do with the amount of wealth you drag home.

Still, material things have their uses. Ask any fighter who can’t afford to buy armor! Don’t make wealth (or
Continuity

You should also decide whether the adventure needs to fit into (or kick off) a campaign, or if it is just a “one-shot.”

In a campaign, each adventure has to follow naturally from the last one, and leave room for future adventures. It also has to take the PCs into account. If they are famous – or notorious – certain NPCs should recognize them. The adventurers should recognize some of the NPCs, too, and possibly some of the locations in the adventure. Most importantly, the adventure should not render the PCs unplayable no matter what the players do . . . because the whole point of a campaign is to keep playing the same characters!

In a one-shot adventure, however, you have no continuity to worry about. Future play balance is not an issue, and neither is character survival. You can experiment with certain death, transcendence to godhood, and other extreme outcomes without the risk of destroying a campaign.

Background

This is the setting of your story. In what game world does it take place? When and where? What are the events leading up to your tale? Who are the important NPCs, and what are their motives? In short, what is happening behind the scenes, and what is the “big picture?” If this adventure is part of a campaign, a lot of the background is set. If it is a “one-shot,” the background can be sketchy. But if you’re starting a campaign, give the background a lot of thought.

Plot

The “plot” is your plan for the things that are supposed to happen during the adventure. In a simple adventure, the GM guides the PCs from one “encounter,” or scene, to the next. Each encounter starts when the heroes arrive; then it is played out, and the next one can begin.

In a more sophisticated adventure, certain things happen at certain times, regardless of the PCs’ actions. If the heroes must solve a murder, for instance, some clues might vanish if they are not found in time – and others might not exist yet if the investigators come on the scene “too soon.” The murders might even continue as the players investigate (that’s one sure way to eliminate a suspect). Likewise, important NPCs may come and go, with little regard for the adventurers’ wishes. And there is no limit to what can happen “offstage.” Elections, wars, and alien invasions . . . many events can present new challenges.

This sort of plot is harder to write, and demands more from the GM during play. But it gives the players a sense of urgency that is missing in a plain, linear adventure.

Introduction

The purpose of the introduction is to get the players’ characters into your plot so that the game can begin. If the players are not familiar with your game world, you should tell them a little bit about it. If they know the game world (or are part of a continuing campaign), you can just set the scene with a few words and start the action. You should not give them the whole background. In a well-designed adventure, one of the players’ objectives is to find out what’s really going on. Don’t give away all your secrets right at the beginning!

The most hackneyed introduction of all (but still one of the best) is the Old Man in the Tavern: “You are all strangers in town, looking for adventure. You are sitting in the local tavern when an old man comes up to you . . . .” The old man can ask for help, order the PCs out of town, sell them a map, offer to guide them to fame and fortune . . . it doesn’t matter. Whatever he does, he is a mouthpiece through which the GM can give the players a little background and start them off in the right direction.

Dungeons

The term “dungeon” refers to a simple fantasy adventure. Typically, the PCs wander from room to room, killing monsters and grabbing treasure. There is often no rhyme or reason to the contents of the rooms – in children’s fantasy games, every encounter may be rolled randomly!

However, a dungeon setting is good for a beginning adventure; it teaches basic game mechanics quickly. And an underground labyrinth does not have to be “kid stuff” – it can be part of a very realistic background.

A “dungeon” can also be a building, battleship, space station, etc. If the adventurers are dropped into a limited area, with little or no goal except to grab what they can and get out alive, it’s a “dungeon.”

A dungeon is easy to map, since its area is limited. When treasure-hunters go too far, they just run into a blank wall and have to turn around. The typical dungeon is a collection of rooms, connected by corridors, shafts, or tunnels.

Dungeon Inhabitants and Plot

The GM should populate his dungeon (or building, or whatever) with appropriate men, beasts, and monsters. If you are just creating a “hack-and-slash” dungeon, you don’t need to worry about what they are doing there, what they eat, why they attack the party, or anything else – just stock the rooms and go.

Likewise, the “plot” for a hack-and-slash adventure will be very simple. “Joe the Barbarian, with his friends Ed the Barbarian and Marge the Barbarian, went down into a cave. They saw lots of monsters and killed them and took their treasure. A dragon ate Ed. Joe and Marge ran away. The End.”

If you want to create a situation that actually makes sense, you have advanced to the level of adventure design. Congratulations. Read on . . .
Some other good “mouthpiece” characters for an introductory encounter:

- An officer briefing a group of soldiers, spies, supers, etc. to perform a mission.
- An injured stranger who staggers up and gasps a few cryptic last words.
- A strange story in the news (the “mouthpiece” in this case is the person the PCs contact to ask about it – a reporter, a scientist, etc.). The GM might instead let the party witness the mysterious event.
- A storyteller, herald, or town drunk, passing on an interesting rumor.
- A wealthy person who offers to hire the party for a dangerous mission.
- A retired adventurer telling about the treasure he couldn’t quite get.
- A spirit or deity visiting the faithful (or fairly faithful) with commands – perhaps in a dream.
- A villain’s henchman, delivering a threat, ransom demand, or boast.
- A friend of one of the characters – or, for that matter, a total stranger rescued from immediate danger – who needs help.
- A lawyer reading a will, which sends the party on a quest for an inheritance.

The “mouthpiece” NPC can end the introductory encounter by providing the maps, passwords, or whatever else the party needs to start the adventure.

**Maps**

As described under Maps (p. 490), you will need a number of maps – one per area you consider “important” to the adventure. Prepare combat maps in advance for any location where a fight is likely.

The experienced GM can save a lot of time by “recycling” maps. One house is a lot like another; one tavern is a lot like another. And so on. Of course, if you always use the same one, your players will kid you about it . . . “Aha, here we are, back in the Generic Tavern!”

Commercially produced combat maps (from SJ Games, or any number of other companies) can also save time. Often an interesting map suggests an appropriate encounter, helping you to design your adventure!

**NPCs**

Nonplayer characters – whether played by the GM or the Adversary – are vital to an adventure. The GM can even plan an entire adventure around a few interesting NPCs and what happens when the PCs become involved with them!

Design the most important NPCs **before** you work out the encounters and other details of the adventure. Their abilities, personalities, motivations, and backgrounds set the tone for the whole adventure, and give you ideas for encounters and lesser NPCs. Build important NPCs just like PCs, complete with full-scale character sheets and brief character stories, so you can roleplay them well.

Create less-important NPCs – spear-carriers, cannon fodder, shop-keepers, and the like – after you plan the first encounters. You do not need complete character sheets for these characters; all you need are notes on their important statistics. Some trivial characters require no planning at all! If you suddenly need to know (for instance) a skill for one of them, just roll 3d and use the result.

Finally, work out a few “generic” NPCs to use, as needed, in improvised or random encounters. For instance, in an adventure set in a fantasy city, you could prepare a few city guards, a couple of storekeepers, a couple of thieves, and maybe a strolling minstrel or wandering drunk. If you need them, you have them . . . and if you don’t need them now, you’ll have them for next time. Guards, like taverns, can be recycled over and over again!

**Encounters**

An “encounter” is a meeting with NPCs, animals, a trap, or anything else the GM wishes. There are three kinds of encounters: planned, improvised, and random. Ideally, as you run the game, your players should never know which kind is which!

**Planned Encounters**

The GM works these out in advance: when the adventurers come to this place, they meet these people (or animals, or whatever). All the important encounters in your adventure should be planned.

Be aware that few encounters go exactly as planned! You should always be ready to adapt to the characters’ actions. Suppose a planned encounter involves the bouncer at the “Blue Boar” – but the PCs don’t go near there. You can drop a hint to send them there, of course . . . but it might be easier to change your plans and let the innkeeper at their rooming house serve the same purpose. The more flexible you are, the more you can avoid the appearance of manipulating the players. And appearance is more important than reality!

**Improvised Encounters**

The GM makes these up in order to keep the adventure moving along planned lines. The simplest “improvised encounter” is the little old man (looking a lot like the one you met at the tavern) who appears in your path and says, “Turn around! You’re going the wrong way!” Such encounters can provide extra clues, hints toward the “right path,” etc.

Improvised encounters are often necessary when the players do something really unusual. For example, suppose you have the PCs encounter a traveling duke who is beset by bandits. The heroes drive off the bandits and save the duke, who offers to pay them generously to track down a family treasure. The players accept, but conclude that the bandits were after the treasure, too, and decide to hunt them down to find out what they know. Since you only intended the bandits as a means to introduce the duke, you could say, “You can’t find the bandits. You must have scared them off.” Or you could let the party find the bandits and defeat them in a meaningless battle. But it would be more fun to improvise an interesting encounter.

If the heroes skillfully track, overwhelm, and interrogate the bandits, you could reward them with a clue. Perhaps one of the bandits snatched the duke’s heirloom cloak clasp, which broke open when he tried to pry the jewel from it – revealing a fragment of an old map!

**Random Encounters**

The GM might wish to generate some encounters at random. One technique is to use a “random encounter table;” a list of encounters keyed to a roll of the dice. See Sample Encounter Table (p. 503) for a simple example. Some “adventures” consist
Fantasy adventures traditionally feature a variety of traps. The novice designer can overdo this, with a crossbow behind every door and a pit in every corridor. If this doesn't kill the whole party, it slows the game to a crawl as they check everything in sight for traps—and then check again, to make sure. But a few strategically located traps can make an adventure more interesting.

All of the above remains true in other genres! A criminal stronghold or millionaire's mansion might hold some unpleasant surprises in store for the unwary intruder: Primitive natives encountered by explorers might have some upsettingly sophisticated defenses.

Some common types of traps include poison needles, hidden crossbows (or guns, or lasers), hidden giant crossbows (or cannon, or homing missiles), pits (with spikes, snakes, or both), falling weights, rolling boulders, sliding walls (or descending roofs), slippery slides, poison gas, acid sprays, land mines, and many more. Think of the last hundred adventure stories you read!

Not all traps are deadly. The intent might be to cripple, capture, annoy, embarrass, or just frighten the victims. A burglar alarm is nothing more than a trap that only produces sound!

Traps, like rooms, should appear on the map key—or a trap in a room can be part of the room's description. For each trap, specify the following:

- How hard the trap is to notice, and what skills can detect it; e.g., "To spot the concealed pit, roll against Architecture-5, Vision-5, or Traps."
- How hard the trap is to disable or set off harmlessly; e.g., "To disable the trap door, roll against Carpentry or Traps+4."
- What sets off the trap; e.g., "The trap door swings open if anyone who weighs more than 50 lbs. walks on it."
- What happens if the trap is set off; e.g., "Unless the victim can make an Acrobatics or DX-6 roll to catch himself, he falls into the pit and takes 3d crushing damage."

Some GMs delight in the invention of fiendish traps to test their players' wits. Such "puzzle traps" require more than a simple skill roll to disable or escape—the players have to think their way out! A very simple example might be a sliding-wall trap that will crush the strongest adventurer to death... unless he opens the manhole in the floor. It's too small for him to fit into—but the lid is of such solid metal that, if held in place, it blocks the closing walls!

Much more complex traps are possible. Have fun. "Puzzle" traps can add flavor to an adventure when simple deathtraps become boring.

Sample Encounter Table

A table of trivial roadside encounters for low-tech settings. Roll 1d per hour of travel.

1 – A group of farmers (roll 2d for number).
2 – One holy hermit.
3 – One not-so-holy beggar.
4 – One merchant with horse, wagon, and 1d/2 guards.
5 – A single horseman.
6 – Nothing.
FEATURES OF A GOOD ADVENTURE

A good adventure (by the standards we use for our own publications) includes:

- Many opportunities for the PCs to use noncombat skills – including some difficult rolls, and some involving unusual skills (forcing the PCs to roll against defaults).
- Contests between PCs and NPCs – and possibly between PCs as well.
- Situations where the players have to think about the right thing to do . . . puzzles, moral choices, or both.
- Situations where proper use of social skills, like Fast-Talk or Diplomacy, will avoid combat.
- Situations where no possible use of social skills will avoid combat!
- Interesting descriptions of people, places, and things, to give the players the feeling that they are really there with their characters.
- A clear introduction, a plotline that builds tension or mystery, and a conclusion.
- Opportunity for roleplaying and character development. This should be present in even the most lighthearted hack-and-slash adventure! Fighters are interesting people, too – at least, they should be.
- A reward for characters who complete the adventure successfully, and a consequence for characters who fail!

ORGANIZING A CONTINUING CAMPAIGN

Even more complex (and more interesting) than a full-scale adventure is a series of adventures involving the same characters. This is called a campaign. If a single adventure is the equivalent of a novel, a campaign is an epic trilogy – the kind that is still going after seven books!

A campaign consists of one adventure after another – or possibly several overlapping adventures at once. Each adventure may take many sessions to resolve. The GM decides what goes on in the game world in between game sessions – and especially between adventures. Important NPCs go about their own affairs. Wars, weather, politics, and trade can go on in the “background” of the campaign, giving rise to new adventures. Your players can be a good source of suggestions . . . and they will be tremendously pleased if their adventures affect the “whole world” in some way, whether they turn aside a catastrophic war or simply find a cure for the Queen’s wart.

A large campaign can have dozens of players (not all playing at once!), several cooperating GMs, planets worth of mapped territory, and hundreds of significant NPCs, from kings and popes down to thieves and beggars.

DON’T PANIC. You don’t have to do all this at once. Most campaigns just “grow,” a bit at a time. One adventure leads to the next, and before you know it, you’ve been playing for a year and you’ve got a campaign going. Much of the flavor of a good campaign comes from the players themselves. The PCs’ Dependents, Allies, Patrons, and Enemies become continuing NPCs . . . old foes reappear when they are least wanted . . . maps become more detailed each time you play. Players come and go, but the campaign goes on. And nobody learns to run a campaign by reading the rulebook. Experience is the best teacher.

To help, we’ve included a Campaign Planning Form on p. 567. Filling this out will put you well on your way to adventure!

Shared Campaigns and Travel Between Campaigns

Two or more GMs may agree to let PCs travel between their campaigns. In general, this simply means that one GM will replace another at a preordained time or place. The old GM may remove himself entirely, or introduce a character of his own and remain as a player.

The more similar the GMs’ campaigns, the more closely they can be connected. If they operate in the same game world, and if the GMs interpret the rules in the same way and have the same “play style,” then the border between their jurisdictions might be as trivial as a river-line or even a city boundary. This is sometimes known as a “shared” campaign.

One good system for GM cooperation involves (for instance) cities. A single “chief GM” is in charge of overall maintenance and development of the game world. A number of the campaign’s players also have GM responsibilities of their own. Each such player designs and controls one city. The player controlling that city referees all adventures within its confines. Needless to say, that player’s characters should take little part in the action there, even as NPCs. Even the best GM might become somewhat emotionally involved with the PCs he has developed over a period of months! The chief GM runs adventures outside the players’ cities. Thus, several players can have the fun of GMing an occasional adventure, while doing no more support work and world-building than they care to.

The same system works in a space campaign, except that each player controls a whole solar system. In a setting with parallel worlds – like the Infinite Worlds campaign in Chapter 20 – each player might control an entire universe!

For this kind of campaign to work, the GMs must consult regularly. Minor “cultural” differences between cities or planets are acceptable – in fact, they’re fun. But the GMs should agree among themselves about the overall nature and goals of the campaign, if PCs are allowed to move freely back and forth. If two or more GMs wish to “share” players and characters while maintaining significant differences between their worlds, they need a different procedure.
A “game world” is a complete background setting for a game. It might be an original creation, or it might be based on history, current affairs, or a work of fiction (novel, movie, comic, TV series, etc.).

It takes many hours of research to “design” an accurate historical game world. Worlds based on fiction require research, too – to ensure that every detail conforms to the source, and to extrapolate logically where the original story gave no information. Creating an original world, and making it believable and interesting, is the biggest challenge of all.

Some things to consider when designing a game world:

- **Geography.** Map the world, indicating such features as oceans, major rivers, and mountain ranges. For an alien world, you also have to determine gravity, atmosphere, water coverage, climate, etc.
- **Inhabitants.** Create racial templates for the major sapient races (see Racial Templates, p. 450), and generate game statistics for common or interesting animals and monsters (see Chapter 16).
- **Civilizations.** Describe the major cultures, specifying customs, languages, laws, religions, etc. Mark major political boundaries on the world map. Make notes on economic considerations that will matter to the PCs: jobs, systems of currency, prices, etc.
- **Technology.** Decide what is possible in the realms of communications, medicine, transportation, weapons, and so forth. Don’t forget to create price lists for PCs who want to go shopping for equipment!
- **Character abilities.** List any advantages, disadvantages, or skills that are unusually common, that work differently, or that do not exist at all. If a trait works differently, or is unique to the setting, describe it. Create character templates for common professions (see Character Templates, p. 445).

This chapter touches on some of these points, and provides advice to the GM who wishes to design his own world.

---

**CULTURES AND LANGUAGES**

You do not need to specify every culture and language in the game world, but you should list all the important ones. Adventurers operating outside their native culture and language have skill penalties – see Culture (p. 23) and Language (p. 23) for details.

**CULTURES**

Cultures are extremely broad in GURPS, and usually encompass multiple nationalities (or planets, in futuristic settings). Populations and locations that share cultures change with time. For instance, “American” and “Italian” are distinct nationalities, but both are part of the “Western” culture – at least in the modern world. In 200 A.D., the “Anasazi” and “Roman” cultures would be quite distinct.
LANGUAGES

Languages can be considerably narrower; a few might even be exclusive to particular cities or social groups. They are rarely isolated, however. If two languages are close, those who know one at a given comprehension level can understand the other at one or two levels below that, and can improve their comprehension from that level. Worldbuilders should note such connections ahead of time.

LAWS AND CUSTOMS

Each game world has its own laws and customs. Furthermore, laws and customs vary from place to place (and time to time) within each world. In some worlds, it is possible to research these things in advance (the Law skill helps here). In other worlds, you must learn them the hard way (Law helps here, too, if you specifically investigate; Streetwise can find out "informally").

As a rule, the use of force or the threat of force is illegal or improper wherever you go. The stronger the local government (see Control Rating, below), the more true this is; government usually considers the use of force to be its own right and monopoly. Self-defense is sometimes an exception – but not always!

Note that public display of noncustomary weapons is a "threat of force," and leads to bad reactions even if it's technically legal. If you walk down a medieval village street in heavy armor, axes and polearms at the ready, the villagers will be very suspicious of your motives.

In general:

- Violating someone's rights might lead to a "civil" trial and a fine – or just an informal beating.
- Violating a custom gives you a reaction penalty – possibly a big one – whenever you try to deal with a local. The offended locals might not even tell you what you are doing wrong!

CONTROL RATING

"Control Rating" (CR) is a general measure of the control exercised by a government. The lower the CR, the less repressive the government and the freer the people. Government type (see Society and Government Types, p. 509) does not absolutely determine CR – it is possible to have a very free monarchy, or a democracy where the voters have saddled themselves with thousands of strict rules.

Assign CR according to the following guidelines:

| CR0 – Anarchy | There are no laws, taxes, or controls. |
| CR1 – Very free | Nothing is illegal save use of force or intimidation against other citizens. Taxes are light or voluntary. Only access to LC0 items is controlled (see Legality, p. 507). |
| CR2 – Free | Some laws exist; most benefit the individual. Taxes are light. Access to items of LC0 and LC1 is controlled. |
| CR3 – Moderate | There are many laws, but most benefit the individual. Taxes are moderate and fair. Access to items of LC0 through LC2 is controlled. |
| CR4 – Controlled | Many laws exist; most are for the convenience of the state. Broadcast communications are regulated; private broadcasts (like CB) and printing may be restricted. Taxation is often heavy and sometimes unfair. Access to items of LC0 through LC3 is controlled. |
| CR5 – Repressive | There are many laws and regulations, strictly enforced. Taxation is heavy and often unfair. There is strict regulation of information technology: computers, photocopies, printing presses, transmitters, etc. All goods are effectively controlled; you can't buy anything without the appropriate ration coupons or paperwork. |
| CR6 – Total control | Laws are numerous and complex. The individual exists to serve the state. Many offenses carry the death penalty, and trials – if there are any at all – are a mockery. Taxation is crushing, taking most of an ordinary citizen's income. Censorship is common, and private ownership of any information technology is forbidden. All goods are controlled, and the government might even withhold basic necessities. |

If a question of legality arises, or if you need to determine how severely the government checks and harasses newcomers, roll 1d. If the result is lower than the CR, then the act is illegal, or the authorities harass, delay, or even arrest the PCs (see Law Enforcement and Jail, p. 507). If it is higher, either the act is legal or the authorities overlook it. If it equals the CR, the situation could go either way: play out an encounter or make a reaction roll.

Travel Etiquette

The wise traveler avoids attracting too much attention. Travelers always stand out if they display technology more advanced than that with which the local citizens are familiar (see Tech Levels, p. 511). They also attract unwelcome attention if they violate local laws or customs. In general, any boisterous behavior or breach of peace should have "interesting" consequences.

Travelers should also remember that politeness to local dignitaries is always wise, and strangers met by chance might be more than they appear...
The GM should skip this die roll in any situation where there is only one logical outcome. For instance, regardless of CR, it is almost always unacceptable for airline and starship passengers to carry weapons.

**Split Control Rating**

A society does not have to have a single, uniform CR. If the GM wishes – and doesn't mind the extra work – he can specify several CRs for a society: one for basic human rights, another for taxation, a third for weapons, and so on. In worlds with magic, psionics, or super abilities, societies may have separate CRs for these things as well.

**Legality**

Each item of equipment has a "Legality Class," as defined under *Legality Class* (p. 267). Some modern-day examples include:

- **LC0** – *Banned*. Weapons of mass destruction; strategic missiles; orbital weapons platforms; inter-continental bombers.
- **LC1** – *Military*. Heavy weapons; air-defense radar; sensor jammers; armored vehicles; land mines.
- **LC2** – *Restricted*. Light assault weapons; silenced; surveillance technology (wiretaps, etc.); armored cars; burglar's tools (e.g., lockpicks); explosives; dangerous drugs.
- **LC3** – *Licensed*. Handguns; hunting guns; radio transmitters; most unarmed vehicles; ordinary drugs and medical equipment.
- **LC4** – *Open*. Nonlethal weapons (e.g., stunners); home computers; radio and television receivers; cameras; most tools; first-aid kits.

**Spell Legality**

In a society where magic is common, each spell might have a Legality Class as well. Damage-dealing spells would be on par with light concealable weapons (LC3), while most other spells would be LC4. There are many possible variations: societies that place a high value on privacy would put Knowledge spells in a lower LC; otherwise-tolerant societies might take exception to Necromantic spells; and all "witchcraft" might be LC1 (or 0!) in a puritanical society.

**Control Rating and Legality Class**

Legality Class interacts with Control Rating as follows:

- **LC = CR + 1 or more**: Any citizen may carry the item.
- **LC = CR**: Anyone but a convicted criminal or the equivalent may carry the item. Registration may be required, but there is no permit fee.
- **LC = CR - 1**: A license is required to own or carry the item. To get a license, one must show a legitimate need or work for the government. Generally, a license costs 1d × 10% of the price of the item itself.
- **LC = CR - 2**: Prohibited except to police SWAT teams, military units, and intelligence services.
- **LC = CR - 3 or worse**: Only permitted to the military or secret police.

**Law Enforcement and Jail**

If you break the law, it will be the duty of some local official to do something about it. On a critical failure, the officer bungled the arrest so badly that the authorities release the prisoner without a trial. On a failure, the officer made a procedural error that the prisoner might be able to exploit. He or his lawyer gets a Law (Criminal) or Law (Police) roll to spot it; on a success, he identifies the error and the charges are dropped. This roll cannot be against default Law skill.

If you break the law, it will be the duty of some local official to do something about it.

**Jail**

"Jail" is where the accused is held pending trial. In theory, this is not the same thing as "prison," which is where convicted criminals serve sentences. In reality, the two are often one and the same.

Jails range from "honor systems" to dungeons with chains. Many game worlds have widely varying types of jail, depending on the crime, the accused; the Status of the prisoner, and any timely bribes.

Jail time between arrest and trial is highly variable. It depends on local laws, whether a judge is available, and – if there is a judge – how busy his court is. In general, the higher the CR, the longer the possible wait.

**Bail**

The authorities might be willing to release a jailed prisoner on "bail": a sum of money that serves as a pledge that he will return for the trial. The amount required depends on the severity of the charges, the prisoner's Reputation and legal record, and the judge's reaction to the prisoner. If the prisoner flees ("jumps bail"), he will face additional charges.

**Trials**

A trial might be totally fair and honest . . . or entirely for show, with a predetermined outcome. It might be rigorously formal, or noisy and informal.
**Trial by Ordeal**
This is a trial in which Fate is supposed to decide guilt or innocence.

*Example:* Anyone accused of witchcraft is thrown into a pond. Anyone who floats is a witch, and is taken out and burned. Those who sink must have been innocent.

For a trial by ordeal, the GM should determine the success rolls needed to survive. (The above example would be hard to survive!) More examples: walk a beam across a canyon (roll DX-4 every 10 feet; those with Perfect Balance don’t need to roll); hold a hot piece of iron (roll ST-3 and Will-3, at +3 for High Pain Threshold); find your way out of a maze (roll IQ; Absolute Direction gives +3).

**Trial by Combat**
Trial by combat is like trial by ordeal, in that Fate is supposed to judge guilt or innocence. As a rule, though, trial by combat provides the punishment as well: the guilty party dies. A trial by combat might be fair (evenly matched champions), loaded (uneven champions), or totally unfair (throw the prisoner into a pit with a monster).

In some trials, an Influence roll against the appropriate Law specialty, by the accused or his lawyer, can replace this reaction roll; see *Influence Rolls* (p. 359). In other trials, the accused might not be allowed to have a lawyer, or even speak!

If two parties ask a judge to settle a dispute, make a reaction roll for both. The judge will find in favor of the party that gets the best reaction.

**Modifiers:** +1 to +3 for evidence or testimony that favors the accused, or -1 to -3 for evidence or testimony against him, if the judge is inclined to listen; reaction modifiers for the Reputation, Social Regard, Social Stigma, and Status of the accused; other reaction modifiers that the GM feels apply with *this* judge.

**Adversarial Trials**
In still other societies, trials are a Quick Contest of Law (Criminal) skill between the prosecution and defense, in the presence of a judge and possibly a jury. If the accused chooses to defend *himself*, he is at -1 to -3 due to his emotional involvement. (The saying “The lawyer who defends himself has a fool for a client” is often true!)

Record the results of the Quick Contest, and then make a reaction roll for the judge or jury (as appropriate).

**Modifiers:** A bonus equal to the defense’s margin of victory, or a penalty equal to the prosecution’s margin of victory, depending on the victor; +2 or more if the player roleplayed a compelling defense; +1 to +3 if the evidence supports the defendant, or -1 to -3 if it supports the prosecution; +1 or more for a plausible alibi; -1 or more for bad publicity; -2 if the defendant jumped bail (see *Bail*, p. 507); -3 if an eyewitness placed the defendant at the crime scene; any bonus or penalty for the defendant’s Reputation.

The reaction is the verdict: a reaction worse than Neutral means “guilty”; a reaction better than Neutral means “not guilty.” Neutral reactions go to the side that won the Quick Contest. If that was a tie, the result is an acquittal.

In the case of a conviction, punishment is left to the GM, playing the part of the judge. See *Criminal Punishment* (below) for ideas. If a PC behaves in a way that truly deserves punishment, the GM should not feel obliged to get him out of it, even if the penalty is serious.

> **Somebody’s going to jail.**
> **Somebody’s going to jail.**
> – Don Henley, “New York Minute”

**Criminal Punishment**
The severity of the punishment for a crime will depend on the crime, the victim, the accused, and the judge’s reaction. Punishments are generally more severe in high-CR societies. Punishments might include:

- Fines or restitution.
- Public humiliation; e.g., the stocks (treat as a bad Reputation with those who witnessed the punishment).
- Prison sentences, sometimes at hard labor.
- Beating, stoning, flogging, etc.
- Branding (treat as a Social Stigma).
- Maiming – temporary or permanent.
- Deprivation of rights; e.g., loss of citizenship, loss of the right to carry weapons, or reduction in formal Status.
- Exile, temporary or permanent.
- Slavery, either to the government or to the victim of the crime.
- Imposition of a specific task or quest, possibly by a magical geas.
- Imposition of a psionic or magical bond or geas to make repeat offenses impossible.
- Combat in the arena (the worse the punishment, the worse the foe).
- Torture.
- Execution (not too useful in game terms, except as a threat to force the party to take immediate action to rescue the prisoner).
Mankind has lived under dozens of different societies. Futuristic, fantasy, and alien settings might offer dozens more – some of them very different. A few possibilities appear below, in order of increasing Control Rating (see Control Rating, p. 506). The GM should choose a society type for each major society in the game world.

**Anarchy**

There are no laws. The social conscience (or strength and weaponry!) of the population maintains order. "Anarchy" could mean a lawless mob . . . or a society of clear-eyed, strong-backed pioneers. CR0, but if your well-armed neighbors unanimously disapprove of what you’re doing, it is effectively illegal!

**Athenian Democracy**

Every citizen (the definition of "citizen" can vary) votes on every action the society takes. Below TL9, this is only practical for groups under 10,000. At TL9+, information networks allow large populations to discuss and vote electronically. CR2 to 4.

**Representative Democracy**

Elected representatives form a congress or parliament. If the citizens are vigilant and informed, this is a benevolent government. If the citizens are badly educated, government policies are bad but popular (bread and circuses!). If the citizens are apathetic, factions or special-interest groups may dominate government. In all cases, conspiracies may operate to control the society. CR2 to 4.

**Clan/Tribal**

The society is one large, interlocking family made up of allied clans or tribes and ruled by the clan elders. Customs and tradition are very important. Younger clan members might feel forced to conform, or become rebellious to protest their lack of influence; seniors may channel this energy by encouraging sports, recreational combat, or adventuring. CR3 to 5.

**Caste**

As for Clan/Tribal, but each clan has a set role or profession. Those who don’t follow their clan profession become clanless (a Social Stigma), unless there is a system for adoption into a new clan. Clans usually form a social hierarchy; e.g., administrators outrank warriors, who outrank street sweepers, and so on. Individuals are expected to associate only with those of equivalent status. There may also be rivalries among clans of the same type (different warrior families, for instance). CR3 to 6.

**Dictatorship**

All government is vested in a single ruler – king, dictator, etc. (If the ruler is a king, this is a monarchy.) Succession might be by inheritance, election, single combat, or any number of other means. This sort of government can act faster, for good or for evil, than most representative governments. Dictatorships (and other totalitarian states), if they endure long enough, sometimes develop a "balance wheel" in the form of custom. Though the ruler’s will is law, there are unwritten laws that even he may not violate with impunity. CR3 to 6.

**Technocracy**

Engineers and scientists rule in the name of efficiency. Everything is carefully planned; of course, plans can go wrong. The better the technocrats are at running things, the less oppressive they are; if they’re incompetent, they are also dictatorial. CR3 to 6.

**Theocracy**

This is rule by a religious group or leader. Freedom of religion is unlikely, and there is no distinction between religious and civil law. The leaders may or may not believe in their own religion; “miracles” might be faked or genuine. Theocracies range from benign utopias to totalitarian religious dictatorships. CR3 to 6.

**Corporate State**

Corporate officers rule the society. Most citizens are employees of the corporation. Society runs smoothly – it has to, or it can’t be profitable! CR4 to 6.

---

**The Big Picture**

The GM should also decide how the major societies in the game world interact with one another. Possible political situations include:

- **World Government**: One government rules the entire world (which might be a continent in a low-tech setting, an entire galaxy in a very high-tech one). Regional differences, if any, are strictly cultural or linguistic.
- **Coalition**: A few powerful allies dominate the world. They squabble on occasion, but they usually present a united front. The individual societies are still quite distinct, and might have radically different government types.
- **Factionalized**: A small number of rival “blocs” or superpowers dominate the world. Each bloc has enough economic and military might to rule the world, but the other blocs would sooner unite in opposition than let that happen. As a result, alliances shift regularly. Ties within blocs are more permanent.
- **Diffuse**: There are dozens, if not hundreds, of clans, nations, and groups. No one can make any claim to world domination.
**Feudal**

Similar to monarchy (see Dictatorship, above), but subsidiary lords retain local power; therefore, the ruler must be careful to maintain the lords’ support, or be overthrown. Since each lord rules his own territory, laws and personal freedoms will vary from dominion to dominion. CR4 to 6 (at least for the commoners).

**Variations**

One or more of these special situations may apply to most of the society types listed above:

- Bureaucracy: A self-perpetuating “civil service” runs the society from day to day. Because these bureaucrats are not elected, they are largely insulated from public pressure. Government seems to run very smoothly – if there are difficulties, you aren’t told about them. But there are high taxes, many laws, and lots of red tape. The government is unresponsive to citizens. There may not be a free press. CR4+.

- Colony: A dependent region ruled by the mother society, usually through a governor. The colonists may have an elected council (through which they influence the governor), an elected representative to the mother government (with nonvoting power), or both – but they have no direct say in their own government. Colonies have less government than the mother society; reduce CR by 1 or more. Rebels and outcasts may be welcome if they have useful skills.

- Libertarian: A self-controls administration – and perhaps actual legislation! This is impossible before TL8, and highly unlikely before TL9. Government might be efficient, inhuman, or both. The system is only as good as its programmers and technicians. Trust the Computer . . . CR3+.

**Restrictions**

Powerful or advanced societies might attach “restricted” status to uninhabited regions – or even to weaker or more primitive societies. Examples include:

- Embargoed: A stronger society might prohibit all trade with a weaker one. They usually enforce this through military means, and search visitors carefully to prevent smuggling.

- Hazardous: The region harbors something dangerous: cannibals, vicious wildlife, magical storms, etc. Buoys, signs, flags, etc. warn travelers of the risk. The authorities don’t move to prevent entry into the region . . . but they don’t rescue travelers who get into trouble, either!

- Prohibited: The region is completely off limits without special permission. This might be because the region is hazardous or quarantined – or because it contains some kind of secret (often military). The authorities might forcibly remove trespassers, prevent them from leaving, or simply destroy them on sight.

- Protected: The authorities limit contact in order to protect native culture, wildlife, etc. Visitors might have to undergo medical quarantine before entering the region, or be prohibited from carrying certain equipment. They might even have to disguise themselves as natives!

- Reserved: The region is off limits for colonization or development.

**Matriarchy.** Positions of authority are open only to females. Any CR is possible.

**Meritocracy:** No one may enter the government without passing a series of tests. A good meritocracy is likely to have competent leaders . . . but this can lead to a rigid caste system. CR3+.

**Military Government:** The military runs the state. A society led by a single commander-in-chief is likely to be a dictatorship; one where the commander must answer to a council (or juntia) of officers is likely to be feudal. Military governments can be strong and honest, but most are totalitarian. CR4+.

**Oligarchy:** Regardless of the nominal form of government, leadership is in the hands of a small, self-perpetuating clique. CR3+.

**Patriarchy:** Positions of authority are open only to males. Any CR is possible.

**Sanctuary:** A sanctuary refuses to extradite the “criminals,” “refugees,” or “terrorists” hunted by other societies. This might be informal, or there might be a tribunal to decide each petitioner’s fate. Lawmen or bounty hunters from elsewhere are outlaws here. CR is rarely over 4.

**Socialist:** The government directly manages the economy. Citizens get free or subsidized education, medical care, housing, etc., and the government tries to give everyone a job. The resulting expenses can stifle an economy at low Tls. Most wealthy, high-tech states have elements of “mild socialism,” such as heavily subsidized health care and “safety-net” welfare benefits for the poor. Like any government expenditure, these benefits might raise local taxes. CR3+.

**Subjugated:** This society is under outside control – whether military (an occupying army), economic (a “puppet government,” subservient to foreign masters), or something else (e.g., magical mind control). CR4+.

**Utopia:** A utopia is a perfect society in which all citizens are satisfied. CR always seems low . . . but is it? Real utopias are rare. Seeming utopias often have some dark secret – for instance, a hidden technocracy ruling by mind control. A sinister utopia is a real GMing challenge. A genuine utopia is an excellent “good guy” society for the heroes to save from conquest or other threats (but real utopias, unless threatened by destruction, are boring).
“Tech level” (TL) is a general rating of a society’s highest achievement in technology (or a certain type of technology). Tech levels run from zero on up. Each TL describes a set of technologies that become available after a certain point in time. The standard TLs, and associated eras on Earth, are:

**TL0** – Stone Age (Prehistory and later). Counting: oral tradition.

**TL1** – Bronze Age (3500 B.C.+). Arithmetic; writing.

**TL2** – Iron Age (1200 B.C.+). Geometry; scrolls.

**TL3** – Medieval (600 A.D.+). Algebra; books.

**TL4** – Age of Sail (1450+). Calculus; movable type.

**TL5** – Industrial Revolution (1730+). Mechanical calculators; telegraph.

**TL6** – Mechanized Age (1880+). Electrical calculators; telephone and radio.

**TL7** – Nuclear Age (1940+). Mainframe computers; television.


**TL9** – Microtech Age (2025+). Artificial intelligence; real-time virtuality.

**TL10** – Robotic Age (2070+). Nanotechnology or other advances start to blur distinctions between technologies . . .

**TL11** – Age of Exotic Matter.

**TL12** – Whatever the GM likes!

Note that TLs have start dates but not end dates. The innovations of a given TL fade as those of higher TLs displace them, but they rarely vanish completely. A blacksmith in 1850s England uses TL3 techniques to shoe the horses that pull the carriage the gentleman rides to catch his TL5 train to London – and those techniques might still exist in TL8, albeit as a quaint hobby. The GM should decide which “dated” technologies remain in use in his game world, and which items from earlier TLs are still commonly available for purchase.

Differences in tech level become very important when adventurers travel between societies. Technology is likely to seem like magic to anyone more than three or four TLs less advanced. If a WWII soldier (TL6) gets dropped back into the days of King Arthur (TL3) . . . things get interesting. Of course, time travel isn’t necessary – even today, you can drop back three or four TLs if you visit the right part of the world.

A party always attracts attention if it displays technology from a higher TL than that of the locals. This attention might take the form of worship, awe, curiosity, envy, fear, or hatred – the greater the disparity in TL, the stronger the reaction.

The GM should set a “baseline TL,” which describes most societies in the game world, most of the time. However, exceptions may exist.

**Backward Societies**

A society might have a lower TL across the board. This could be because it is impoverished, isolated (either geographically or economically), resistant to change (such as 17th-century China), or regressed (possibly in the wake of war or natural disaster). PCs from such societies will have the Low TL disadvantage (see p. 22).

**Advanced Societies**

Likewise, the TL of a particular society might be higher than that of the rest of the game world. If the GM chooses to introduce such advanced societies, he should ensure that PCs who wish to use their advanced technology pay the points and cash to acquire it honestly. PCs from such societies must have the High TL advantage (see p. 23).

**Split Tech Level**

Realistic societies rarely have the same TL in every field of endeavor; they tend to be advanced in some fields, backward in others. GMs who desire extra detail can rate each society for its TL in a few key areas. It is most efficient to list only those TLs that differ from the baseline; e.g., “TL8 (Communications TL7, Medical TL9).”

PCs have a personal TL equal to their society’s baseline TL, but the TL of their technological skills matches that of their society in the relevant area.

---

**Variations Within a Tech Level**

The equipment listed for a TL does not appear all at once as soon as a society enters that TL. Instead, items appear gradually after that date.

Shortly after a TL begins, devices from the previous TL will be common – along with experts in skills associated with those items. A player could easily justify a PC with a personal TL one step below that of his society, or with one or two skills that are several TLs out of date.

As the TL wears on, devices from the next TL start to appear. If PCs wish to obtain such equipment, they must either invent it or buy a prototype – see *New Inventions* (p. 473). Access to prototypes is not sufficient to justify a PC with a personal TL above that of his society!

At the GM’s option, adventurers may have a skill penalty of -1 or more when dealing with technology of their own TL that is more or less advanced than what they are used to. Treat this as an unfamiliarity penalty; see *Familiarity* (p. 169).

Finally, the GM should be aware that not every item of a given TL must appear in every society that attains that TL. The GM always has the final say as to which items are currently available – both to the PCs and in the game world in general.
Tech Level by Field

It is often important to know what a given TL implies for a particular area of knowledge – for instance, when using the Building Up Local Technology and Split Tech Level rules. The tables below outline the effects of TL on four sample fields. Many other such fields exist: architecture, communications, materials, etc.

Transportation

**TL0** – Skis; dogsleds; dugout canoes.
**TL1** – Bare horseback; the wheel (and chariots); shipbuilding; sails.
**TL2** – Saddle; roads; triremes.
**TL3** – Stirrups; ocean-going sailing ships (longships, roundships, etc.).
**TL4** – Stagecoach; three-masted sailing ships; precise navigation.
**TL5** – Steam locomotives; steamboats; early submersibles; balloons and early airships.
**TL6** – Automobiles; continental railways; ocean liners; submarines; aircraft.
**TL7** – Nuclear submarines; jet aircraft; helicopters; manned space flight.
**TL8** – Satellite navigation; SSTO (“single stage to orbit”) spacecraft.
**TL9** – Robot cars; space elevators; manned interplanetary space flight.
**TL10** – Fast interplanetary space flight.
**TL11** – Manned interstellar space flight.
**TL12** – Fast interstellar space flight.

Superscience! Reactionless thrust; contragravity; faster-than-light (FTL) travel; matter transmission; parachronic technology; time machines.

Weapons and Armor

**TL0** – Wooden and stone weapons; primitive shields; hides for armor.
**TL1** – Bronze weapons and armor.
**TL2** – Iron weapons; iron armor (including mail); siege engines.
**TL3** – Steel weapons; early firearms; plate armor; castles.
**TL4** – Muskets and pikes; horse artillery; naval broadsides.
**TL5** – Early repeating small arms; rifled cannon; ironclads.
**TL6** – Smokeless powder; automatic weapons; tanks; combat aircraft.
**TL7** – Ballistic body armor; guided munitions; combat jets; nuclear weapons.
**TL8** – Smartguns; blinding lasers; unmanned combat vehicles.
**TL9** – Electrolasers; heavy laser weapons; battlesuits; combat robots; designer viruses.
**TL10** – Compact laser and heavy particle-beam weapons; Gauss guns; nanotech armor; nanoviruses; antimatter bombs.
**TL11** – Compact particle-beam weapons; disassemblers (“gray goo”); defensive nanites.
**TL12** – Gamma-ray lasers; “living metal” armor; black-hole bombs.

Superscience! Monomolecular blades; force-field technology; gravitic weapons; nuclear dampers; disintegrators.

Power

**TL0** – Human muscle power; dogs.
**TL1** – Donkeys; oxen; ponies.
**TL2** – Horses; water wheels.
**TL3** – Heavy horses and horse-collars; windmills.
**TL4** – Improved windmills; belt drives; clockwork.
**TL5** – Steam engines; direct current; batteries.
**TL6** – Steam turbines; internal combustion; alternating current; hydroelectricity.
**TL7** – Gas turbines; fission; solar power.
**TL8** – Fuel cells; advanced batteries.
**TL9** – Micro fuel cells; deuterium-hydrogen fusion; high-temperature superconductors.
**TL10** – Helium-3 fusion; antimatter.
**TL11** – Portable fusion power.
**TL12** – Portable antimatter power.

Superscience! Broadcast power; cold fusion; zero-point energy; total conversion; cosmic power.

Biotechnology/Medicine

**TL0** – First aid; herbal remedies; primitive agriculture.
**TL1** – Surgery; animal husbandry; fermentation.
**TL2** – Bleeding the sick; chemical remedies.
**TL3** – Crude prosthetics; anatomical science.
**TL4** – Optical microscope makes cells visible.
**TL5** – Germ theory of disease; safe anesthetics; vaccines.
**TL6** – Antibiotics; blood typing and safe transfusions; heredity; biochemistry.
**TL7** – Discovery of DNA; organ transplants; pacemaker.
**TL8** – Genetically modified organisms; gene therapy; cloning.
**TL9** – Human genetic engineering; tissue engineering; artificial wombs; cybernetic implants.
**TL10** – Brain transplants; uploading; bioroids; uplifted animals.
**TL11** – Living machines; cellular rejuvenation.
**TL12** – Full metamorphosis; regeneration.

Superscience! Fast-growth clone tanks; psi drugs; regeneration ray.
**Borrowed Technology**

A society can be familiar with technology that it does not itself possess. This is frequently the case for low-tech societies with high-tech neighbors, and for colonies. A village with Iron Age technology (TL2) might be quite familiar with the TL3 steel weapons carried by travelers, and richer villagers might have a few, but local smiths could not duplicate or repair them. Express this as “TL2/3.” PCs from such societies have a personal TL equal to the lower TL, but may learn the skills needed to use (but not repair or design) equipment of the higher TL.

**Building Up Local Technology**

There may be times when you need to improve the local TL. A group of castaways might have high-tech knowledge, but little or no equipment to work with. In that case, they need to “build the tools to build the tools” to use their technological knowledge. In extreme cases, your castaways might have to go all the way back to primitive mining to get the ore to refine to metal to build the tools to build the tools . . . ! Or a single traveler might want to impart his high-tech knowledge to the people he is visiting. (We assume that he has the cooperation of his hosts, or he doesn’t have a chance.)

Any such situation is largely at the GM’s discretion. But it can be done. Some of the best adventure stories of all time have revolved around one of these premises: *Swiss Family Robinson, Lord Kalvan of Otherwhen,* the *Riverworld* series, *A Connecticut Yankee in King Arthur’s Court,* etc.

**Different Technologies**

Some technologies (and some societies) do not fit nicely onto the standard tech-level charts. GMs who run into this problem might wish to use one of the optional rules below.

**Technology Paths**

Certain categories of inventions might appear in an order other than that suggested by the default TLs. In particular, there is no guarantee that TL9+ technologies will appear in the order *GURPS* predicts. Apply the Split Tech Level rule (p. 511) as liberally as you wish to simulate your favorite genre! For instance, in a “cyberpunk” society, computing, bionics, and biotechnology might be two to four TLs more advanced. In contrast, a “retro-tech” setting that mimics 1940s sci-fi might have computers frozen at TL6 but many other technologies at anywhere from TL9 to TL12. Any combination is possible!

**Divergent Tech Levels**

In other cases, a society has a single, consistent TL – but it got there along an unusual path. The GM can designate this “divergent TL” with the notation “TL(x+y),” where x is the TL at which the technology diverged, y is the number of TLs since the divergence, and the sum x+y is the *effective* TL for most purposes.

**Example:** TL(5+1) is effectively TL6 – but a different TL6 that split off at TL5. TL(5+1) devices produce similar results to TL6 ones, but look little like those devices and rely on different operating principles. A TL(5+1) “steampunk” world based on Victorian visions of the future might have steam cars, steam dirigibles, and high-speed telegraph lines instead of the automobiles, airplanes, and telephones of TL6.

Divergent TLs are not unique. There could be any number of versions of (for instance) TL(5+1), each different in its own way. The GM should specify what caused the split in each case, be it different thinking, different prevailing physics, or something else.

Characters used to a “normal” or “differently diverging” TL suffer an additional -2 penalty for unfamiliarity, over and above any penalties for TL differences, when dealing with divergent technology.

**Superscience**

“Superscience” technologies violate physical laws – relativity, conservation of energy, etc. – as we currently understand them. Examples of superscience technologies appear under *GURPS* (p. 512), and several articles of superscience equipment appear in Chapter 8.

By definition, it is impossible to set a firm TL for superscience – we might discover faster-than-light travel tomorrow, a thousand years from now, or never. Equipment TLs are always debatable, but superscience
TLs are arbitrary. To reflect this, the rules give the TL of superscience developments as "^" instead of a number. The GM is free to assign such innovations to any TL. To note a superscience invention that appears at a specific TL in a particular game world, put a "^" after its TL; e.g., "TL3^" for a TL3 superscience item.

Remember: superscience doesn’t have to change a society’s overall TL, create a new technology path, or cause a divergent TL. It just adds totally new developments to all the usual technologies for a given TL in that society.

**Tech Level and Genre**

When designing a game world with a specific genre in mind, the GM should be sure to choose a TL that will meet his players’ expectations for the genre. Some examples:

- **Sword & Sandal:** Gladiators, chariots, and amazons. TL1-2.
- **Medieval Fantasy:** Knights, wizards, and castles. TL3.
- **Warring Provinces Japan:** Samurai and ninja. TL3-4.
- **Swashbucklers:** Pirates and musketeers. TL4.
- **Wild West:** Cowboys and Indians. TL5.
- **Steampunk:** Fiction of Jules Verne and H.G. Wells. TL5, diverging to TL(5+1).
- **Pulp:** Archaeologists and detectives between the World Wars. TL6.
- **WWII:** Axis and Allies. TL6.
- **Cold War:** Capitalism vs. communism. TL7.
- **Modern Day:** You’re living in it! TL8.
- **Cyberpunk:** Netrunners and cyborgs. TL9.
- **Space Opera:** Interstellar adventure. TL10+, plus superscience.

**Economics**

Each game world has its own economic situation. But money, in some form or another, is important in almost every setting.

Money is anything you can exchange for what you want. It varies from one game world to the next. In a high-tech world, everything might be done by credit card. In a low-tech world, gold and silver may be king.

For the sake of convenience, GURPS prefixes all prices with a dollar sign – $ – in all settings. The GM is welcome to translate this to credits, copper farthings, Martian foomphra, or whatever he feels is appropriate to the game world; see Tech Level and Starting Wealth (p. 27).

In a low-tech world, jewelry is also money. It might not have a set value imprinted on it, but it is small and portable, and easily traded for coins or bartered directly for needed goods. In fact, many societies exist largely by barter – which can be a test of the players’ ingenuity.

**Bankrolls and Possessions**

List the money a character has on his person on his character sheet, just like his other possessions. If a lot of transactions are taking place, it might be wise to record money on a separate sheet of paper to avoid erasing a hole in the character sheet!

List the money a character does not carry with him separately, along with its location. The GM may arrange floods, bank robberies, tax increases, and other entertainments to deprive the PCs of their savings – or at least make them work to get their money back. The same is true of all other possessions the heroes do not carry with them.

**Buying and Selling**

Players can buy and sell among themselves at whatever prices they can agree on. For outside transactions, the GM (or Adversary) should roleplay a merchant dealing in the needed goods or services. Most transactions do not require a reaction roll. Only make a reaction roll if the situation is in some way unusual. For instance, if the adventurers are new in town and have been swaggering around in armor and acting strangely, roll to see if the merchants will have anything to do with them!

In general, the GM should set prices reasonably, following the laws of supply and demand. Camels are valuable near the desert, worthless in the jungle. After a great battle, used armor might be on sale at scrap-metal prices. And so on.

The Merchant skill (p. 209) will help the PCs get good deals.

**Moving Money Between Worlds**

If the PCs move between game worlds (see Travel Between Game Worlds, p. 520), they will naturally want to take some cash along. But what is “legal tender” in one world might be worthless in another. There are two principles for the GM to remember here:

1. Money in a new world isn’t “legal tender”; it’s a commodity. If you bring medieval gold coins to the 21st century, they will sell as curios – or as gold, for perhaps $400 a troy ounce. If you take American paper money to the 10th century, it will be worthless. So, rather than money, take along a few plastic hard-hats and maybe an MP3 player. (“What am I bid for this miraculous orchestra in a box?”)

2. A cross-world trading operation can get very rich very quickly. If a GM allows cross-world travel, it is up to him to preserve balance by limiting the quantity or type of goods that traders can move between worlds. A suggested limit: only what the travelers can carry on their persons – and trips should not be frequent.
Equipment and Supplies

The GM should give the players a list of standard equipment and supplies, and their “normal” costs. The items and prices on the list will vary from game world to game world.

The players will want to buy things that aren’t on the list. The GM should allow any reasonable purchase – as he defines “reasonable” – setting prices by comparison with things on the list. Real-world catalogs can be useful here!

For more information, see Chapter 8, Equipment.

Loot, and Disposing of It

Many adventures are overt quests for treasure. Many aren’t. Nevertheless, it is customary to let the heroes find something of value if they successfully complete an adventure. If nothing else, this lets them buy their supplies for the next adventure . . .

The classic fantasy adventure sends successful adventurers home with chests of gold and jewels. Very convenient! If you are writing a more realistic adventure, invent more interesting forms of treasure.

Let’s say the party was hired to guard a caravan. They drove off the bandits that attacked the caravan, tracked them to their lair, wiped them out, and took their loot. Now, assuming the heroes have enough pack animals, it will be a simple matter to take the goods into town. Locate a merchant (using Area Knowledge – or Streetwise, if necessary). Make the best sales approach possible. The GM makes a reaction roll for the merchant. If he’s interested in the goods, he makes an offer, which the players can accept or reject. Simple.

But it doesn’t have to be that simple. Identifying treasure, and turning it into cash, can be a major part of the challenge! Some possibilities:

• The treasure is not portable. How will they get it home?
• The treasure is not recognizable as such without a skill roll – or looks like treasure to the unskilled observer, but is really junk!
• The treasure is valuable only to certain collectors or specialists. Getting it to a buyer might be an adventure in itself.
• The treasure is illegal or immoral, making it risky to trade.
• The treasure is perishable or dangerous, and requires special handling.
• Somebody else is hunting the treasure.
• The treasure is not goods, but information – a clue to the real loot, or a major plot hook toward the overall campaign goal.

In spite of your best planning, the players will occasionally find “loot” you had not anticipated. For instance, the slavers had the PCs trapped in iron cages . . . and when they escape, they

Gold and Silver

A traditional assumption of fantasy games (and many fantasy novels) is that gold and silver are heavy, and inconvenient to carry around for purchases. If you are the GM, this is true only if you want it to be true.

Historically, gold and silver were very valuable – and many goods were cheap. For an authentic medieval English (14th-century) economy, treat the $ as a “farthing”: a copper coin about an inch across. A silver penny is worth $4 and is less than half an inch across; 250 such coins ($1,000) weigh one pound. If silver and gold trade at 20 to 1 (a reasonable ratio for much of history), a pound of gold is worth $20,000! A man could carry a king’s ransom in his backpack.

On the other hand, a GM who wants wealth to be less portable might assume that the $ is a one-ounce silver coin, like a silver dollar. A one-ounce gold piece would then be worth $20. At that rate, 12 coins (troy weight) would weigh a pound; a pound of gold would be worth only $240. In such a world, precious gems are the only way to carry a large amount of wealth in a small package, and caravans loaded with gold might actually exist!
take the cages with them to sell for scrap. This is when you improvise. If you have no clear idea what the goods are worth, just make the story interesting. If you want the party to have money, then there's a demand for scrap iron in the next village. If not, nobody is interested. Simple.

Controlling Inflation

The GM should be careful not to let the PCs get too rich too soon. Rather than drive up prices, make expensive things (ships, noble titles, etc.) available, and give the heroes opportunities to invest in interesting long-term, high-risk ventures (e.g., bankrolling an inventor). Alternatively, arrange an occasional catastrophe to keep the PCs broke – or simply an adventure where no amount of money can replace brains.

In a high-tech world, there is no limit to the advantages you can buy with money. In a low-tech environment, once you have one good suit of armor; one fine weapon, and a couple of fine horses, there's not much else you can buy to enhance personal prowess. But you can hire an army...

Finally, be realistic about the value of loot. Armor, combat vehicles, and similar military materials are likely to be damaged after a fight – the PCs will be lucky to get 1/3 "retail value" if they drag this kind of hardware into town. (A very realistic GM will assess the PCs maintenance costs for repairing their own vehicles, weapons, armor; etc., too.)

Wealth and Status

Wealth (p. 25) and Status (p. 28) are separate but related traits. It is up to the GM to determine the details of the relationship.

In many game worlds, those with high social standing must buy up Wealth by one level past Average per Status level above 0, but can have high Wealth without high Status. In others, wealthy characters must buy an additional level of Status per level of Wealth past Average, but can purchase high Status without Wealth. The GM might even enforce both requirements and rigidly associate Status levels with Wealth levels – but this excludes many good character concepts. In all game worlds, it is common for those with negative Status to have Wealth one level below Average per Status level below 0.

To keep things fun, the GM should forbid high Status to poor characters or high Wealth to low-Status ones only if the setting absolutely demands it!

Cost of Living and Status

Each PC must pay the monthly "cost of living" for his Status or accept the consequences, as explained under Cost of Living (p. 265). Assume the PCs are Status 0 – or "middle class" – unless they buy their Status up or down.

To calculate how much money a character has for discretionary use each month, subtract his cost of living and that of noncontributing dependents from his monthly pay (see Jobs, below). In a campaign that does not use jobs, either subtract cost of living from the PCs' adventuring income or ignore this rule entirely!

Jobs

The GM determines what jobs are available in the game world, either on his own or by encouraging the players to come up with ideas for jobs suited to their characters' talents. In a historical campaign, the GM can reduce his workload by inviting the players to research and submit reliable information about the jobs they want!

Regardless of whether the GM or the players come up with the job's description, the GM assigns its prerequisites, job roll, monthly pay, and wealth level. The next few sections explain these things.

Description

This includes the job's title, and tells exactly what kind of work the job entails. The GM should give hours, risks, guild or union affiliations, etc., and point to the occupational template (see Character Templates, p. 258) for the job, if any.

Prerequisites

A job's prerequisites are the skills – if any – needed to do the job. Most jobs specify a minimum required level in each prerequisite skill. This might be absolute ("Administration at 12+"), or relative ("Administration at IQ+2 or better"); the former is likely if the employer requires testing, the latter if the employer awards jobs on the basis of experience. In either case, candidates must have at least one point in the skill – default skill will not suffice! Some jobs also require specific advantages, or forbid certain disadvantages.

Job Roll

At the end of every month in which a character works, he must roll against one of the prerequisite skills for his job. This is called a job roll.

For jobs with multiple prerequisite skills, the GM should specify whether the worker uses his best prerequisite, his worst prerequisite, or one specific skill at all times. This roll might be at a bonus for an easy job, at a penalty for a difficult one.

For jobs without prerequisites, the GM should specify either a flat success roll (e.g., "All characters roll vs. 12.") or an attribute roll (e.g., "Roll ST.").

Most jobs offer a fixed wage or salary. On anything but a critical success or critical failure, the worker collects the monthly pay for the job (see below). On a critical success, he gets a 10% permanent raise.

Other occupations are more variable; for instance, freelance jobs and work on commission. For these jobs, the worker earns the monthly pay if he makes his job roll exactly. For greater success, increase that month's income by 10% times the margin of success; a critical success triples the month's income! On a failure, decrease that month's income by 10% times the margin of failure.

For any kind of job, a critical failure is always bad. At best, the worker will earn no pay for the month. He might also face demotion (at least a 10% reduction in monthly pay), lost savings (due to damages, fines, etc.), loss of job, on-the-job injury (due to an accident – or possibly a fight, if the job is a violent one), or arrest (especially at a criminal "job"). The GM should be creative!

Monthly Pay

Each month on the job, a worker earns his monthly pay – modified for his job roll, as described above. Time spent adventuring is usually not "on
the job,” although the GM might wish to make exceptions for vacations, work done while traveling, etc.

The GM may set any pay he likes. The first table at right suggests a fair monthly pay for someone of Average wealth working at a “typical” job for his tech level.

Actual pay at each TL varies within a range bracketed by the typical monthly pay of the previous TL and that of the next TL; e.g., from $2,100 to $3,600 at TL8. Unless the economy is under some sort of stress or outside control, jobs near the high end of this range will be difficult (significant penalty to the job roll), dangerous (severe consequences on a critically failed job roll), or highly trained (many or high-level skill prerequisites).

Wealth Level

The monthly pay numbers above are for workers of Average wealth. Assume that those of lower Wealth normally have jobs that pay less than this, while those of higher Wealth usually have jobs that pay more. Multiply the average pay and pay range for jobs suitable to a given wealth level by the starting wealth multiplier for that wealth level (see Wealth, p. 25).

Example: “Comfortable” wealth doubles starting wealth; therefore, Comfortable jobs pay twice as much. At TL8, this means that monthly income for those of Comfortable wealth is typically $5,200, but can range from $4,200 to $7,200.

The more a job pays, the higher the Status it can support. The second table at right sums this up.

If a PC lands a job associated with a higher wealth level than his own (which isn’t easy – see Finding a Job, p. 518), the GM should let him earn the usual pay for that job. Most employers cannot get away with paying poorer workers less! However, if the PC’s savings reach the starting wealth of the next-highest wealth level, he must pay the points to buy up his Wealth (see Adding and Improving Social Traits, p. 291). This continues until his personal wealth level equals that of his job.

Likewise, a wealthy PC may work at a job below his wealth level. He gets the usual pay for that job; he does not receive extra pay simply because he is wealthy! Such people often have Independent Income (p. 26) as well as a job in order to meet the cost of living for their (usually high) Status.

Hirelings

A “hireling” is any NPC in the adventurers’ employ. The GM controls hirelings; the players can give any orders they like, but the GM decides how they are followed!

A hireling provides an excellent way to add muscle or special talents to a party without introducing more PCs. A party may have any number of hirelings, but the GM should keep the number of important “personality” hirelings down to two or three at a time. The GM can manage any number of generic swordsmen – but keeping up with an important hireling, whose personality and character sheet are as detailed as any PCs, is challenging.

Creating Hirelings

The GM sets the hireling’s abilities. If there is an occupational template (see Character Templates, p. 258) for the hireling’s profession, the GM can save time by copying statistics from that template. (If the template is for heroic PCs as opposed to average members of a profession, apply a -1 or -2 to all attributes and skills.) The GM keeps the hireling’s record sheet; the players may not see it. Unimportant hirelings need only a card or a note; important hirelings require a full character sheet.

Finding a Hireling

The PCs can’t pulling a hireling out of thin air. When they need to employ someone, they must search for a suitable person – just as in real life. They might not always get what they want.

The recruiter may attempt an IQ roll once per week to find a hireling of the desired type. The GM may permit him to substitute an appropriate skill for IQ: Administration (for formal, corporate-style hiring), Current Affairs (if seeking prominent “world experts”), Propaganda (for aggressive recruiting), Streetwise (if seeking criminals), etc. The party may attempt only one roll per hireling per week. Modify this roll as follows:

City Size: The bigger the town or city, the better the odds:

<table>
<thead>
<tr>
<th>Population</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100</td>
<td>-3</td>
</tr>
<tr>
<td>100-999</td>
<td>-2</td>
</tr>
<tr>
<td>1,000-4,999</td>
<td>-1</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>0</td>
</tr>
<tr>
<td>10,000-49,999</td>
<td>+1</td>
</tr>
<tr>
<td>50,000-99,999</td>
<td>+2</td>
</tr>
<tr>
<td>100,000 or more</td>
<td>+3</td>
</tr>
</tbody>
</table>

Table: Job's Wealth Level

<table>
<thead>
<tr>
<th>Wealth Level</th>
<th>Monthly Pay Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>1/5</td>
</tr>
<tr>
<td>Struggling</td>
<td>1/2</td>
</tr>
<tr>
<td>Average</td>
<td>1</td>
</tr>
<tr>
<td>Comfortable</td>
<td>2</td>
</tr>
<tr>
<td>Wealthy</td>
<td>5</td>
</tr>
<tr>
<td>Very Wealthy</td>
<td>20</td>
</tr>
<tr>
<td>Filthy Rich</td>
<td>100</td>
</tr>
<tr>
<td>Multimillionaire 1</td>
<td>1,000</td>
</tr>
<tr>
<td>Multimillionaire 2</td>
<td>10,000</td>
</tr>
<tr>
<td>Multimillionaire 3</td>
<td>100,000</td>
</tr>
<tr>
<td>Multimillionaire 4</td>
<td>1,000,000</td>
</tr>
</tbody>
</table>

Table: Typical Status Level

<table>
<thead>
<tr>
<th>Wealth Level</th>
<th>Status Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>-2</td>
</tr>
<tr>
<td>Struggling</td>
<td>-1</td>
</tr>
<tr>
<td>Average</td>
<td>0</td>
</tr>
<tr>
<td>Comfortable</td>
<td>1</td>
</tr>
<tr>
<td>Wealthy</td>
<td>2</td>
</tr>
<tr>
<td>Very Wealthy</td>
<td>3</td>
</tr>
<tr>
<td>Filthy Rich</td>
<td>4</td>
</tr>
<tr>
<td>Multimillionaire 1</td>
<td>5</td>
</tr>
<tr>
<td>Multimillionaire 2</td>
<td>6</td>
</tr>
<tr>
<td>Multimillionaire 3</td>
<td>7</td>
</tr>
<tr>
<td>Multimillionaire 4</td>
<td>8</td>
</tr>
</tbody>
</table>

Table: Monthly Pay

<table>
<thead>
<tr>
<th>TL</th>
<th>Typical Monthly Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$625</td>
</tr>
<tr>
<td>1</td>
<td>$650</td>
</tr>
<tr>
<td>2</td>
<td>$675</td>
</tr>
<tr>
<td>3</td>
<td>$700</td>
</tr>
<tr>
<td>4</td>
<td>$800</td>
</tr>
<tr>
<td>5</td>
<td>$1,100</td>
</tr>
<tr>
<td>6</td>
<td>$1,600</td>
</tr>
<tr>
<td>7</td>
<td>$2,100</td>
</tr>
<tr>
<td>8</td>
<td>$2,600</td>
</tr>
<tr>
<td>9</td>
<td>$3,600</td>
</tr>
<tr>
<td>10</td>
<td>$5,600</td>
</tr>
<tr>
<td>11</td>
<td>$8,100</td>
</tr>
<tr>
<td>12</td>
<td>$10,600</td>
</tr>
</tbody>
</table>

Table: Campaign Typical Monthly Pay

<table>
<thead>
<tr>
<th>TL</th>
<th>Campaign Typical Monthly Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$625</td>
</tr>
<tr>
<td>1</td>
<td>$650</td>
</tr>
<tr>
<td>2</td>
<td>$675</td>
</tr>
<tr>
<td>3</td>
<td>$700</td>
</tr>
<tr>
<td>4</td>
<td>$800</td>
</tr>
<tr>
<td>5</td>
<td>$1,100</td>
</tr>
<tr>
<td>6</td>
<td>$1,600</td>
</tr>
<tr>
<td>7</td>
<td>$2,100</td>
</tr>
<tr>
<td>8</td>
<td>$2,600</td>
</tr>
<tr>
<td>9</td>
<td>$3,600</td>
</tr>
<tr>
<td>10</td>
<td>$5,600</td>
</tr>
<tr>
<td>11</td>
<td>$8,100</td>
</tr>
<tr>
<td>12</td>
<td>$10,600</td>
</tr>
</tbody>
</table>
Finding a Job

A PC seeking a job that requires an employer (that is, one at which he is not self-employed) may roll against IQ once per week to see if he finds work. The Laziness disadvantage gives -5 here! Apply the following modifiers:

- **City Size:** The more people in the town or city, the better his chances (see table).
- **Overqualification:** If his skill exceeds the minimum level required by the job, he is more likely to find work: +1 if his skill is one level higher, +2 if two or more levels higher. The GM may give further bonuses if the job hunter has additional abilities that would logically help him do the job (or impress a potential employer).
- **Advertising:** He can advertise that he is looking for work: +1 if his budget is 5% the monthly pay of the job sought, +2 if 50%, +3 if 500%, and so on. This money might be for bribes, “business clothing” for interviews, handbills, placement fees, etc., depending on the job and the setting.
- **Scarcity:** Higher-paying jobs are harder to find. Subtract twice the typical Status level of the job sought from the roll; e.g., a “Filthy Rich” job typically accompanies Status 4, so it would give -8. Negative Status gives a bonus! For instance, roll at +2 to find a “Struggling” job (Status -1).
- **Multiple Jobs:** A seeker who is qualified for more than one job can look for more than one job at a time, at a cumulative -1 to all rolls per job after the first.

### Population Modifier Table

<table>
<thead>
<tr>
<th>Population</th>
<th>Modifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100</td>
<td>-3</td>
</tr>
<tr>
<td>100-999</td>
<td>-2</td>
</tr>
<tr>
<td>1,000-4,999</td>
<td>-1</td>
</tr>
<tr>
<td>5,000-9,999</td>
<td>0</td>
</tr>
<tr>
<td>10,000-49,999</td>
<td>+1</td>
</tr>
<tr>
<td>50,000-99,999</td>
<td>+2</td>
</tr>
<tr>
<td>100,000 or more</td>
<td>+3</td>
</tr>
</tbody>
</table>

**Advertising:** +1 if the advertising budget is 50% the monthly pay of the job, +2 if 500%, +3 if 5,000%, and so on. This money covers the expense of business lunches, handbills, newspaper ads, “recruiting parties,” etc.

**Money Offered:** +1 if the pay is 20% higher than normal for the job, +2 if 50% higher, and +3 if 100% higher or more.

**Risk:** -2 to find a hireling for a job that involves obvious risk of combat, unless seeking a guard, mercenary, or other “combatant” hireling. The GM decides which potential hirelings are “combatant.”

**Legality:** -5 to find a hireling for an illegal job – and any critical failure on the roll results in legal complications. The GM may waive this -5 when the employer uses Streetwise skill for the search, but the critical failure result is the same!

On a success, the PCs find a candidate. The GM describes the potential hireling to the players, and can even take his part for an “interview.” The players must then decide whether they actually want to hire that person. If they decide not to, they must start their search over again.

A failure might mean that a hireling simply is not available – especially in a small town. It is up to the GM whether to allow repeated attempts.

Of course, the GM is free to “load” the roll, if he feels the PCs absolutely should have (or should not have) a hireling of a specific type! For instance, if an adventure calls for a particular hireling, the GM can ensure that the hireling will appear. He may do this overtly (the NPC approaches the party in a bar and asks for a job) or covertly (the players say that they are looking for hirelings; the GM pretends to roll, but gives them a preplanned NPC).

### Loyalty of Hirelings

A hireling might not always act in his employer’s best interests. The GM should use the hireling’s “loyalty rating” as a guide. Unless this is preset for a reason, generate it by making a reaction roll (see Reaction Rolls, p. 494) for “loyalty” when the PCs first encounter the hireling. The GM can even use this during the initial meeting or interview, to see whether the hireling lies about himself. Note that a very loyal potential hireling might exaggerate his abilities out of desire to join the party!

### Slaves

In a game world where slavery is legal, the PCs may buy slaves as either workers or an investment – or they might be enslaved themselves! Anywhere slavery is legal, slaves make up a large part of the job market, and there is a 50% chance that any hireling found is actually a slave.

The price of a slave is generally equal to the amount the slave could earn in five years, if free and working at the typical pay rate for the best job he qualifies for. The GM may adjust this price for any number of reasons: extra skills, good or bad attitude toward slavery, physical appearance, health, etc. Slave traders rarely give a real bargain!

### Loyalty of Slaves

Determine a slave’s loyalty per **Loyalty of Hirelings** (above). However, slaves are less predictable than hirelings. After determining the slave’s initial loyalty, roll 2d on the following table to determine a loyalty modifier:

| 2-7 | - No modifier. |
| 8   | - He was enslaved for some crime, and resents it: -1 to loyalty. |
| 9   | - As above, but -2 to loyalty. |
| 10  | - His previous master was very cruel. If he is treated with kindness during the first week, apply +2 to loyalty; otherwise, no change. |
| 11  | - He has a fanatic hatred of slavery. If treated well, he may like his masters as people, but will still escape as soon as possible. If treated badly (or even “average” for a slave), his loyalty drops to 6. |
| 12  | - He has the Slave Mentality disadvantage (p. 154), and considers... |
Loyalty Checks

A “loyalty check” is a roll made by the GM, usually in secret, to see how a hireling behaves in a given situation. Check loyalty whenever a hireling is in mortal danger, or when violating his trust seems to be the wise, profitable, or easy thing to do.

To make a loyalty check, the GM rolls 3d against the hireling’s loyalty rating (see Loyalty of Hirelings). On a roll equal to or less than his loyalty, the hireling “passed” the check and behaved loyally. A hireling with loyalty 20+ passes all checks automatically.

If the GM rolls over the hireling’s loyalty, the hireling “failed” the check and served his own interests. This does not always mean total betrayal – it depends on the situation. It just means he let his employers down. He may repent and beg forgiveness; this is up to the whim (and dramatic ability) of the GM. If the PCs forgive a hireling with a loyalty of 16+, with or without punishment, his base loyalty goes up by 1.

The GM is free to modify a loyalty check for special circumstances. A huge bribe from a foe, for instance, would give most hirelings a penalty to their loyalty check.

It is up to the GM to decide when a check is necessary. This depends on the hireling. For a veteran, “mortal danger” does not mean “any combat.” He would not fear an orc – or even a whole pack of orcs. But he might have to check loyalty if asked to battle a dragon!

Legal Complications

When slave-holding PCs enter an area where slavery is illegal, they must either dispose of their slaves or pass them off as free servants. Possible anti-slavery attitudes include: legal to own slaves, but not to buy or sell them locally; legal for non-citizens to own slaves while passing through, but illegal for permanent residents to own them; or illegal to own slaves at all.

A creative GM may impose other laws and customs regarding slavery. For instance, it might be legal to enslave members of some social groups or races, but not others. There might be ways for a slave to earn his freedom – some societies might even permit slaves to own property and buy their freedom.

Changes in Loyalty

Several factors can change loyalty, temporarily or permanently:

Higher Pay: +1 to loyalty per 10% by which the hireling’s pay exceeds the norm for his job, whether it’s a “salary” or a share in loot. This bonus persists for a month after the extra pay ceases. (This factor also affects slaves, if they are allowed their own possessions.)

Great Danger: Whenever a noncombatant hireling is exposed to a combat situation, check loyalty. Failure gives -1 to loyalty for a week. Repetitions might have a permanent effect.

Rescue: If the PCs risk their lives (or the mission) to rescue the hireling, make a reaction roll at +3 or more, depending on the nature of the rescue. A “Good” or better reaction means the hireling is grateful. His loyalty becomes the result of the roll or his original loyalty – whichever is higher. If one of the PCs was seriously injured or killed in the rescue, the GM should consider adding a permanent loyalty bonus on top of this!

Employers’ Competence: Loyalty of a “continuing” hireling might change by one point at the end of an adventure, based on the party’s performance. A botched mission reduces loyalty; great success increases it. This modifier is permanent.

Length of Service: After each year, make a loyalty check. A success gives a permanent +1 to loyalty. Thus, the best hirelings become better . . . but poor ones are unlikely to improve much.

Other Planes of Existence

A campaign can extend across several game worlds instead of being tied to just one. This makes it possible to explore themes that do not work well in a single-world campaign. For instance, the PCs might visit several radically different settings in the course of a single adventure, and the world – at least one world – could actually end without the campaign coming to an abrupt halt.

Multi-world campaigns greatly increase the players’ options. They get to experience several settings and genres while playing the same characters. And if they grow tired of the current world, the GM can simply move the action to a new one. This can give a flagging campaign a new lease on life.

However, a multi-world campaign increases the GM’s workload. Instead of having to design one world in detail, he has to create many. He must also address the question of travel between worlds, which can be as much work as designing a world!
Travel Between Game Worlds

One of the chief purposes of the GURPS design is to let players explore multiple game worlds without learning a whole new set of rules each time. A player can participate in several different campaigns, each in a different place or time, and play a different character in each campaign. Each character stays in his own world. But the characters can also move from one game world to another. This can happen in three ways:

1. A player can develop a character in one game world and then bring that character into another game world. An example might be a medieval wizard, hurled hundreds of years into the future by a magic spell, participating in a WWII adventure.

2. An entire campaign can move from one game world to another. For example, suppose the party is the crew of an interstellar trading ship. They crash-land on a primitive planet. Until they can make their way to the spaceport, on the other side of the world, they are effectively living in the 12th century!

3. The campaign can include multiple game worlds by design, along with the means to travel between them. See Other Planes of Existence.

Differences in Worlds

As a rule, the more different two worlds are, the harder it should be for PCs to move between them deliberately. Significant differences would include:

- Magical world vs. technological world.
- Very low-tech world vs. very high-tech world.
- Largely human or all-human world vs. world with many races.
- War-wracked, plague-ridden world vs. peaceful, decadent world.
- Fantasy world vs. strictly historical, “real” world.

Certainly, any or all of these differences could exist on a single planet! But they would not be found next door to each other.

Likewise, the GM should make travel between incompatible worlds difficult. This achieves an effect that is very rare in gaming; it improves both realism and playability. Players will appreciate the fact that “rule changes” come only with warning.

Possible obstacles to interworld travel include all the standard geographical barriers: high mountain ranges, wide oceans, extensive deserts or badlands, swampy jungles, etc. Magical barriers are also a possibility, as are intervening hostile lands. GMs may also have their different worlds located literally on different worlds. The problems of interplanetary travel at low TLs are not to be taken lightly, but powerful magic can do almost anything. Of course, such powerful magic is not likely to be within the PCs’ control . . .

Alternate Earths

“Alternate Earths” are worlds that are like Earth . . . but different in some way. The differences might be tiny (Kennedy's picture is on the dime), huge (Kennedy is now King of the Western Hemisphere), or unbelievable (the Earth is ruled by intelligent lizards who have the same cultures, languages, and politics as us).

A “reasonable” alternate history is sometimes called a parallel world. Inventing parallel worlds is a great intellectual game. One way to approach it is to pick a historical event and ask, “What if this were different?” What if Lincoln had survived Booth’s attack? What if Chamberlain had stood up to Hitler? What if Eric the Red had died in a brawl at age 16?

As the GM, you can invent any sort of alternate Earth. You can assume as many basic points of difference as you like. But it is interesting to see what logical consequences you can develop from one change. Pick any historical event – great or small – and ask yourself, “What if this had gone differently?”

For an entire campaign setting built around alternate Earths, with many examples, see Chapter 20.

Virtual Realities

A virtual reality (or “virtuality”) is basically a synthetic plane of existence generated by high technology. Much of the advice given here for cross-world campaigns is equally valid in high-tech campaigns that feature an immersive “cyberspace” where the PCs can have adventures and interact with the real world indirectly.

The GM needs to be prepared to deal with another potential problem. Many players see little point in working hard to achieve goals in one world if they believe the fruits of their labors will be lost when the campaign moves to the next. This can lead to a game-disrupting sense of detachment. To prevent this, the GM must strengthen campaign continuity by creating storylines that span worlds . . . which adds even more work.

Any GM should know the limits of his time and ability, and consult with his players ahead of time. This is even truer for GMs who wish to run cross-world campaigns.

Types of Realities

Many different types of game worlds can exist in a cross-world campaign. These are often called “planes of existence” (or “planes”), “dimensions,” “realities,” “realms,” or “universes” to distinguish them from distant lands or planets in the same physical universe, which are sometimes called “game worlds” as well.

Physical Realities

These are planes of existence that travelers can actually visit – either in body or in spirit – much as they would visit another country or planet. The
defining feature of such realms is that visitors possess a physical body during their stay. This might be their normal body . . . or it might be a “spirit body” that is corporeal only within that realm.

The most common physical reality is the alternate world (also known as an “alternate history” or “alternate timeline”). This is almost the same as the PCs’ home world, but in this world, history diverged at some pivotal event, creating a different reality. (See Alternate Earths, p. 520.)

Almost as common is the mirror world. Mirror worlds look just like the PCs’ home world, but the resemblance is cosmetic. No reasonable sequence of historical shifts could explain the differences! A good example is the world of faerie: it looks a lot like our world, but it is actually a magical realm ruled by powerful spirits. Another common example is the “evil parallel.” Many things about the world are similar, but personalities and even governments are “opposite”: republics become dictatorships, saints become fiends, and so on.

Some physical realities might be even more alien. At best, they might be as different as alien planets within our universe. At worst, the laws of physics might be different, or suspended. Humans might be unable to survive there!

Interpenetrating Planes
Two or more planes of existence might interpenetrate, with each location in one world corresponding to a similar location in all the others. Such realms are generally distinct from one another; and invisible to each other’s inhabitants — although some gifted people, such as mediums and seers, might be able to perceive more than one reality at a time. Perhaps even ordinary people can occasionally see the inhabitants of the other realms, but regard them as ghosts.

This is a common way to look at “dream,” “phantom,” and “spirit” realms in fiction. Often, travelers to such planes do not go anywhere; they just shift their perceptions.

Phases
A phase is not a destination in itself, but an invisible sub-dimension of one specific reality. Unlike an interpenetrating plane, it is not distinct from its partner reality; it merely represents a physical or supernatural “wavelength” different from the standard one. The main use of such realms in fiction is to let travelers rapidly bridge the gap between two locations within the same physical reality.

An example of a phase is the ethereal state that those with Insubstantiality (p. 62) assume in order to walk through physical obstacles. Another example, common in science fiction, is hyperspace: the “space” into which stardrives shift starships for faster-than-light travel.

Voids
A void surrounds physical realities in much the same way that outer space surrounds stars and planets. A void differs from an interpenetrating plane in that it touches realities without overlapping them. It differs from a phase in that it is not a sub-dimension of just one reality, but a “super-dimension” that engulfs and connects all realities.

Like the ocean and outer space, the void in fiction is a dramatic device that serves one purpose above all others: it mediates travel — in this case, interplanar travel. For instance, popular interpretations of the “astral” plane suggest that it is a void that travelers must pass through when using magic or psionics to journey between realities.

Planar Cosmology
The GM must determine what planes of existence are present — in number and in type — and how they interact. The possibilities are endless! Here are some popular arrangements.

Worlds Within Worlds
In this model, realities are nested one within the next — like the layers of an onion. Alternate worlds or interpenetrating planes might exist on a more-or-less equal footing at some levels of this hierarchy, but the truly important events in the campaign always involve movement up or down the hierarchy, not across any one level.

This structure lets the GM hide secrets within secrets, and offers a classic explanation for many supernatural powers and beings: “They come from a higher plane.” As a result, it is well suited to multiple-reality campaigns with a strong supernatural flavor.

Example: A fantasy campaign takes place in a fairly ordinary physical reality – a world with mountains, oceans, stars in the sky, etc. “Inside” this world, there is a phase called the Ethereal Plane; this explains magical effects such as teleportation and walking through walls. Surrounding the physical world is an inner void: the Spirit World, realm of ghosts. The Spirit World does not overlap the physical world; instead, it is a layer that dead souls (and powerful wizards!) must traverse on their way to an outer void known as the Astral Plane. The Astral Plane, in turn, allows travel to the alien “physical” realities of demons, gods, and other higher powers.

Parallel Worlds
This cosmology features multiple physical realities standing shoulder to shoulder. Most are true alternate realities, but a few might be mirror worlds. Some might even be “pressed so close together” that they interpenetrate. The defining feature is that there are no planes of existence within, between, or surrounding these worlds. All realities are on an equal footing, and travel involves a direct shift as opposed to a journey through some kind of intervening dimension.

This structure eliminates mystical journeys, speeds the act of travel, and provides a rational explanation for weird events (“ghosts” are just inhabitants of unusually close realities, “demons” are merely ugly interplanar voyagers, etc.). These features make it desirable for science-fiction campaigns centered on cross-world travel and trade.

This framework is conceptually simple, but the GM can make it as convoluted as he wishes. Travelers might only be able to visit “adjacent” worlds . . . and a satisfactory definition of “adjacent” could defy scientists’ best efforts. It might take multiple hops to travel to some worlds, and while worlds might form a ring or other simple pattern, the GM could instead decree that they exhibit a brain-busting geometry that humans and their best computers simply cannot map. Use your imagination!
Mixing It Up

The GM is free to add any number of twists. For instance:

- Start with a hierarchy of realities, as explained under Worlds Within Worlds, but place parallel worlds on some tiers of the hierarchy.
- Start with worlds that abut on worlds, as described for Parallel Worlds, but make certain “worlds” fully realized hierarchies of dimensions instead of simple physical realities.
- Add any number of distinct phases to some or all of the worlds in the setting (e.g., each physical reality might have its own hyperspace and an ethereal plane).

INTERPLANAR TRAVEL

Many stories that feature multiple worlds assume that travel between those worlds is a one-way trip: unlucky (or lucky!) travelers somehow fall through the gap between worlds. But regular travel between worlds is an interesting possibility, as it lets explorers study, exploit, and perhaps even conquer entire worlds. In this case, the most important question to answer is, “How do the adventurers get there?”

Instantaneous vs. Time-Consuming Travel

Travel between worlds could be a “Poof! You’re there!” phenomenon: the heroes just have to cast a spell, push a button, walk under a hill, etc. Or it might be a slow process, comparable to sea or space travel. Both approaches have pros and cons.

Instantaneous travel – like the Jumper advantage (p. 64) and Plane Shift spell (p. 248) – allows furious, universe-spanning action, with the heroes and their foes battling from one reality to the next. However, some players will try to avoid enemies (and Debt, Duties, etc.) this way, sapping drama instead of adding to it. This kind of travel also encourages brisk interplanar trade, which is great fun . . . until it destroys the campaign’s economy. In general, if interplanar travel is to be quick, the GM should make the means of travel hard to come by, introduce reasonable risks (e.g., nasty surprises on failed Plane Shift rolls), limit what travelers can carry, and make it clear that some alternate worlds are dangerous.

If interplanar travel takes time, the GM must determine how much time passes, and at what rate relative to time in the PCs’ home world. The primary advantage of time-consuming travel is that the trip itself is an adventure. The downside is that the campaign can get bogged down in travel. Many players grow bored if their characters must make long trips to achieve their goals. If the GM chooses this option, he should be prepared to build an adventure around each trip, or let the PCs spend their time on gainful long-term projects such as study, invention, and magical enchantment.

The most important question to answer is, “How do the adventurers get there?”

Physical Travel vs. Projection

Interplanar travelers sometimes visit other planes of existence in person, but this is not the only option. Visitors might instead journey to other realities in mind or in spirit.

Physical travel (teleporting between worlds, moving there in some kind of vehicle, etc.) lets the GM use classic “hooks” like money and physical danger to steer the campaign. It is also involves less bookkeeping: the PCs have the same abilities and equipment as in their home world. However, physical travel lets the PCs vanish bodily, perhaps along with their possessions, making it possible to escape the consequences of their actions. It also opens the door to commodities trading, which can have unwelcome economic effects. The GM should take care to create adversaries who can follow the PCs wherever they go, and should consider imposing strict limits on the physical goods that can accompany travelers (e.g., “You arrive naked.”).

Projection involves traveling to other planes as a mind or spirit while the body remains behind. This solves many of the problems GMs have with cross-world campaigns. What belongs in each world stays in that world. The only thing that moves between worlds is information – and the GM can easily control that. There are two disadvantages. First, the GM must keep records for both the PCs’ physical selves and their projections. (The GM could just say that the projection is the same as the original, but he would be discarding an interesting dramatic tool.) Second, players might feel that other realms aren’t “real,” and behave accordingly. The solution here is to let them . . . and then have the consequences of their actions show up in their “real” world!

Modes of Travel

Finally, the GM must decide on the actual mechanism used for interplanar travel. Options include:

Artifacts: Interplanar travel relies on magical, psionic, superscience, or weird science gadgetry. There are endless possibilities, from hyperdrives and parachronic conveyors to magic mirrors and stone circles. Be sure to specify whether the artifact goes with the traveler to the other side, or merely sends him there – and whether it’s good for the return trip!

Right Time, Right Place: Anyone can reach other planes, but only under certain conditions: while dreaming, on certain days of the year (“When the stars are right!”), at specific places (such as the “hollow hills” of faerie myth, or a wormhole in deep space), and so on – and possibly more than one of the above.

Special Powers: Travelers need advantages (e.g., Jumper), magic spells (e.g., Plane Shift), or similar powers to move between worlds. To keep PCs with such abilities from going off and leaving the rest behind, the GM should either require all PCs to have such abilities or make sure that the person in charge of transportation has the power to convey his companions (and that the player is responsible enough to do so).
It’s 2027. A future Earth, known as Homeline, is exploring hundreds of alternate Earths. It’s also fighting an undeclared war with another world-jumping civilization . . . but that may be the least of its worries!
Welcome to Infinite Worlds.

Infinite Worlds is an example of a game setting. But it’s more than that. It’s also a framework that lets players create almost any kind of character, and that makes it easy for GMs to run cross-genre adventures.

The Infinite Worlds multiverse is completely optional. GMs who don’t want to permit extradimensional excursions are free to prohibit them. Not everyone is comfortable with blaster-toting wizards fighting Nazi supersoldiers . . .

Although that doesn’t have to be the way it works. Many worlds have yet to be discovered; many others are isolated. The PCs may start out completely unaware of the existence of other dimensions, but at some point in the campaign (possibly after months or even years of play), they discover that their world is just one of many. They find a way to travel to an alternate world, or perhaps they discover an extradimensional plot and end up recruited by the Infinity Patrol . . .

And everything changes.
In the year 1995, Dr. Paul Van Zandt, a physics professor, built the first working parachronic projector and used it to visit the timeline that became known as Earth-Beta, or simply Beta. He concealed his observations and continued his experiments. Six months later, following a mysterious fire that destroyed his Dartmouth laboratory, he resigned from teaching to set up a “consulting” firm.

In fact, Van Zandt had simply freed himself to continue his experiments without the supervision of academia – or of the Department of Defense, which had supplied grant money for his original project. Over the next few years, he refined his theories, contacted 23 more universes, and personally visited six alternate Earths. He also secretly gathered a number of trusted aides, the nucleus of the group that would become Infinity Unlimited. And he founded White Star Trading, an interworld trading corporation, to finance further experiments.

In February 1998, Van Zandt made headlines by publishing his results – and by formally incorporating Infinity Unlimited, with subsidiaries including White Star Trading, Parachronic Laboratories, and Infinity Development. Furthermore, Van Zandt offered to license his designs to any government or corporation interested in crosstime travel.

Infinite Worlds Glossary

alternate: Any timeline except the original Earth. Also “alternate world.”
anchor: An echo that does not experience a quantum shift when “history is changed.”
banestorm: A natural phenomenon that moves matter between worlds.
Centrum: A rival civilization with the ability to travel between worlds. A “Centran” is a native or agent of Centrum.
conveyor: A self-propelled device for traveling between alternate worlds.
Coventry: An alternate world maintained by the Infinity Patrol as a prison for those – both Homeliners and outtimers – who Know Too Much.
echo: An alternate world which is – or appears to be – identical to ours, but at an earlier point in its history.
Eraser: A memory-affecting drug used by I-Cops and others to keep the secret of parachronic travel.
hell parallel: An alternate world which has suffered a natural or manmade disaster that rendered it unliveable. More loosely, any really bad world.
homeboy: Anybody from one's world of origin.
Homeline: The original Earth.
I-Cop: An agent of the Infinity Patrol's Intervention Service.
Infinity Patrol: The paramilitary arm of Infinity Unlimited.
Infinity Unlimited: A private organization that controls parachronic technology as a monopoly and governs access to alternate timelines.
Interworld: The Centran equivalent to the Infinity Patrol.
nexus portal: A “natural” path between alternate worlds.
outtime: Any world except the original Homeline.
outtimer: Anyone from an alternate world.
parachronics: The study of alternate worlds. More specifically, the study of why alternate worlds exist, and how travel between them is possible.
parachronozoid: A creature with a natural world-jumping ability, especially one that leaves a tunnel or portal behind (those that don't are rather hard to spot!).
parallel: An alternate world that differs from ours only in that its history has been different (some are very different). A “close parallel” is different as the result of one identifiable historical change.
projector: A device that can send a conveyor across quanta.
quantum: An “energy level” in 8-dimensional space that contains many alternate timelines. Quantum levels are often abbreviated; e.g., Q7 for Quantum 7.
reality quake: A parachronic upheaval that buries some or all of an alternate's history beneath a new one.
The Secret: The fact that technological cross-world travel is possible. Outtimers are not supposed to learn this, unless recruited by Infinity or Interworld.
timeline: Another term for an alternate world.
weird parallel: An alternate world that has many similarities to our own, but also has differences which make these similarities seem unbelievable (such as a world where intelligent reptiles speak English).
zero point: The term for a location that has been “zeroed” – properly calibrated – for a safe conveyor jump between two specific dimensions.
The Interworld Treaty

The Interworld Treaty was ratified by most (but not all) U.N. member states. It represented a compromise between the interests of large and small states – and between business interests (championed by an uneasy alliance between Van Zandt and the United States) and U.N. and government bureaucrats. The treaty created a framework that was intended to prevent a “neo-colonial” land rush, limit the ability of governments to deploy military forces crosstime, and permit (but regulate) the commercial exploitation of certain worlds, while preventing cross-cultural disasters.

The most significant effect of the treaty was to centralize most power in Infinity Unlimited, while ensuring that checks and balances existed that would give the U.N. Security Council – and to a lesser extent, the U.N. Secretary General – a degree of oversight.

It works . . . at least, some of the time.

Dark Infinity

How Van Zandt persuaded the world’s great powers to accede (mostly) to his terms is one of the “big secrets” of the Infinite Worlds setting. Some possibilities:

Conspiracy: Infinity Unlimited is the instrument of a vast, ruthless conspiracy that has dominated the corridors of power for centuries. The rise of Infinity was the culmination of centuries of preparation. But who won? Do the Illuminati control it?

The Menace from Beyond Time: The world’s leaders caved in because of what Van Zandt showed them. They’ve suppressed this to prevent panic, but perhaps the truth is leaking out. Whatever the truth may be, it’s obviously vitally important that humans spread across many worlds. If the GM wants to have a “new power” invade the hyper-cosmos, there’s plenty of scope.

Deus Ex Paramachina: What if Van Zandt is much more than he seems? Could he be a visitor from another, more advanced timeline? A retired, wandering god? A rogue technomancer, exiled from the Four Realms? It seems odd that Infinity and Centrum developed parachronics so close together. Maybe it was planned. If so, who was responsible? Was conflict the goal, or did something go wrong? Maybe Centrum was supposed to be Infinity’s ally . . .

Naturally, governments were outraged. The U.S. Congress immediately moved to nationalize and classify all parachronic technology. The Japanese, European, Chinese, and Russian governments all called for its internationalization and suppression.

The next day, Van Zandt addressed a closed session of the U.N. Security Council. No one knows what he said, but the world powers accepted his proposal . . . within certain limits.

Infinity Unlimited was organized as a corporation whose formal partners were the permanent members of the U.N. Security Council. Van Zandt retained the position of first CEO, but Security Council-appointed bureaucrats also sat on its board. Infinity Unlimited’s charter was rewritten to keep control of the basic technology firmly in its hands.

Van Zandt won a key victory – almost unnoticed at the time – when he resolved a budget dispute by suggesting that Infinity Unlimited would be largely self-funding: after an initial infusion of funds, it would be “forced” to rely on profits from licensing parachronic technology. Many politicians were pleased that Infinity would not drain resources from the United Nations’ limited funds, and believed this would serve as a cap on the organization’s power. Few in the United Nations or the world appreciated, then, the true potential of the parachronic secret:

**Infinite worlds, infinite wealth.**

Infinity also received its own security organization, which Van Zandt insisted on calling the “Infinity Patrol.” Initially small, and limited to protecting Infinity’s exploration teams and installations, its role and power would expand dramatically over time.

It took time for the economic and political ramifications to sink in, but the revelation that the Earth existed within a potentially infinite series of alternate worlds shook the foundations of human belief. Science, religion, even the nature of identity was called into question. But some people adapted quickly (others still haven’t), and many saw opportunities.

Soon, groups of intrepid explorers were probing the dimensions, led by the vanguard of Infinity Unlimited’s Penetration Service: elite “time scouts” that the corporation recruited for its perilous first-contact missions. Trade opened with dozens of worlds. Natural resources flowed in from the untouched ore deposits of uninhabited alternate Earths. On the world that came to be known as “Homeline,” the environment began to recover as the worst industrial wastes – and the most polluting industries – were sent to dead worlds already blighted beyond anything mankind could do. Political intrigues continued . . . but the economy of Homeline was no longer one of desperate scarcity.

Van Zandt retired immediately. “I plan to devote the rest of my life to travel and study,” he said, “and I’m never going to touch a soldering iron again.”

For a little while, it looked like the start of a utopia, at least for Homeline. And then the worm peeked out of the multidimensional apple: Centrum, a different reality-spanning culture, with its own ideas of what a utopia should look like.

Suddenly, infinite worlds meant infinite trouble . . .
AN INFINITY OF WORLDS

Infinity knows of several hundred alternate worlds, spread through an 8-dimensional space in a pattern that seems almost predictable. These worlds are divided between a number of different “energy levels,” or quanta. It is easy to reach a world on the same quantum, hard to travel outside your own quantum.

Homeline is on Quantum 5 (Q5). Infinity can reach Q4 and Q6 fairly easily, and Q3 and Q7 with difficulty. Q2 and below, and Q8 and above, are completely inaccessible.

Centrum is located on Q8. They can reach Q7 and Q9 fairly easily, and Q6 and Q10 with difficulty. They cannot reach Q5 and below, or Q11 and above, at all.

The known worlds are distributed as follows:

- **Quantum 2 and below:** Unknown!
- **Quantum 3:** 39 known Earths.
- **Quantum 4:** 89 known Earths.
- **Quantum 5:** 68 known Earths, including Homeline and Earth-Beta.
- **Quantum 6:** 379 known Earths.
- **Quantum 7:** 126 known Earths.
- **Quantum 8:** 45 known Earths, including Centrum.
- **Quantum 9:** 43 known Earths.
- **Quantum 10:** 52 known Earths.
- **Quantum 11 and above:** Unknown!

Parachronic scientists agree that there must be an infinity of alternate worlds, although most are out of reach. They disagree strongly on how big an infinity. Neither Homeline’s nor Centrum’s technology can reach anywhere near an infinite number of worlds. But they are out there . . . somewhere.

There are almost certainly undiscovered timelines in all the quanta that Infinity and Centrum can reach. After the first 10 years of exploration, new discoveries settled down to a steady rate of about 10 per year.

A common misconception about the “infinity worlds” is that all possibilities must exist on some alternate world, somewhere. Of course, this might be true; until Infinity can reach all possible alternates, it will be hard to disprove. But even if an infinity of worlds exist, there could be many possibilities that don’t exist. As one physicist explained it: “You can have an infinite number of apples without having any oranges.”

**CLASSES OF ALTERNATE WORLDS**

Infinity Unlimited’s Penetration Service classifies alternate worlds as follows.

**Empty**

There is no intelligent life on the world. It is free for exploitation. Typical uses include colonization (usually on the very best worlds), industry (mostly on bad worlds), hunting preserves (including prehistoric ones!), and research (the whole timeline is set aside as a zoo, science station, etc.). “Disaster worlds” are sometimes exploitable, if only as waste dumps; others are reserved for scientific use.

**Echoes**

The Earths in these timelines, all in Quantum 6, seem to be following the “known” course of history exactly, but aren’t as far along in that history as Homeline. These worlds are open for cautious, unobtrusive research and tourism – but if “history is changed,” they shift to other quanta and become parallels. Centrum has been trying to do just that, as part of a program intended to move them closer to their own home dimension.

**Parallels**

The Earths in these universes diverged from the “known” course of history at some point. Infinity and Centrum penetrate most such worlds as time and manpower allow. Trade, development, conquest, etc., are possible without risk of a quantum shift.

Homeline’s general objective with these worlds is “benevolent guidance” away from war, especially war with weapons of mass destruction – and, somewhat less benevolently, to ensure that they do not discover parachronic travel. Many people disagree with this, but the only coherent alternative anybody has ever come up with is “hands off.” And the idea of, for instance, keeping hands off a parallel-world Hitler, as he is giving the orders for Dachau, is a bit much.

**Anchors**

An anchor is similar to an echo, but highly stable. No one is quite sure why – some theories suggest that quantum anchors were the “original” alternate worlds from which others split off. The first anchors were discovered when major interventions in certain Quantum 6 worlds failed to cause shifts. The half-dozen that exist in Q6 are fierce battlegrounds . . . because here, with no risk of a shift occurring, the dimension war can be fought without any subtlety at all.

**CLOSE PARALLELS**

A “close parallel” is a world very much like Homeline at some past period, but with small differences. Examples include:

- **Earth-Beta:** The first parallel to be discovered. Like Homeline in 2004 in most ways, save for the lack of the crosstime secret.
- **Cherokee:** In this world, now in its year 1930, the Cherokee Nation was stronger and more successful in surviving Anglo incursions. When oil was discovered in Oklahoma, the Cherokee kept the land and the wealth – Big Oil is now an Indian-dominated business.
- **Holly:** A music-lover’s dream world. Buddy Holly’s plane didn’t crash; in that world, it’s now 1989, and Holly and Ritchie Valens are both still rocking. (The Big Bopper went into politics, and is now in Congress.) Several other stars lived less self-destructive lives, and are still around, although Elvis is still dead. And the Monkees became a super-group, with Stephen Stills as a member.

**Which One Is Ours?**

Homeline obviously isn’t “our” present-day world – the defining
change was the discovery of parachronic technology in the 1990s. But Infinity has discovered a couple of early 21st-century Earths, just a couple of decades behind Homeline, which “split off” by not inventing parachronics. There are certainly a few more out there. Since these worlds have technology only a few years away from that of Homeline, the policy is covert observation. If the GM wishes, any of these close parallels could be “our world, our time” – or at least one that is very close to it.

Where Am I?
It is quite possible for a crosstime traveler to encounter an alternative version of himself (sometimes older or younger) living in one or more close parallels. This offers considerable opportunity for infiltration and subversion, but there’s also the risk that sentiment or narcissism can lead to a traveler losing his objectivity and violating the rules to help out or otherwise influence his “other self.”

Farther Parallels
These worlds are considerably more divergent than the close parallels. A few examples (Quantum 5, except where indicated):

Attila: The Mongol invasion of Europe crushed Western and Islamic civilization. Eurasia and northern Africa are forest and grassland, ruled by warring nomadic tribes. Some urban civilizations exist in Japan and South America.

Campbell: Science-fiction editor John W. Campbell died in a traffic accident early in his career. As a result, many science-fiction writers never developed their talents, and SF didn’t advance much past space opera. Apparently, this reduced the number of students who became interested in science and engineering, because scientific development has stagnated here since the end of WWII

Cornwallis: It is 1984. Revolution failed in America and never came to France. The world is TL6, dominated by conservative, aristocratic monarchies . . . but a new revolution is brewing.

Gernsback: A TL(6+2) “techno-utopia.” Nikola Tesla married Anne Morgan, daughter of industrialist J.P. Morgan. Backed by Morgan’s money, Tesla’s genius changed the world with inventions such as broadcast power. The transistor and modern electronics are unknown . . . but atomic power, ray guns, dirigibles, and air cars are common. There was no World War II – the League of Nations reigns, guided by the World Science Council. Gernsback is a covert battleground between Centrum and Infinity, each side coveting Gernsback’s wealth (much of its technology, unfortunately, fails to work in other realities). Quantum 7.

Johnson’s Rome: The Roman Empire is still intact, and cheerfully decadent, in the year 1206 A.D . . . and Johnson Crosstime Incorporated is developing it as a vacation spot. The corporation is using systematic bribery and infiltration to take over the Empire. It is already turning a huge profit. Part of the program involves outlawing public tortures and the most brutal forms of gladiatorial combat, but most of the decadent attractions of Rome will remain intact. (There are many other recreational timelines; this is just one of the most successful.)

Midgard: A TL4 world. The Vikings conquered Byzantium and used its wealth (and the secret of Greek fire) to overthrow Christendom. It is now 1412: the dawn of a Nordic age of discovery, colonization, and piracy in the Americas. Quantum 7.

Ming-3: In our world, China turned its back on exploration in the 15th century. In Ming-3, it did not. It is now 1859, and the Middle Kingdom (currently TL5) rules a global empire. Quantum 7.

The Thousand-Year Reich: The common science-fiction nightmare of a Nazi victory in World War II exists on five known alternates in Q4 and Q5. The U.N., aided by Infinity, recruits and infiltrates agents into two of the “earlier” ones (local dates 1952 and 1961), with the hope of overthrowing the Axis governments. Two more are further along: one in 1970, and one in 1988. These are under careful observation. The 1988 world is actually less advanced than the 1970 one, having suffered a Third World War in which the Nazis destroyed Japan with nuclear weapons and lost many major cities in Europe and North America. The fifth and most worrisome Nazi world is Reich-5; see p. 543 for details.

Weird Parallels
A “weird parallel” is an alternate that resembles Homeline in many ways, but with such strange differences that it is hard to believe the similarities. According to parachronic physicists, these similarities are the reason why otherwise-improbable worlds are sometimes found on accessible quantum levels.

United States of Lizardia: The first weird parallel discovered by Infinity. “United States of Lizardia” (USL for short) is Homeline’s name. Its inhabitants call it Earth, and in some ways, it’s similar to 21st-century Earth . . . except that mammals never became dominant. The natives are bipedal, dinosaur-descended lizard men. Their most powerful nation is analogous to the United States, and occupies North America. Infinity’s Penetration Service is covertly studying it.

Orichalcum: The legendary Empire of Atlantis exists alongside Heroic-Age Greece and Egypt. An island nation in the Atlantic, its inhabitants are blessed by the gods and skilled in many crafts – including the working of the wondermetal orichalcum. This is a TL1-2 alternate Earth in Quantum 6.

Dead Worlds
A “dead world” is an alternate Earth where life never developed. In some cases, Earth is at a different distance from the sun, or has no moon. Dead worlds do not have breathable atmospheres. Over a dozen of these worlds are known. They can be exploited for mineral wealth. They are also a convenient dumping ground for wastes too loathsome to keep on the same world with any human being.

Myth Parallels
Some parallel worlds correspond – far too closely for coincidence – to myths or fiction of Homeline. On such a world, Robin Hood might be a real, living person, waging guerrilla war on the Sheriff of Nottingham . . . or mermaids might be real and common. The most logical explanation is that some writers are psychics or world-jumpers.
Most “myth” parallels are closed to everyone but researchers . . . except for the Robin Hood world, called “Nottingham.” Infinity researchers decided fairly quickly that Robin Hood had just been a lot more “real” than anyone thought. That world is now a popular Time Tours destination.

**Hell Parallels**

“Hell parallels” is a general term for the distressingly large number of alternate worlds that have suffered some great disaster or holocaust. Some are closed due to continuing hazards; others are open to exploitation or research.

**Nuclear War**

More than 20 post-apocalyptic Earths are known, including a dead, radioactive planet; a dying world in the grip of nuclear winter; and a world where humanity has been knocked back into the Stone Age. On a few worlds, nuclear radiation seems to work differently, accelerating the evolution of those who survived the war; all but two of these are off limits. And on one world, Ragnarok, Infinity scouts arrived 10 years after the war and discovered about 20,000 survivors huddled in fallout shelters and isolated bases. In a massive humanitarian effort, these survivors were ferried to an uninhabited timeline and helped to get back on their feet.

**Disease**

On at least four known alternates, disease has wiped out or nearly wiped out mankind. Three of these worlds were depopulated by deliberate biological warfare. They are strictly off limits, their coordinates a secret (and with good reason: in two cases, the first scout died despite all precautions). The fourth world, called Ariane, was hit by mutant influenza in its year 1915, with over 99.9% mortality. The virus is fully controllable with TL8 medicine, and Ariane is being colonized, looted, and developed, despite occasional skirmishes with tribes of TL2 survivors.

**Cosmic Catastrophe**

A very large meteorite struck Lucifer-1, in Quantum 7, about 100 years ago. Few traces of human civilization survived. Continuing volcanism has rendered its air nearly unbreatheable in most areas.

Lucifer-3 is worse: the surface of Earth – and quite possibly every world within several hundred light years – was sterilized by radiation from a nearby supernova or gamma-ray burst. Homeliner survivors are systematically looting the ruins of its TL7 human civilization for surviving art treasures and refined raw materials.

On Taft-3, massive solar flares caused sterility and a more gradual collapse of civilization.

**Few traces of human civilization survived.**

**Ecological Disaster**

Several worlds appear to have been devastated by over-industrialization and careless exploitation at the hands of their human or other inhabitants – some recently, others long ago. On Lenin-2, this led to global warming, flooding, heavy weather; and a massive famine; the few million survivors are now living at TL3.

**Other Roads to Hell**

Other worlds have suffered a wide variety of more unusual disasters:

*Drexler:* "Gray goo" nanomachines devoured civilization (and the first scout).

*Leviathan:* Humanity is fighting a losing battle against an underwater civilization.

*Steel:* Mankind developed sapient machines in the 2010s. These rose up and exterminated most of humanity. Now it is 2026: a war-ravaged, post-apocalyptic Earth is divided into several Zones, ruled by rival artificial intelligences . . . the Zone Minds. Only a few pockets of human resistance remain. Worse, the arms race between rival Zones is spurring rapid technological development (they’re now TL9). Centrum and Infinity both fear that at least one AI is researching parachronic technology, and are (separately) debating whether to secretly assist the human resistance forces.

**Worlds That Break the Rules**

There are a few worlds where physical laws don’t work in the way we think of as “normal.” The best known of these are the universes where crosstime travel itself works differently. For instance, Homeline and Centrum are the only known timelines from which a projector can operate, while Coventry (p. 540) cannot be reached by any means except a projector.

There are others with differences that have nothing to do with parachronics; for instance, the universes where superscience allows physical “impossibilities,” such as gravity control or faster-than-light travel. In some cases, it’s biology that follows different rules, allowing tiny humans or colossal beasts to exist.

And a few worlds are even stranger: There are timelines where no technology higher than “simple mechanics” works. This is because it is impossible to produce an artificial electrical discharge there . . . even though natural discharges work just fine. This gives scientists fits: how do the physical laws “know” the difference? The best-known example, Rustic, was discovered by a world-jumper. If a conveyor had gone there instead, it wouldn’t have been able to return.

There are even worlds where psychic powers exist (Infinity is wary of any world with mind readers, for obvious reasons). Likewise, there are a few where magic works . . . and not always the same way. Such worlds are closed except to elite researchers and agents, and their existence is secret. But there are the inevitable rumors; for instance, many people believe that some Patrol agents have learned magic in order to function more effectively when visiting magical universes.

Of late, scouts are discovering more and more “rule-breaking” worlds – perhaps because most of the “close” worlds have already been found. Or maybe something is
happening to reality. GMs are encouraged to dream up such worlds as needed! Two examples:

Merlin: A close parallel until 1945, when the first A-bomb test created a huge, permanent banestorm in New Mexico. This resulted in a zone of high mana in the American Southwest, and a region of normal mana encompassing much of North and Central America. Magical fallout triggered the appearance of “supernatural” creatures. The United States has become a technomagic superpower that frightens even Infinity. Merlin is a TL7-8 alternate Earth in Quantum 3.

Yrth: A quantum sargasso (see Marooned!, p. 546) accidentally discovered by an Infinity world-jumper a few years ago. He had many adventures before finding a magical artifact that allowed him to escape! Yrth is a TL3 “medieval fantasy” world where powerful magic works in a reliable fashion. Elves, dwarves, goblins, dragons, and several other mythical races exist there. Humans are dominant, but local legends suggest that they are not the original natives. Infinity believes that a banestorm must have transported members of several human cultures to Yrth – either from Homeline during the Middle Ages or from a medieval echo.

**POCKET MULTIVERSES**

“You know, back home, I’m a god.”

A “pocket multiverse” is a set of closely coupled dimensions that share a set of inhabitants and metaphysical laws. Working magic is likely, but not certain.

The typical pocket multiverse consists of one baseline physical reality (which might contain an alternate Earth) and one or more attached alternate dimensions or interpenetrating planes populated by magical beings or spirits. There is often a “void” that surrounds all these dimensions.

**INTERDIMENSIONAL TRAVEL**

The keys to crossworld travel are the parachronic projector, which can move matter between timelines, and the parachronic conveyor, which facilitates such transport. There are also nontechnological means of travel between worlds.

**PARACHRONIC CONVEYORS**

A “parachronic conveyor” is a vehicle for interdimensional travel. There are different styles, but all involve an enclosed hull containing a parachronic field generator, a power system, and a control system.

**Hull Type**

*Capsule:* The standard conveyor is basically an enclosed box. It may be disguised for covert operations – for instance, as a hut, covered wagon, shed, phone booth, or trailer.

*Mobile:* Some conveyors are functioning, mobile vehicles. These usually mass from 1 to 20 tons, although larger and smaller designs exist.

“Mobot”: An unmanned, robot-controlled vehicle. These are still experimental; Homeline cannot yet build a really robust artificial intelligence.

**Parachronic Field Generator**

A conveyor’s generator may have subquantum, quantum, or two-quantum range. No one has yet developed a conveyor with greater range.

The generator also has a mass capacity: the maximum mass it can transport. The mass of the conveyor (including the generator) and its payload cannot safely exceed this limit.

The capabilities of the generator largely determine the cost of the conveyor, which is usually very high. This isn’t all for the circuitry – much of the cost is licensing fees!

*Subquantum Conveyors:* These can jump between destinations at the same quantum level. Base cost is $10 million. Each ton of capacity adds $10 million and 10 lbs. LC2.

*Quantum Conveyors:* These can jump between destinations at the same quantum level. With the help of a projector, they can jump to or from adjacent quantum levels as well. Base cost is $20 million. Each ton of capacity adds $150 million and 10 lbs. LC1.

**Power System**

A jump requires 200 kJ of energy per ton of capacity – delivered in a single pulse. A typical pulsed power system for the field generator costs $50 and weighs 5 lbs. per kJ.

**Control System**

A conveyor may have one of two types of control system:

*Fixed:* The conveyor can only jump between two specific realities, whose coordinates are hardwired. The operator cannot change these settings. This type of conveyor is typical of those available to most corporations, private users, etc. who have proper licenses. LC2.

Many pocket multiverses house powerful, even omnipotent godlike beings. Most such entities are tied to their realm and cannot leave – at least, not without leaving behind most of their power. However, magic or technology from outside the multiverse might allow these gods or their servants to leave. And rarely, a pocket multiverse “absorbs” another reality, bringing it inside the gods’ domain!

A simple example of a pocket multiverse is a regular physical universe containing a parallel Earth; an interpenetrating, superimposed spirit world; and two alternate dimensions, a heaven and a hell. In this system, people who die really do go on to their punishment or reward; ghosts and spirits prowl the space between; angels and demons are quite real; and there may be a Creator.

Infinity researchers find operating in pocket multiverses complex, difficult, and dangerous. Parachronic technology does not always function in all parts of these systems!
Parachronic Coordinates

Levels of several different types of parachronic energy determine a world’s “parachronic coordinates.” The most important of these is the “T-Gamma force,” which has levels that only come in whole numbers.

Suppose the T-Gamma force equation were composed of two numbers – there are really hundreds, but suppose it were only two. The formula for Homeline might be 5 + 0 = 5, so it is in Quantum 5. The formula for Earth-Beta, a close parallel, might be 4 + 1 = 5, so it’s also in Q5. The next world might be 3 + 2 = 5, which is still in Q5. These similar formulas give the same result – 5 – so the associated worlds are similar to Homeline, as well as nearby.

But a world might also have a formula of 25/5 = 5, or -5 x -1 = 5, which gives 5 in a very different way. Such worlds are still in Q5, but very different.

By the same analogy, a parallel that is in Q7 but still very similar to Homeline might have the formula 7 + 0 = 7.

Programmable: The conveyor can jump to any reality within its range. To accomplish this, the operator must enter the coordinates into its guidance system manually. These units are much more tightly controlled. LC0.

Conveyor Operation

An unassisted parachronic conveyor can only jump to timelines in the same quantum. For a long-range conveyor to jump to a different quantum, it requires the assistance of a parachronic projector (see below). For a safe jump, the total mass of the conveyor and its payload cannot exceed the field generator’s capacity. A typical conveyor, after subtracting its own mass, can transport anywhere from 500 to 2,000 lbs. of occupants and cargo.

A conveyor jump requires a lot of energy in a single pulse – more than a TL8 vehicular power plant can deliver. The necessary pulsed power system accounts for about half the mass of a conveyor. It can deliver enough energy for a single jump, after which it must be recharged. Most conveyors have an onboard fuel cell that can replenish the energy bank in about 30 minutes. This means the conveyor can’t return immediately after making a jump!

A conveyor needs to be programmed with the precise parachronic coordinates of both its location and its destination. If a conveyor gets lost, it’s in trouble: the crew may know where to go, but not how to get there from their current position. Finding the coordinates of a new universe is a huge research project, taking years of effort. Infinity and Centrum both have the parachronic coordinates of several hundred universes on file. In Homeline, most are publicly available, but some (for closed worlds, or those known to be controlled by Centrum) are secret.

Parachronic coordinates are used in conjunction with the actual space-time location of the conveyor to plot a “parachronic course.” A different “jump program” is required for each location in real space (e.g., Times Square, New York) and each set of parachronic coordinates (e.g., Homeline to Earth-Beta). Infinity Unlimited charges about $500 for a pre-plotted jump program, from a commercial I-Port to the equivalent location in the target universe. To create a custom jump program (e.g., to depart from your garage in Queens instead of from Times Square) takes 5 to 10 days of supercomputer time... at a cost of $1 million to $20 million. For this reason, most legitimate travelers use the I-Ports.

Just prior to departure, the conveyor’s operator must perform final jump calibrations to correct for local conditions and the conveyor’s current mass. Solar neutrino and cosmic ray density, local electrical and magnetic fields, and similar factors can all influence the jump; a good operator will compensate, taking 10 minutes. The operator can take more or less time; see Time Spent (p. 346) for the effects on the skill roll for the jump.

Finally, the operator hits the “jump” button! This activates the conveyor’s generator. If the jump requires a projector, he hits the “ready” button instead. The conveyor jumps as soon as the projector’s field is focused on it.) The conveyor vanishes, to reappear at the same point in space in a different universe.

Parachronic Projectors

A “parachronic projector” is a device that enables a quantum or two-quantum conveyor to cross quanta. It consists of an enclosed “stage” surrounded by equipment. It can be set to dispatch or retrieve a conveyor.

A projector’s size depends on how much mass it can move. Van Zandt’s first projector filled a large laboratory. The largest modern projectors can move up to 300 tons at once, and occupy most of a city block. An “average” projector requires enough hardware to fill a small auditorium, and can move two tons.

A projector requires a great deal of energy to operate. This can get expensive, but for a large projector, the cost per unit of mass remains low enough to be negligible – even when moving relatively low-value items, such as grain and ore.

Projectors are very costly. Infinity quotes a base price of $100 million for the simplest installation with a two-ton capacity; prices only go up from there. Thus, only governments, eccentric billionaires, and large corporations can afford their own projectors. But since the cost to transport people and goods is relatively low, projectors routinely handle a dozen transits per day.

Projector Operation

In order for a projector to dispatch a conveyor, the conveyor must be positioned on the projector’s stage and “ready”: programmed, powered-up, etc.
To retrieve a conveyor, the projector must be focused on a specific universe within two quanta. If a “ready” conveyor in the target universe occupies a point congruent with the stage, the projector snatches it back. Since “real time” interdimensional communication is impossible, retrieval operations rely on setting pickup times and alternates. For example, a cautious penetration expedition might arrange to have a projector turned on once every 24 hours. If they don’t want pickup, they won’t power up their conveyor.

It is relatively straightforward to use a projector to dispatch or retrieve a quantum or two-quantum conveyor over a one-quantum distance (e.g., from Q5 to Q4 or Q6, or vice versa), provided the conveyor has an operating, calibrated field generator.

To dispatch or retrieve a two-quantum conveyor over a two-quantum distance (e.g., from Q5 to Q3 or Q7, or vice versa) is trickier. A conveyor with an operating, calibrated field generator isn’t enough – transit is only possible under special conditions, and these can only be predicted about four hours in advance. (Every hour, roll 3d. On a result of 7 or less, an hour-long window will open in four hours.) Only the computers and instruments on the projector can make this prediction; those in the conveyor have no option but to prepare for pickup and wait . . . and wait . . . and wait.

**Operations and Accidents**

When a conveyor jumps, roll against the operator’s Electronics Operation (Parachronic) skill to see how the trip went. On a projector-assisted trip, both the projector operator and the conveyor operator must roll.

**Modifiers:** -3 or worse for damaged equipment. Electrical disturbances give a penalty, from -2 for severe electrical storms or solar flares to -6 for the electromagnetic pulse of a nuclear blast! (“Hardening” the electronics won’t remove this modifier – this is an environmental effect, not equipment damage.)

On a success, the conveyor instantly disappears from its starting universe and reappears at the same point in the destination universe. On a failure, by either the conveyor operator or the projector operator, something went wrong! Usually, the transit happens anyway . . . but not as planned. Roll 1d – or 2d, for a two-quantum jump – and add it to the operator’s margins of failure. If the conveyor and projector operators both failed, add their margins of failure! If the conveyor is overloaded, increase the total by one or more. Then look up the result on the table below.

1 – Timing error. Trip takes 1d minutes from the viewpoint of both those in transit and those “outside.”

2 – Timing error. Trip takes 1d minutes from the viewpoint of one of those in transit and those “outside.”

3 – Timing error. Trip takes 1d minutes from the viewpoint of both those in transit and those “outside.”

4 – Timing error. Trip takes 4d minutes from the viewpoint of those “outside.”

5 – Timing error. Trip takes 4d minutes from the viewpoint of both those in transit and those “outside.”

6 – Positional error. Conveyor appears 1d feet too low, or off to one side. Minor damage to conveyor or projector, but not to passengers or cargo (unless it is very fragile).†‡

7 – Resonance error. Shipment appears and then vanishes, reappearing where it was coming from. A repeated attempt is allowed, but at -1 to skill.†

8-9 – Field-strength error. Electrical discharges do 1d-2 burning damage to all personnel, and temporarily disable all unshielded electronic equipment. The conveyor’s field generator is disabled until it receives major repairs.†

10 – Positional error. Conveyor appears too high. The fall inflicts 1d crushing damage on each passenger and to breakable cargo. The conveyor’s generator is damaged: -3 on trips until it gets minor repairs.†‡

11– Severe positional error. As 10, but falling damage is 2d and the conveyor’s generator is disabled until it receives major repairs.†‡

12 – Focus error. The conveyor goes somewhere unintended. It will appear in the same place, geographically, but it could be on any of an infinite number of timelines. Roll 1d: 1-3 means it’s on the right quantum level but in a different timeline; 4-5 means it’s on an adjacent quantum level; and 6 means it’s two quantum levels off. It will take days, weeks, or even months for the computers at Infinity (or Centrum) to deduce its location. Until then, there is no way to retrieve it. If a projector was involved, there is also a 2-in-6 chance that something will arrive on the stage from a random crosstime location. It might be air; rubble, an artifact, or a living being . . . and it might be dangerous. In anything but an emergency, the projector will be taken offline for 1d days while researchers gather data (the hope is to build a controllable “snatcher” projector someday!).†‡

13 – Matrix error. The conveyor arrives in small pieces – it is totally destroyed. Grain, ore, etc., is unaffected; other cargo is killed or destroyed. The GM may wish to “fudge” this result for PCs (treating it as 12 or 14, as desired).†

14 or more – Utter confusion! Roll twice more and apply both results. If either of these new rolls results in 14 or more, see Fascinating Parachronic Disasters (below) instead.†

* Travel time between worlds is theoretically zero. Sometimes, for no known reason, a trip seems to take longer. And sometimes, a trip seems instantaneous to the passengers but takes time from the point of view of the people on either end!

† When one of these results comes up, roll 1d: on a 1 or a 6, nothing happens; on 2-5, the corresponding time-delay result from the table (2 through 5) occurs as well.

‡ If this error would mean that the conveyor materializes inside a solid object, anything it displaces simply vanishes. No one has yet explained where it goes. This means that it is very foolish to stand on a projector stage or within the area corresponding to the focus of a projector! You could vanish. Worse, *part* of you could vanish.
Fascinating
Parachronic Disasters

Roll 2d and consult the table below whenever result 14 comes up twice in succession on the previous table. Several of these results assume living cargo; reroll these if sending inanimate cargo.

Some of these results appear to violate parachronic science. Many of them have not happened to Infinity . . . yet. A hazard associated with any such event is the mob of researchers that instantly appear – to take possession of all equipment involved, and to debrief all witnesses to within an inch of their lives.

Parachronic Detectors

A “parachronic detector” is a device that can detect an incoming jump. To do so, it must be on the same reality as the jump, and the jump must occur within its range (see below). Roll against the operator’s Electronic Operations (Sensors) skill. Success gives a bearing. Two or more stations within range can triangulate and determine the jumper’s location to within a few percent of the actual range.

The sensor also records the jump’s reality disturbance. An hour’s analysis and a successful Physics (Parachronic) roll will reveal the source of the jump – conveyor, projector, or “anomalous” (e.g., a spell) – and its quantum of origin. A day’s work and a roll at -5 identifies the reality of origin, if the researcher is familiar with it.

The portable unit most often carried by Infinity Patrol agents costs $560,000 and weighs 56 lbs.; it the size of a large backpack, and has a 1,000-yard range. Larger models are $1 million and weighs 200 lbs. per mile of range.

When Infinity or Centrum takes over a timeline, standard operating procedure is to deploy a network of long-range detectors. However, their expense means that few worlds have total coverage. It is generally only cost-effective to deploy them in major centers.

<table>
<thead>
<tr>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trip takes centuries, or even millenia, from the viewpoint of the shipment. Much less time passes for the “outside” world. Survival of living beings is unlikely – they might arrive and then crumble to dust! Rather than killing off PCs, the GM is free to substitute other temporal oddities, such as aging in reverse. Finding a cure could be an interesting adventure.</td>
<td>Trip takes a very long time from the passengers’ mental perspective, but no time from their physical perspective. Each passenger gains 3d points in assorted mental quirks and disadvantages, assigned by the GM in accordance with the passenger’s personality. (This has happened twice.)</td>
<td>Signal error. Living things arrive safely . . . except that everyone’s mind ends up in the wrong body. This may be permanent, or it might wear off in 1d days. See Mind Transfer (p. 296) for the effects of mind swapping.</td>
<td>Tau-factor error. Shipment appears as a “mirror image” of itself. Ores are unaffected. Foodstuffs are inedible. Living passengers acquire the Restricted Diet and Unusual Biochemistry disadvantages, and require a special diet</td>
<td>Bio-field error. All nonliving material in the shipment – including the conveyor – disintegrates or is lost elsewhere. This can leave travelers embarrassed or stranded, depending on whether they were arriving at a projector stage or leaving one.</td>
<td>Living beings experience brief telepathy. Each passenger acquires 20 points worth of Telepathy abilities (see Chapter 6); the GM assigns these randomly. These last 1d days – roll separately for each person. (This has happened twice . . . that Infinity knows of.)</td>
<td>The shipment appears twice, 1d minutes apart. (This has happened once; fortunately, it was an uncrewed conveyor. The second conveyor displaced the first one when it was partially unloaded. Was the duplicate some sort of “mirror” effect, or was it from another timeline? It is unknown what would have happened had there been passengers. Would they have been duplicated?)</td>
<td>The shipment or conveyor is switched with a very similar shipment or conveyor belonging to Centrum (or to Homeline, if the mission was Centrum’s).</td>
<td>The shipment or conveyor is switched with a very similar shipment or conveyor belonging to some other, as yet unsuspected, race of crossworld travelers.</td>
<td>The shipment or conveyor is switched with a shipment or conveyor belonging to some completely alien dimension-traveling culture. Mass is unchanged, but nothing else need be the same!</td>
<td></td>
</tr>
</tbody>
</table>

Damaged Conveyors

Failed jumps, accidents, sabotage, and attacks can all damage a conveyor: Depending on its hull, a conveyor might be as flimsy as tinfoil or as robust as a tank – but should any damage penetrate its DR, assume that there is a 1-in-6 chance of significant damage to its delicate parachronic hardware.

The dramatic effect of damage is more important than the specifics. As a rule of thumb, it usually reduces the conveyor’s capabilities: the conveyor still functions, but at -3 or worse to all Electronics Operation (Parachronic) rolls.
Severe damage (GM’s decision) may cripple the conveyor completely. Until repairs are made, it cannot make a subquantum jump itself, nor can a projector retrieve it. In effect, it is “stranded.”

**Lost Conveyors**

A conveyor can become entirely lost – that is, fail to arrive where it was expected – for a variety of reasons. These boil down to “operator error” and “bad luck.”

If someone on Homeline was retrieving the conveyor with a projector, or expecting it to return under its own power, its loss will be noticed immediately.

If the conveyor was outbound from Homeline, the time before its loss is noticed depends on the shipment. Loss of a regular supply run to a major base will be reported as soon as possible, by sending a message capsule to the other end. However, it might take days or weeks to notice the loss of an exploration mission!

The sooner a conveyor’s loss is noticed, the better the chances of recovery. The Infinity Unlimited computers can get to work on the problem, taking into account every known variable, down to the exact mass and capacitance of the conveyor. Sometimes, they can predict where it might have appeared. If they’re lucky, this is a charted, habitable timeline. But sometimes it isn’t.

Occasionally, the computers predict an uncharted location. In fact, this is how several new timelines were discovered. Even so, being randomly dumped onto a brand-new timeline, while it makes a great adventure, is a trip most travelers would rather avoid.

**Lost/Moved Timelines**

This is *not* “operator error” – but when it happens, it causes operator headaches! See *Timeline Shifts* (p. 544).

**Paradoxes**

Paradoxes don’t happen, because parachronic travel is not true *time* travel. However, in an “echo” – a timeline that duplicates Homeline’s history – any intervention that changes the flow of events can cause a quantum shift: an expensive nuisance at best, a disaster at worst. See *Timeline Shifts* (p. 544).

That said, a continuing nightmare of more imaginative types is this: What if one of the historical parallels is somehow Homeline’s past, and visitors change it without noticing? But that hasn’t happened . . . yet.

**NATURAL PARACHRONIC PHENOMENA**

There are several unusual “natural” phenomena that can reach across dimensions.

**Banestorms**

A “banestorm” is a localized event that transports everyone within a certain area to another dimension. The phenomenon is most often circular, and may range in size from a few yards to a few miles across. On a planet with an atmosphere, it tends to manifest as a thick fog bank, mysterious thundercloud, heavy electrical storm, etc. that builds up slowly (e.g., a fog rolls in and blocks all light) and vanishes suddenly.

When a banestorm vanishes, so does everyone within its radius. These “passengers” reappear . . . elsewhere. And unlike a parachronic conveyor, a banestorm does not always transport its passengers to a spatial location that corresponds to their point of origin in their home dimension. Some geographical locations seem to be “preferred” pickup or delivery points. These places often earn a reputation – the Bermuda Triangle, for example.
There are few consistent patterns beyond this. Some worlds seem to be more prone to banestorm manifestations than others – and on a given world, certain locations seem to be unusually susceptible. Multiple banestorms can strike simultaneously. Researchers know of at least two special types of banestorm:

Twin banestorms exchange matter from two dimensions. A large land-based event can even exchange terrain between worlds.

Permanent banestorms transform an area of a single physical reality into one in which two dimensions co-mingle. This often has an effect on the area's mana level, increasing it for hundreds or even thousands of miles around.

No one knows what causes any type of banestorm. Theories include:

Banestorms are magical. Some evidence suggests that banestorms are magical in nature. Divination can often predict them. Powerful ritual magic can sometimes summon them. Magic seems to be less successful at controlling them, however...

Banestorms are technological. Parachronic technology can certainly detect banestorms; a parachronic detector (p. 532) “goes crazy” 1d minutes before one appears. There is considerable debate as to whether parachronic technology can cause them. Parachronic Laboratories (p. 538) believes it might be possible to create an artificial banestorm using a “parachronic bomb” – but if they’ve got one, they don’t admit it. Some theories suggest that any use of parachronic technology may intensify or even cause banestorms. And some evidence suggests that the technology need not be parachronic: on one world, Merlin, the first nuclear detonation to take place triggered a permanent banestorm.

Banestorms are alive. A few researchers believe that banestorms are living things!

Reality Quakes
Unlike a timeline shift (see p. 544), a “reality quake” is a parachronic convulsion that overturns the past of a given world, rewriting reality and changing its established history. This would normally go unnoticed, except that fragments of the previous past (“reality shards”) often still remain, persisting as bizarre memories, inexplicable amnesia, or anomalous artifacts – especially in the “fracture zone,” the name given to the “epicenter” where the two histories began to diverge. Some reality shards are even human – legendary figures, mysterious strangers, or individuals “duplicated” across worlds. Extremely powerful reality quakes sometimes overturn both the past and future of a world, hurling reality shards into nearby parallels.

Nexus Portals
A “nexus portal” is a hole leading from one dimension to another. It is usually circular and less than 10 yards across, and allows light to pass through from both ends (that is, you can see its destination). Like a conveyor, a portal crosses realities without crossing space.

Most portals are two-way: you can enter or leave at will. Some, however, are one-way: you can enter but you can’t leave. If you stick a limb or object partway through, you can’t retrieve it – it’s stuck until you or the object go all the way through.

A portal might be further qualified as:

Open: The portal is always present and can be traversed freely.

Periodic: The portal only appears sometimes: every full moon, once per century, etc. If it’s two-way, the way out usually has the same cycle.

Locked: The portal only appears in the presence of a specific “key” – usually a magical or technological artifact. A parachronic detector or world-jumper can detect its presence.

Summonable: The portal only appears when summoned. This requires a specific action, which might be mundane (touch a specific object) or complex (use a specific sacred dagger to perform a blood sacrifice). Most such portals only remain open for a brief period after being summoned.

Variable: The portal is a junction between more than two realities. The destination might be random or selectable (via a key or action). If two people want to go to the same place, they should hold tight as they pass through!

Hidden: A hidden portal is invisible – you can step through it without realizing it was there. Such portals are often one-way! A parachronic detector can sense a hidden portal only at 1/100 its normal range – and only when the portal is actually used to traverse a dimension. A world-jumper can sense a hidden portal in his line of sight on an IQ roll.

Dimensional Highways
A “dimensional highway” is a path that runs across dimensions. Researching its history often reveals that it follows ancient straight tracks, ley lines, etc. At points along the road, nexus portals exist. These are usually periodic or locked, and as wide as the road itself. The road might end at a portal in one dimension and resume at a portal in the next – or it might continue in the original world as well, and after a stretch, lead to another portal to a third reality, and so on. Who built the roads? Nobody knows...

Shiftrealms
Some geographical features (and a few man-made structures) are “unstuck” in reality. They shift between worlds, either randomly or on a regular cycle. These “shiftrealms” may appear and vanish entirely, or overlay or switch places with local reality. They can range in size from individual rooms to entire worlds. Researchers believe this may account for tales of mysterious vanishing islands (such as Avalon and Huy Breasil) and haunted forests.
Infinity’s World Classes

Infinity applies one of the following formal classifications to each timeline.

**Open**
The world is open to visitation and colonization.

**Protectorate**
The world is a populated parallel under the protection and control of Infinity Unlimited or the United Nations. Depending on the world’s status, limited trade and contact may be possible.

**Research**
The world is set aside for study. Most such worlds are parallels. Types include:

- **Anomalies**: Worlds that show some interesting but not obviously dangerous variations in physical laws.
- **Cultural Preserves**: Worlds left as “controls” to judge the effect of intervention on other, similar timelines.
- **Nature Preserves**: Worlds with interesting wildlife, such as dinosaurs . . . or dragons.
- **Primitives**: Parallel worlds inhabited by Bronze Age or earlier man. (There is continuing pressure to allow more exploitation of these worlds.)

**Closed**
The world is “off limits” to absolutely everyone save a few chosen researchers or Penetration Service agents . . . mostly because they pose a potential danger to Homeline. Infinity tries to keep the very existence of these worlds secret. Reasons for this include:

- **Hell Parallels**: Timelines depopulated by uncontrollable disease, nanotech gone awry, or forces not yet understood. See p. 528.
- **High-Tech and Aggressive**: The world would present an obvious danger if the locals learned about crosstime travel. The Nazi-dominated “Reich” parallels are the best example.
- **Mysterious Forces**: Worlds that harbor magic, widespread psionics, or any ability under the general heading “super powers.”
- **Nonhuman Intelligence**: Timelines in which aliens are the dominant species.
- **Ultra-Tech**: When a world has technology more advanced than Homeline’s (or Centrum’s), it is considered hazardous even if its culture seems benign. The researchers’ objective here, of course, is to learn the native science without being caught! No Earths with interstellar travel have been discovered so far.
- **War Zone**: The world is the site of a major struggle between Infinity and Centrum, or between different native factions.

There are a few “special” closed worlds that don’t fit into any of the categories above; e.g., a mysterious parallel where the inhabitants suddenly began to shrink. They are usually closed for good, one-of-a-kind reasons!

Infinity also requires that outtime interlopers “better the lot” of the people whose worlds they infiltrate and use. This is often interpreted very loosely . . .

Infinity’s ability to enforce these policies is strong but hardly absolute. Many interests explore and exploit timelines clandestinely, simply because it is so profitable to find and monopolize a new world!

Infinity has a number of subsidiary organizations. Each performs a different task. They try to cooperate closely, but communications breakdowns and low-level infiltrations are not unknown. Additionally, no matter how carefully Infinity screens its employees, there is always the chance that Centrum infiltrators, government and corporate spies, and ordinary thieves are among them – leading to adventures with no outside enemy.
Crosstime Recruitment

Homeline and Centran crosstime organizations often employ locals, but they do so through front organizations – the outtimers have no clue that they’re working for extradimensional bosses. In fact, it’s a serious crime for anyone to divulge The Secret to an outtimer. However, the Infinity Patrol has limited authority to recruit talented outtimers. Its Centran equivalent, Interworld, enjoys similar powers.

Crosstime recruitment is supposed to occur only when an outtimer’s talents are deemed to be a significant asset to the organization. A field agent who recruits a local will have to justify his actions to a board of inquiry. In practice, tolerance depends on the situation. World-jumpers (p. 544) are an exception. They’re so valuable that every effort will be made to recruit them, no matter where they’re from.

On the other hand, there have been cases where recruitment was initiated for personal reasons. For instance, an undercover Time Scout might fall in love with a talented outtimer and use his influence to recruit her into the service. In a case like this, Infinity might go along in order to keep a good agent . . . but it is more likely to court-martial the offender and send both lovers off to Coventry (p. 540).

The Patrol expects all recruits to go through training and indoctrination, and watches them carefully to ensure that they remain reliable. An outtime recruit whose true loyalties remained with his homeworld would be a great liability.

ISWAT

Interworld Special Weapons and Tactics, or ISWAT, is the elite black-ops section of the Infinity Patrol. It specializes in operations on closed worlds, weird parallels, and pocket multiverses, and routinely performs high-priority but deniable missions that can determine the fate of entire worlds.

ISWAT has an undisclosed number of operatives, who work in small teams. Some are highly trained I-Cops or special operations troops . . . but the majority are outtimers recruited for their unique talents. Rumor has it that these include famous historical or mythical figures plucked from alternate worlds; wizards, psis, and supers; nonhumans (including undead); slumming angels and reformed demons; and even retired pagan demigods. Many of these rumors are true.

ISWAT ops have three things in common: a dedication to the nebulously defined ideals of “peace and freedom,” a love for action, and a very tight personal loyalty to their team members. The eight iconic characters on pp. 307-323 make up an ISWAT team. Such a team is an ideal PC group for very free-wheeling adventure.

Does Centrum have its own ISWAT? That’s a very good question.

INFINITY DEVELOPMENT

This joint U.N.-Infinity organization is responsible for parceling out “trading territories” among the timelines. When a new world is opened for commercial exploitation, interested parties must submit bids to ID. Cash is just one consideration; bidders must also show how they will protect the local environment and population, keep security, and so forth. Outtime installations are always subject to inspection by ID bureaucrats, I-Cops, or both.

Many Homeline organizations object strongly to the implication that Infinity “owns” the other timelines . . . but that’s the way it works.

INFINITY PATROL

The Infinity Patrol is the “operations” branch of Infinity. In theory, it is
a private security force operating under a U.N. mandate – much like the various contractors (some armed) that the United Nations has hired in the past to clean up after wars. In practice, the Patrol is a supranational paramilitary agency under Infinity’s control.

The Patrol’s jurisdiction on Homeline is strictly limited to protecting Infinity premises – although they have close liaisons with both national police agencies and Interpol. Beyond Homeline, only its reach limits its influence, but it has limited powers on worlds that have large national presences. The Patrol is spread very thinly among the many timelines it polices.

The Patrol is a large organization, with 10,000 field agents and 50,000 other employees. It is multinational in character. The paramilitary “I-Cops” primarily recruit former police and military personnel, while the Penetration Service attracts adventurers and scientists of all sorts (geologists, anthropologists, biologists, etc.). The one constant is that everyone must pass rigorous psychological and loyalty examinations intended to weed out fanatic nationalists, criminals, radicals, and anyone else likely to betray the organization. Most of the time, this works – although some Patrol members undoubtedly have divided loyalties or hidden agendas.

A Patrol field agent might be an explorer, investigator, or soldier, but regardless of his job, he serves in one of the Patrol’s two main branches:

**Intervention Service:** Popularly known as the “I-Cops,” Intervention is the security and espionage arm of the Patrol. Its primary responsibilities are enforcing Infinity regulations and countering Centrum penetrations. Intervention is organized into 10 divisions, including Justice, Security, Internal Affairs, and Special Operations.

**Penetration Service:** The “Time Scouts” are responsible for surveying and opening new timelines. They also handle search-and-rescue operations for lost conveyors. One of their least-known but most dangerous jobs is crosstime intelligence gathering. Penetration’s eight divisions include Contact, Echo Surveillance, Intelligence, and Search and Rescue.

### Infinity Patrol Missions

The Patrol has many duties, including:

- **Enforcement:** Inevitably, some Homeline governments, corporations, and individuals use timelines in unacceptable ways: exploiting the natives, wasting resources, importing mercenaries, and equipment for military adventures, and so on. This happens constantly, despite the I-Cops’ best efforts. But the Patrol keeps trying to stop it. This is the job of the Justice division of Intervention, but Penetration Service agents often notice the problem first, when a “new” timeline turns out to have uninvited guests.

- **Homeline Security:** The Security division of Intervention is focused on monitoring and stopping crosstime infiltration of Homeline. It works closely with the Intelligence division of Penetration – and with the intelligence agencies of major world powers – to detect and neutralize threats. A major part of this job is keeping tabs on conveyors and projectors.

- **Outtime Security:** A pillar of Infinity’s policy is that no timeline outside Homeline (and obviously Centrum) is in order to roll up the entire gang – not just the foot soldiers. An experienced Time Tours guide or retired scout might be approached for such a mission.

- **Defense vs. Centrum:** This includes counterespionage against Centrum spies, espionage to learn more about the enemy, and the most “romantic” job in the Patrol: defending echoes against sabotage. Penetration and Intervention work together at these tasks. Penetration engages in surveillance, espionage, and counterespionage, while Intervention handles active police work and special-ops missions to counter Centrum operations once detected.

- **Penetration Missions**

New timelines are discovered mathematically, although a lot of trial and error is also involved. Initial entry into a new timeline is always made using a robot with an extensive chemical and biological sensor package. Many timelines get no further visits . . . they’re not suitable for human life. But when a timeline looks safe, a human has to go in.
The first scout's job is to get in, look around, and determine whether the timeline is inhabited – and, if so, by whom or by what. If it proves to be uninhabited, Penetration classifies it for colonization or other use and turns it over to Infinity Development.

But if the timeline is inhabited, it remains the property of Penetration, and the survey proceeds very carefully. The first scout isn’t expected to bring back anything more than an estimate of the tech level and a recorded sample of the language. Later teams try to learn a bit more on each visit. If the timeline is similar to a known parallel or historical period, experienced agents can be brought in quickly. Otherwise, exploration happens one careful step at a time. The higher the timeline’s technology, the more careful the explorers must be.

Only very well penetrated timelines are opened up to organizations like Time Tours. Usually, these are on Q4 and Q5, where Centrum’s agents cannot reach. But certain Q6 echoes are also (carefully supervised) tour sites.

Naming New Worlds: A newly located timeline receives a code number based on its parachronic coordinates. Researchers inevitably end up coining informal names during the penetration process. Eventually, one name sticks and becomes official.

Penetration Adventures: An adventure or even a campaign could be built around the first penetrations of a new timeline – especially if it has high technology and is not a close parallel. One of the first steps is to grab a daily newspaper. Imagine the gradual penetration of, for instance, a world in which the Nazis won World War II . . . and it is now 1960.

Miracle Workers

Miracle Workers is the nonprofit, “do-gooder” side of Infinity. It works closely with various U.N. aid agencies. Despite being heavily financed by licensing profits from other parts of Infinity, as well as by outside donations, there is never enough time or money to help everywhere. And – to the great frustration of the staff – Miracle Workers is strictly forbidden to help out in the historical echoes, for fear of shifting the timeline.

Miracle Workers is not for profit, but is not in the business of handing out free lunches, either. When it resettles disaster victims, for instance, it usually requires those resettled to pay their way – most often by working for other Infinity operations. Still, these contracts are always more than fair to those being helped.

Miracle Workers supplies vaccines, antidotes, food crops, etc., in situations where these things would make a difference. The biggest challenge here is covering its tracks, except in those rare, usually depopulated timelines where Infinity simply moves in and takes over.

Parachronic Laboratories

This is Infinity’s pure-research organization, dedicated to improving both parachronic technology and Homeline’s understanding of the science behind crosstime travel. Infinity might ask agents of any of its organizations to test prototype equipment from “Paralabs.” When a traveler survives a new and devastating conveyor accident, researchers from Paralabs are in the middle of the investigation . . . probably demanding that the victims do it all again, more slowly.

Outside Organizations

Many organizations, both government and private, have access to conveyors. All of these units are theoretically under Infinity’s control, open to I-Cop inspection at any time. But conveyors are often falsely reported “lost” and put to clandestine uses – or simply stolen by untrustworthy agents or employees. This is a constant headache for the Patrol.

More than 30 non-Infinity organizations have their own projectors. Fortunately, these are easier to police, and every projector has its own full-time Patrol monitoring team.

The United Nations

The United Nations theoretically oversees Infinity in its many forms, but its “control” is loose on Homeline, and looser yet in the alternate worlds, Infinity definitely keeps secrets from the U.N. However, the U.N. has nearly unfettered access to Infinity facilities for operations such as humanitarian relief missions to other worlds.

Since U.N. members tend to protest interventions against their crosstime analogs, most crosstime U.N. interventions are either in very different parallels or intended to help the “local” U.N. survive and grow. At any given time, the U.N. may be actively intervening in two to four different timelines.

Governments

Several nations (notably China, France, Germany, Japan, Russia, the United Kingdom, and the United States) have significant “official” parachronic capabilities, with their own fleets of projectors and conveyors. In addition to engaging in mining, waste disposal, and research, these governments maintain “colony” worlds on permanent lease from Infinity.

For Infinity, the biggest problem with governments is their incessant “deniable” secret operations, as they try to circumvent the limitations Infinity places on them. Conveyors can and are built secretly, and the major powers undoubtedly have clandestine parachronic capabilities intended for covert exploration, weapon testing, outtime exploitation, or even war. The I-Cops often run into highly trained agents who they know are from Homeline. Sometimes they can even prove it.

Projectors can also be built secretly, but no one seems to have done so on Homeline yet – again, giving rise to speculation that Infinity has detection methods it isn’t revealing. So far, no projector built off of Homeline has worked.
RESEARCH FOUNDATIONS

The infinite worlds are fertile ground for scientific research. Scientists can study totally unspoiled biomes . . . or worlds that have been utterly destroyed by dozens of different disasters. Infinity permits almost any kind of nondestructive research. It would probably allow a little scientific destructiveness, too, if an artfully written proposal were to make the gains seem great enough.

Most research, by far, has been historical and social. The historical parallels offer answers to countless intriguing “what if” questions, and the echoes offer – or at least seem to offer – a window into Homeline’s own past! Many expeditions are mounted to such worlds, to observe and to learn. These are bound by strict rules: they must keep The Secret of parallel worlds hidden, and they cannot change the history of the echoes, lest they be “lost” to a timeline shift (see Timeline Shifts, p. 544).

CROSSTIME BOUNTY HUNTERS

“Richard Z. Horn. Under arrest for a billion-dollar computer fraud, he jumped bail, hijacked a Time Truckers, Inc. conveyor, and disappeared on Cornwallis. The I-Cops found the abandoned conveyor, but after spending a week searching, they gave up looking for Horn – said he was no threat. But there’s a $1,000,000 bounty on Horn, and a reward from Time Truckers as well. I was determined to collect both . . .”

There are a lot of places for a fugitive to hide among the hundreds of known parallel worlds. The I-Cops go after anyone who is a threat to security or the stability of an echo, but they lack the manpower to chase down anyone who doesn’t pose a clear and present threat to Infinity’s hegemony. The crosstime divisions of agencies like the FBI handle some of these cases. Freelance bounty hunters pick up many of the others.

Getting a crosstime bounty-hunting license from Infinity requires a careful background check and appropriate experience (being ex-Patrol helps; a good employment history with a reputable crosstime company like Time Tours is also a plus). Some bounty hunters work alone; others work for private agencies, the largest and most successful of which is Infinite Justice, based in Indiana.

CORPORATIONS

Crosstime exploitation can be highly profitable. Numerous businesses operate from Homeline.

Goods that are cheap on Homeline are often valuable elsewhere, and vice versa.

White Star Trading

Founded by Paul Van Zandt, White Star is the original interworld trading company – and probably the largest. Van Zandt financed most of his original development by trading back and forth with a single world.

Today, White Star has offices in hundreds of dimensions, always disguised as ordinary businesses. Some are small, handling a few hundred pounds of rare commodities a day; for example, a crate of new-release CDs from Holly, or a breeding pair of passenger pigeons. Others ship hundreds of tons of grain or ore daily, loading the cargo onto barges that go out of sight of land and then jump between worlds.

White Star was formerly part of Infinity, but antitrust considerations (and competitors’ objections) led to its becoming legally and financially distinct. It still has a “cozy” relationship with Infinity, which makes many of its smaller competitors unhappy.

Other Traders

Many corporations of all sizes are getting rich through cross-world trading. Goods that are cheap on Homeline are often valuable elsewhere, and vice versa. As always, though, The Secret must be kept.

When a new timeline is opened up, the traders’ agents are the first in, looking for new goods and new markets. Some are unscrupulous, dealing even in slaves and drugs; others are the best allies the Patrol has.

White Star dominates the interworld trading scene, but there is so much business that there’s no need to hog it all. One of the largest corporations involved is Time Truckers, Inc., whose trained conveyor operators hire out to various businesses.

Time Tours, Ltd.

“If it’s Tuesday, this must be 1066.”

Time Tours is by far the best known of the “independent” companies using parachronic technology. Its business is sending groups of tourists on exciting expeditions into parallel timelines. The goal is not always pure sightseeing: one popular trip is the Dinosaur Safari, the ultimate challenge for hunters looking for really big game. The Patrol runs an official “customs check” when each tour returns, but unless the outcome world is known to contain some specific danger, this is mostly a formality.

Working for Time Tours can be challenging. Employees must organize, equip, and lead expeditions to many different timelines. The job includes keeping the tourists out of trouble . . . tourists who all too often can’t manage the clothing or the language, and who will walk right into the Charge of the Light Brigade to get a good snapshot for the folks back home. As a result, Time Tours reserves the right to do whatever is needed – up to and including aborting the trip with no refund – to prevent “cultural contamination,” or to correct it once it has occurred.
**Keeping the Secret**

Infinity and Centrum may be enemies, but there is one thing they agree on: the secret of parachronic technology must remain their monopoly. An “outtimer” who learns this secret – *The Secret* – must be hired, discredited, or made to vanish.

It’s reasonable to expect highly trained Infinity personnel to keep the secret of parachronic travel; indeed, operatives likely to contact outtimers have prepared cover stories that fit local belief systems. If possible, anything that might reveal The Secret will be explained away as a mundane event – but if not, it’s better the locals think they saw witches, fairies, or UFOs than get any inkling that humans with advanced technology are traveling across dimensions.

On the other hand, when a herd of tourists goes charging off into a parallel, there’s a strong likelihood that somebody will let something slip . . .

**Eraser**

When outtimers see visitors appear or disappear, or witness some use of Homeline technology, the preferred solution is to make them forget. “Eraser” is a sedative and amnesic drug used by both Infinity and Centrum. A recipient must make a HT-3 roll to avoid its effects. On a failure, he falls unconscious. On awakening, his short-term memories – everything in the last 5d+45 minutes – are gone. Eraser comes in pill, injection, and gas form. It appears to have no untoward side effects, even in massive overdoses. The Infinity Patrol issues it to I-Cops and to civilian security personnel engaged in authorized crosstime operations. It is not for sale at any price; authorized users must account for every dose acquired and used. Still, it turns up on the black market at an average price of $500 per dose. LC2.

**Extreme Measures**

When someone has seen too much and Eraser won’t solve the problem, and he isn’t a good subject for recruitment, troubleshooters are called in to deal with the security leak. Measures can range from dirty tricks intended to discredit the subject or change his perceptions, to commando raids aimed at eliminating all the witnesses and destroying all hard evidence. But where Centrum might kill, Infinity prefers to make the witness vanish. He is kidnapped . . . and taken to Coventry.

**Coventry**

Coventry is a Quantum 3 alternate in which humanity didn’t develop. It has one important and useful peculiarity: unassisted conveyors can’t enter or leave it – and neither can world-jumpers. And nobody knows why. This means the only access to Coventry is by projector-assisted conveyor from Homeline.

The I-Cops use Coventry to isolate people who Know Too Much: outtimers who stumbled onto a Homeline operation; Homeliners who broke regulations; scientists abducted from other timelines because the Patrol feared they were too close to developing parachronic technology; and even disgruntled ex-employees of Infinity! The population also includes some voluntary settlers, rescued from crosstime disasters.

All sorts of adventures are possible on Coventry . . . including a rescue attempt from within Infinity, by employees who are morally opposed to the whole concept. The world itself is a pastoral TL4, with TL8 medicine.

**Ethical Problems**

It would not be unfair to conclude that Infinity and Centrum regard outtimers – as a group, if not as individuals – as something less than “real” people with human rights. Infinity’s PR department does its best to downplay this perception, but every time the I-Cops cart some outtimer off to Coventry, they send the message that Homeline is somehow “superior.” And every time a filmmaker creates a historical epic by recording the bloody deaths of thousands of people in an outtime war, he reinforces the idea that the residents of other timelines are puppets for Homeline’s entertainment.

---

**Time Tours** has competitors, but they’re not different – just smaller and often shoddier. And some other companies offer vacations rather than tours. They emphasize luxury over excitement. Johnson’s Rome (p. 527) is the best known of these.

**Mining Companies**

Many huge operations exist solely to wrest mineral wealth from uninhabited timelines. Most mining leases granted by Infinity are for otherwise-worthless worlds, many of which are uninhabitable without artificial aid.

But there’s a great deal of wealth to be had . . . and greedy miners have secretly raped several habitable timelines.

**Waste-Disposition Companies**

Radioactive waste, toxins, biohazards, and other noxious brews too foul to stay on an inhabited planet . . . don’t have to. Infinity only permits waste dumping on genuine hell worlds – worlds that really can’t get any worse – and requires disposal companies to take every precaution to ensure that wastes get to the projector site in complete safety.

**The Very Rich**

A very few, very wealthy individuals own conveyors for hobby purposes. Most of these people are glorified tourists or collectors, but there is the occasional sybarite who enjoys playing power games in “backward” settings. Their conveyor crews are all Infinity employees – which theoretically prevents the most flagrant abuses.
Attacks to establish alternative societies. One, Uhuru, even declared its independence from the United States and made it stick.

There are also “secret” bases and colonies, sponsored by governments, corporations, and other organizations with clandestine conveyors. Some are hidden away on known timelines; others are on worlds as yet unknown to Infinity. A few have special purposes (mining, trading, research, etc.), but many are just groups of people trying to get away from it all.

Centrum

Centrum is the only known human timeline other than Homeline to independently develop parachronic technology. It is also Homeline’s fiercest enemy. Centran agents intrigue against the Infinity Patrol across the dimensions, and will settle for nothing less than total domination of the infinite worlds.

Centrum is a world government descended from a united Anglo-French Empire. One of the last historical figures to exist in both worlds was Eleanor of Aquitaine, who either created or stabilized the Empire and ruled it for over 20 years. The Empire grew and expanded, dominating Europe before 1700, Africa and Asia before 1850. The New World was colonized in an orderly fashion; the Indian tribes were enslaved or destroyed.

In 1902, the Empire collapsed in a worldwide civil war; the aristocracy had become decadent, and with nothing left to conquer, they turned on each other. Members of the technical and military class likely engineered the war. Educated, trusted, and trained to serve, they had grown contemptuous of their titled masters — and when they restored world government 50 years later, it was stamped in their image: a tightly-organized meritocracy called “the Centrum.”

Centrum’s rulers value science, order, and power for its own sake. Children are constantly tested and retested, and all training and promotion is based on talent and achievement.

Philosophically, the key difference between Centrum and Infinity is in their treatment of inhabited worlds. Centrum wishes to bring all worlds under its central control, creating a single transworld state whose boundaries span the dimensions. The Centran approach to conquest is to infiltrate a world, overthrow its government as inexpensively as possible, and take over — and then advance its technology and send its leading citizens to Centrum for education and indoctrination. After a probationary period, outtimers can eventually hope to become citizens of Centrum itself, although no world is currently judged “ready.”

Centrum is a mid-TL8 society. Like Homeline, it developed parachronics a few decades ago.

Language

The native Centran language is a heavily accented dialect of English. Centrum wiped out all other languages on its own world two generations ago. Until recently, they did not even have any trained linguists . . . because they didn’t need them!

All this puts Centrum at a great handicap in penetrating worlds or areas where the language is unlike English. They are currently experimenting with methods of teaching language quickly — but right now, any fluent speaker of, for instance, Japanese is certainly not a native Centran.

Interworld

This is the Centran equivalent to the Infinity Patrol. As an arm of a world government, Interworld is larger and more ruthless than the Patrol. It might even have a better grasp of parachronic science.

Almost without exception, Interworld agents are fanatically loyal to Centrum. They are also quite likely to have bionic implants — Centrum itself is fabulously wealthy, and can equip individual agents well. They kill mercilessly if necessary, but they respect talent, and often try to recruit talented outtimers. They have normal human feelings of loyalty toward friends, desire to protect children, and so on. They are not monsters or machines.

Crosstime Conflict

Centrum is on Quantum 8, while Homeline is on Q5. Since it’s possible to jump one quantum easily and two with difficulty, Centrum’s territories “overlap” Homeline’s at Q6 (which Homeline can reach more easily) and Q7 (where Centrum has the advantage).

One might think that would provide a natural border. Unfortunately, it doesn’t work that way. For one thing, Centrum is aggressive. For another, Q6 appears to have more usable worlds than all the other quanta put together (nobody knows why).
Centrum seems to have had crosstime travel for longer than Homeline, but initially used it mainly to enter empty worlds for resources. Their mastery of parachronic mathematics is definitely better than Homeline’s. They can apparently detect whether a timeline is unstable, and plan an intervention to push it in the direction they want; see Timeline Shifts (p. 544). Homeline’s scientists have not yet figured out how to do that – or at least, Infinity isn’t admitting it.

Homeline became aware of Centrum’s existence nine years ago, when an intruder was captured in one of Infinity’s most secret labs. He told a very strange story under truth serum! Infinity released that first agent with an offer of friendship. Centrum immediately accepted, with apologies for their earlier penetration of Infinity’s territory. But it quickly became obvious that their “friendship” was entirely treacherous; they didn’t have enough experience in true cooperation to fake it believably. Eight years ago, they “stole” four timelines from Q6! A year later, the “infinity war” was a reality.

Apparently, Centrum does not have “historical echoes” of the sort Homeline does . . . or, if such echoes exist, they are in a quantum unreachable from Homeline. This deprives Infinity of a possible source of insight into Centran psychology.

Interestingly, Centrum seems to be at the exact same “time,” measured by the stars, that Homeline is. Is this connected with the fact that it is the only known timeline, other than Homeline, that can support a parachronic projector? Nobody knows.

CROSSTIME BANDITS

In the past five years, Infinity has shut down a dozen criminal crosstime operations. There are almost certainly many more.

The Men Who Would Be King: There is a steady stream of megalomaniacs who try to use advanced technology or historical knowledge to seize a position of power in another timeline. To discover them, the Patrol uses the same surveillance methods it uses to catch Centran agents. Indeed, it can be difficult to determine quickly whether infiltrators are Homeline adventurers or Centran operatives!

Time Raiders: Criminals who are just in it for the money – whether they’re after crown jewels, the Mona Lisa, or a nuclear warhead – are harder to catch. The most subtle raiders strike an echo and grab the loot just before it was lost “in history,” in an effort to avoid triggering timeline shifts that would bring the Patrol down on them. “Theft to order” for wealthy private collectors is where the steady money is . . . but everything from intellectual property theft to arms smuggling can be lucrative.

Illegal Immigration and Crosstime Slavery: This is a growing problem. Need cheap labor? Find a suitable dimension, hire a conveyer-load of would-be illegal immigrants, and take them crosstime instead of cross-border. If they go to the authorities, they’ll be sent to Coventry, so they’ll accept cheap wages in exchange for the promise of earning enough to buy false citizenship papers . . . Criminal organizations import everyone from prostitutes to soldiers to nuclear physicists. And sometimes blackmail isn’t needed: “rescue” a platoon of Nazi soldiers from an echo’s Stalingrad and they may be eager to serve as your loyal mercenaries. There’s also a scary black market in famous movie stars, singers, and beauties. Only last month, agents of the Italian Gruppo di Intervento Speciale rescued a kidnapped Helen of Troy from a members-only brothel.

Replacements: Duplicates (“dupes”) of many Homeline residents exist on close parallels like Earth-Beta. There have been cases where Homeliners have paid to have dead children, old lovers, or archenemies snatched from these worlds. In a few cases, the Homeline original was killed and replaced by a dupe. A typical scam: If Mr. Johnson is a millionaire businessman in Homeline but a homeless bum who lost everything in a market crash in Earth-Beta, the Mafia might grab Beta’s Johnson and offer him a deal to replace Homeline’s Johnson . . . as their comfortable puppet.
REALITY LIBERATION FORCE

The RLF is a Homeline-based guerrilla organization that opposes the U.N. Interworld Council’s "unde-mocratic and unjust hegemony and exploitation of other timelines." The RLF calls for an end to crosstime travel except for peaceful scientific purposes.

The RLF has wide popular support. Several mainstream groups, notably People Against Crosstime Exploitation (PACE), serve as RLF front organizations. The RLF also has many sympathizers in political and military circles – although most resent the Council, which they feel has usurped their authority, more than they oppose crosstime travel.

THE CABAL: MASTERS OF INFINITY

A disturbing number of the magicians, psychics, parachronozoids (see p. 544), and supernatural entities that Infinity operatives encounter claim to have knowledge of a vast paranormal brotherhood known as "the Cabal." To hear them tell it, the Cabal has lurked in the shadows for millennia, manipulating events across the infinite worlds through secret societies and occult conspiracies. Which Earth (or Earths?) the Cabal calls home is one of the most perplexing – and potentially unpleasant – conundrums Infinity faces.

A particularly unsettling aspect of these rumors is their consistent claim that the Cabal has access to "higher dimensions of being," somehow "above" the infinite worlds, known as the Astral Realm, the Iconic Realm, and the Realm of Pure Spirit. Cabal members are said to cross these realms and the infinite worlds in search of arcane knowledge.

Perhaps most frightening of all, the Cabal is reputedly fractured. Renegade archmages and demon lords supposedly fight secret wars, with the infinite worlds as their pawns and battlefields. The losers become exiles, often bent on conquering parallel Earths beyond the Cabal’s reach, where they can amass power and plot vengeance . . .

REICH-5

Reich-5, on Quantum 3, was the fifth "Nazi victory" parallel discovered by Infinity. It is presently in its year 2010, ruled by a brutally efficient world government dominated by Germany, Japan, and a Nazified United States. It is TL8 in most respects, but advanced in space technology and a twisted form of genetics – and possibly in psionic technology.

Naturally, Infinity strictly prohibited travel to this world, and hid its existence in order to prevent it from acquiring The Secret. But after a decade of containment, the unhinkable happened: Nazi parapsychologists in the SS-controlled province of Burgundy discovered a psionic world-jumper (or captured such a visitor from another timeline – Infinity isn’t sure which) and gained expertise in harnessing and exploiting the power.

By the time Infinity learned of this, the Nazis had approximately two-dozen world-jumpers, of highly variable power and reliability (several had to use dangerous cocktails of drugs to unlock their powers), and were creating more through selective breeding, cloning, and bio-psionic technology. Worse, working in concert and using experimental psibernetic linkages, it seemed that some of these world-jumpers were able to transport loads of four or five times their own weight – sufficient to move squads of troops and even small armored vehicles.

Reich-5 soon began its first crosstime invasion: an infiltration of Nostradamus, a post-apocalyptic world where prophecy shaped reality. That the locals foresaw the invaders’ coming did them little good; in fact, it reinforced the conquerors’ sense of destiny. And matters only got worse.

Nostradamus proved to be at the junction of a "dimensional road" which the Nazi world-jumpers were able to detect and exploit. This road, which the Nazis call the "chronobahn," seems to span at least half a dozen dimensions as it wavers in and out of existence . . . And the Nazis have begun to explore it. They can still only shift small loads at some risk, but they may be learning more.

Reich-5 lags far behind Centrum and Homeline in parachronic theory – a weakness that is compounded by the fact that all of its researchers are highly eccentric "Aryan mystics" who seem intent on keeping secrets from the "materialists" in Berlin. Hence, Infinity has not yet activated contingency plans – for instance, to transport nuclear warheads to known Reich-5 military bases and government centers – and is instead focusing its efforts on destabilizing the regime. In any case, the "transdi-mensional SS" are already scattered across bases in an unknown number of dimensions.

As Infinity is slowly realizing, Reich-5 has the potential to dominate all of Quantum 3 – and perhaps move beyond, especially if it finds allies.
The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well.

— *Alice’s Adventures in Wonderland*, Lewis Carroll

“Parachronozoids” are creatures with natural world-jumping abilities. There is a wide variety of them, native to different dimensions. Some resemble ordinary or talking animals, such as white rabbits, beautiful stags, or black horses. Others are mystical. And a few are terrible, semi-material horrors that man was not meant to know.

All parachronozoids possess the Jumper (World) advantage (p. 64). Most have the Tunnel enhancement, allowing them to create interdimensional paths that can be followed. Of course, these paths close behind them after a time, with no guarantee that they will ever open again. This can have dire consequences for the unwary. For example, a hunter sees a beautiful white stag and gives chase, and as he follows, the world gradually fades away . . . and then the stag vanishes, leaving him stranded in another world!

Many parachronozoids also have the Warp advantage (p. 97), giving them the ability to jump across space as well as the dimensions.

Some parachronozoids seem drawn to those with latent or active psionic abilities (most often ESP or Teleportation). Others seek mana-rich areas, and there are rumors of ways to magically summon or lure them. Certainly, wizards have trapped and tamed such entities, using them as mounts or harnessing them to create world-jumping chariots.

And some are predators and vampires, stalking prey from dimension to dimension . . .

Of the 379 timelines Infinity knows of in Quantum 6, 281 are “historical echoes”: worlds apparently identical to Homeline at earlier points in its history. No “future” echoes are known — although there are parallel worlds with higher technology or more advanced local dates. No echoes are known on any quantum except Q6.

Why is Homeline “reflected” so many times in another quantum? Nobody knows. The echoes are irregularly spaced through history. There are few echoes before 3000 B.C. and none before 12,000 B.C. Some periods have several echoes; a few have none.

In all of the echoes, time is flowing more slowly than on Homeline – but the difference is so slight (a maximum of one year of difference for every 250,000 years that pass) as to be almost unnoticeable. Nevertheless, this slight deviation would explain the differences, if the original “event” that created the echoes occurred some 3.5 billion years ago — perhaps during the earliest appearance of life on Earth.

The echoes represent an incredible opportunity for research into history . . . but they also represent a significant hazard. Anyone visiting an echo is carefully cautioned against doing anything that might make a significant change in the timeline. This has nothing to do with ethics. It’s a question of safety. The balance that holds the echoes in Q6 is a fragile one. If something happens to change the future course of history in an echo, it may simply vanish! The first few times this happened, it was thought that the world had been destroyed. But as Infinity was on the verge of shutting down all travel to the echoes, one of the lost worlds was rediscovered . . . in Q5!

Centrum seems to be able to instigate such shifts on purpose. Of the 24 echoes that have vanished from Q6 since Infinity discovered them, four are known to have moved “closer” to Homeline, going to Q5. Eleven are known to have moved to Q7, nearer to Centrum . . . and Centrum deliberately engineered at least six of these shifts. One bounced all the way to Q4, on the “other side” of Homeline. And eight of the missing timelines haven’t been found at all.

Infinity regulations require that any visit to an echo be managed with extreme care — no casual or “tourist” trips are allowed. The I-Cops are

---

**World-Jumpers**

A “world-jumper” is anyone who possesses the Jumper (World) advantage (p. 64). This ability seems to be “psionic” . . . but nobody knows for sure.

Infinity has several people with this ability on its payroll, and is always on the lookout for more. Only a few are native to Homeline. At least one of them claims to have visited alternate worlds before Van Zandt did . . . and kept it quiet, because he thought he was insane. Infinity’s world-jumpers are top couriers, special agents, and troubleshooters. Most observers believe Centrum has world-jumpers as well.

In Infinite Worlds, Jumper (World) functions normally for jumps within the same quantum. Jumps between quanta are at -5 per quantum level of difference. Those who have this trait always know by “feel” what quantum they are on.
always alert for signs of Centrum's intervention. But they can't simply flood the echoes with agents – doing that would greatly increase the risk of instigating the very changes they want to avoid! Instead, they rely on strategically placed agents and regular patrols.

**CENTRAN INTERVENTION**

Centrum has intervened several times, in increasingly sophisticated ways, to try to move echoes "closer" to Q8. It is clear that Centrum has some method of predicting what sorts of changes will produce the desired effect.

However, Centrum's predictions are not infallible. In at least four timelines, massive Centran interventions seemed to have had no effect at all; these timelines appear to be "held in place" by something other than their similarity to Homeline (see *Anchors*, p. 526).

If Centrum *does* manage to pull off an intervention, the GM should decide how long it takes to come into effect. A shift may take hours or days to occur – it is never instant – and the Centran agents must stay in place throughout, in order to protect their work! Even then, it might be possible to reverse the shift by counteracting the effects of the intervention. As a result, once Centrum manages to shift a Q6 timeline to Q7 or Q8, Interworld agents attempt to eradicate *all* Homeline personnel. Such an attack is more likely to be covert than overt.

**Examples of Centrum's Intervention**

Successful interventions by Centrum include:

*The atomic destruction of London in the year 1902.* The first and last time Centrum attempted any such gross attack. It became a political issue among Centran leadership; the parties responsible were removed from power. Such extreme intervention is not generally effective in any event – the results are too unpredictable.

*The execution of Princess Elizabeth in 1554, before she ascended the throne.* Apparently, her sister Mary was influenced against her.

*The sinking of HMS Beagle with all hands in early 1833.* Charles Darwin was among those lost. This timeline did not "vanish" until late 1837, though.

*The sabotage of Yuri Gagarin's space capsule in 1960.* This triggered a round of witch-hunts and accusations within the Russian space program that eventually spilled over into the Strategic Rocket Forces and dangerously weakened Khrushchev's hold on power. This instability in the Kremlin may have contributed to the Cuba Incident of 1962, in the aftermath of which the U.S. and U.K. were able to enforce U.N. control over Soviet missile and space programs. This world-line migrated to Q8 shortly thereafter.

**Long-Term Intervention**

Infinity is concerned about the possibility of very long-term interventions. For instance, if a pivotal figure like Alexander the Great or Karl Marx were murdered as a child, no historical differences would show up for...
years... but when they appeared, they would be huge. Possibly, Centrum can’t compute the effects of such interventions – or perhaps, if echoes exist in part because of human culture, only a large and sudden shift in popular attitudes can effect a change. It could be that if a key individual is removed prematurely, someone else will appear to take his role in history. Thus, removing Hitler well before his rise to prominence might only result in a similar dictator appearing, with little change in events. Parachronic intervention is still an art rather than a science.

**Intervention Adventures**

Trying to stop a Centran intervention on an echo makes an excellent adventure for a PC team of I-Cops. The GM can make the following assumptions:

- The enemy agents are outnumbered and secretive. It is difficult and expensive to send anyone from Centrum to Quantum 6.
- The enemy plan requires split-second timing... because, if it didn’t, they would have pulled it off already. Whatever the Centran method of computing an intervention, if the answer were always as simple as “Nuke London in 1902,” they’d succeed a lot more often. However, the enemy does have backup plans.
- The Patrol gives the agents some general information about the enemy penetration. The means by which their superiors acquired this data is none of their business! They are simply told, for instance, “It’s 1453 on echo Sigma-6A. There’s evidence of Centrum penetration in Germany. If they’re working close to home, their target might be Gutenberg’s printing press... other teams are checking out other possibilities.” That’s one reason why counter-intervention teams are small: Homeline has to check out everything.

**Intervention in Reverse**

The GM can turn the whole thing around: Infinity has unraveled the secret of timeline intervention, discovered a string of Centran echoes in Quantum 7, and sent out strike teams to shift them toward Q5. Just work it all in reverse. The Homeline team has a specific assignment - something the computers predict will shift the timeline in a useful fashion if carried out successfully. The Centran opposition consists of lots of small teams... and if the Homeliners put one out of the way in too obvious a fashion, it tips off Interworld, who will reinforce the area very heavily.

**Effects of Tampering with Echoes**

It takes a significant change to cause a whole timeline to “move” to a different quantum level. A “significant” change is up to the GM, because nobody knows what kind of change is really significant. The mere presence of a group of strangers doesn’t seem to make much difference. But there’s always the chance of hitting a key moment in history: the visitor to reflected 1938 Washington gets the last seat on a train, so a senator is late to a meeting with the President, so a key military appropriation fails... so when World War II comes along, the United States loses.

In general, if a change seems like it can lead to a distinct “what if” variation in history, it’s significant. However, a shift need not be permanent. One timeline was shifted to Q7 by Centrum aid to Benedict Arnold in 1780, turning the Revolutionary War in England’s favor. An intrepid team of I-Cops in the cut-off world sabotaged the British fleet off Boston, turning the war around again... and the timeline returned to Q6! It appears that history is sufficiently “elastic” to absorb a deviation – if it can be exactly counterbalanced before too much time has passed.

For game purposes, assume that very minor changes do not create a shift – or, at least, not immediately. If outtimers do something that the GM thinks may “change history,” he can allow a shift to happen in minutes or days. A shift is usually only one quantum, but can possibly be more. Choose the direction of a shift randomly, unless it was caused by agents in accordance with a specific plan designed around a correct understanding of how parachronics interact with history.

**Locating a Shifted Timeline**

Only Infinity and Centrum possess the sophisticated instruments and supercomputers needed to locate a lost timeline quickly. Such a search requires a full week of work and a successful Physics (Parachronic) roll. This roll is at +3 if the timeline is in the researchers’ “home” quantum, at +1 if it’s in an adjacent quantum, and at no modifier if it’s two quanta away. If it’s three or more quanta away, it can’t be found!

With lesser equipment, the search takes weeks to years (GM’s option) – possibly at a large penalty.
## MELEE ATTACK MODIFIERS

When attacking in melee combat, figure your effective skill by:

1. Taking your base skill with the weapon or unarmed attack you are using. (In some situations, another skill – e.g., Free Fall, Riding, or Environment Suit – will limit this skill.)

2. Applying the relevant condition-al modifiers below. Modifiers are cumulative, but combined visibility penalties cannot exceed -10 (-6, if used to blindness). If any modifier marked with an asterisk (*) applies, adjusted skill after all modifiers cannot exceed 9.

A roll of this number, or less, is a hit.

### Attacker’s Maneuver
- All-Out Attack (Determined): +4
- Move and Attack: +4*

### Attacker’s Posture
- Crawling or lying down: -4 (if crawling, can only make reach “C” attacks)
- Crouching, kneeling, or sitting: -2

### Attacker’s Situation
- Affliction (coughing, retching, etc.): see Afflictions (p. 428)
- Bad footing: -2 or more (GM’s option)
- Grappled: -4
- Holding a large shield: -2
- Major distraction (e.g., all clothes on fire): -3 or more (GM’s option)
- Minor distraction (e.g., part of clothes on fire): -2
- Mounted, and mount attacked on its last turn: -2
- Mounted, and mount’s velocity relative to target is 7+: -1
- Shock: -HP of injury received last turn (maximum -4)
- ST below that required for weapon: -1 per point of deficit
- Wearing a shield in close combat: -DB of shield

### Other Actions by Attacker
- Deceptive Attack: -2 per -1 penalty to foe’s defense
- Dual-Weapon Attack: -4/-8 with primary/off hand (-4/-4 w. Ambidexterity)
- Evaluate: +1 per turn (maximum +3)
- Off-hand attack: -4 (no penalty w. Ambidexterity)
- Rapid Strike: -6 on both attacks (-3 w. Trained By A Master or Weapon Master)

### Target (choose one)
- Hit location: 0 for torso, -2 for arm or leg, -3 for groin, -4 for hand or foot, -5 for face, -7 for skull; impaling and piercing attacks can target vitals at -3 or eyes at -9
- Hit location, through chink in armor: -8 for torso, -10 anywhere else (e.g., eyeslits)
- Weapon, to damage: -5 to hit a reach “C” weapon (e.g., knife) or pistol; -4 to hit a reach 1 weapon (e.g., broadsword); -3 to hit a reach 2+ weapon (e.g., spear) or rifle

### Visibility
- Cannot see anything: -10 (-6, if used to blindness)*
- Cannot see foe: -6, or -4 if you know his location to within 1 yard*
- Partial darkness, fog, smoke, etc.: -1 to -9 (GM’s option)

---

Violence, naked force, has settled more issues in history than has any other factor, and the contrary opinion is wishful thinking at its worst.

– Robert A. Heinlein
**Ranged Attack Modifiers**

When making a ranged attack, figure your *effective skill* by:

1. Taking your base skill with your ranged weapon.
2. Applying the target’s Size Modifier (SM).
3. Modifying for the target’s range and speed; see *Size and Speed/Range Table* (p. 550).
4. Applying the relevant condition-al modifiers below. Modifiers are cumulative, but combined *visibility* penalties cannot exceed -10. If any modifier marked with an asterisk (*) applies, adjusted skill after all modifiers cannot exceed 9.

A roll of this number, or less, is a hit. If using rapid fire, you score one extra hit for every full multiple of Recoil by which you make your attack roll.

**Attacker’s Maneuver**

All-Out Attack (Determined): +1
Move and Attack: -2 or -Bulk of weapon, whichever is worse

**Attacker’s Situation**

Affliction (coughing, retching, etc.): see *Afflictions* (p. 428)
Bad footing: -2 or more (GM’s option)
Close combat: a penalty equal to the weapon’s Bulk statistic (see *Weapons for Close Combat*, p. 391)
Damaged weapon: -HP of injury received last turn (maximum -4)
Major distraction (e.g., all clothes on fire): -3 or more (GM’s option)
Minor distraction (e.g., part of clothes on fire): -2
Shock: -HP of injury received last turn (maximum -4)
ST below that required for weapon: -1 per point of deficit

**Attacking from Moving**

Vehicle or Mount

If weapon is not in a stabilized mount, the combined bonus for Accuracy, Aim, bracing, and targeting systems cannot exceed the vehicle’s SR.

Air vehicle: -1 if handheld weapon, 0 otherwise
Exposed rider hanging on side of vehicle/mount and shooting over/under it: -6

Ground vehicle, good road: -1 if handheld weapon, 0 otherwise
Ground vehicle, bad road: 0 if stabilized turret or stabilized open mount; -1 if fixed mount, hard-point, or carriage; -2 if external open mount; -3 if handheld weapon
Ground vehicle, off-road: -1 if stabilized turret or stabilized open mount; -2 if fixed mount, hard-point, or carriage; -3 if external open mount; -4 if handheld weapon

**Space vehicle:**

- Turning in exposed saddle/seat of vehicle/mount to fire at foe behind: -4
- Vehicle/mount dodged last turn and you’re not operator/rider: -2, or -4 if flying
- Vehicle/mount failed control roll: penalty equal to margin of failure
- Water vehicle, calm water: 0 if stabilized turret or stabilized open mount; -1 if fixed mount, hard-point, or carriage; -2 if external open mount; -3 if handheld weapon
- Water vehicle, rough water: -1 if stabilized turret or stabilized open mount; -2 if fixed mount, hard-point, or carriage; -3 if external open mount; -4 if handheld weapon

**Opportunity Fire**

Checking target before firing: -2
Hexes watched: 0 if 1 hex; -1 if 2 hexes; -2 if 3-4 hexes or a line; -3 if 5-6 hexes; -4 if 7-10 hexes; -5 if 11+ hexes watched

**Other Actions by Attacker**

Aim for one turn: +Accuracy of weapon
Braced weapon: +1 if stationary *and* took a turn to Aim
Dual-Weapon Attack: -4/-8 with primary/off-hand (-4/-4 w. Ambidexterity)
Extra Aim: +1 for 2 seconds, +2 for 3+
Off-hand attack: -4 (no penalty w. Ambidexterity)
Pop-up attack: -2, and no Aim possible
Rapid fire: 0 if 2-4 shots; +1 if 5-8 shots; +2 if 9-12 shots; +3 if 13-16 shots; +4 if 17-24 shots; +5 if 25-49 shots; +6 if 50-99 shots; +7 if 100-199 shots; etc.

**Target**

To attack hit locations or weapons, use the penalties under *Melee Attack Modifiers* (p. 547). If the target has cover, you can either choose to take no penalty and roll hit location randomly (shots that hit a covered location always strike *full* cover; and hit *partial* cover on 4-6 on 1d) or target an exposed hit location (add an extra -2 if only partly exposed).

Shooting through light cover: -2
Target behind someone else: -4 per intervening figure
Target crouching, kneeling, sitting, or lying down: an extra -2 to hit torso, groin, or legs
Target only partly exposed: -2

**Targeting Systems**

Laser sight: +1
Scope: +1 per second of Aim, to a maximum of the scope’s bonus
Vehicular targeting system: +1 to +3 if shooter took a turn to Aim
Unfamiliar weapon or targeting system: -2

**Visibility**

Blind, target completely invisible, or in total darkness: -10*
Cannot see foe: -6, or -4 if you know his location to within 1 yard*
Partial darkness, fog, smoke, etc.: -1 to -9 (GM’s option)
Target has light concealment (e.g., bushes): -2

**Active Defense Modifiers**

When performing a dodge, block, or parry, figure your active defense roll by:

1. Taking your calculated Dodge, Block, or Parry score. (The Combat Reflexes and Enhanced Defenses advantages increase these values above their base.)
2. Applying the relevant condition-al modifiers below. All modifiers are cumulative.

A roll of this number, or less, means you avoid the attack.

**Defender’s Equipment**

Parrying with dagger or knife: -1 to Parry
Parrying with kusari or whip: -2 to Parry
Parrying with quarterstaff: +2 to Parry
Shield or cloak: +DB of shield (see *Shield Table*, p. 287), except vs. firearms
Unarmed parry vs. weapon: -3 to Parry (+0 vs. thrust, or w. Judo or Karate)
Defender’s Maneuver

All-Out Attack: no defense possible!
All-Out Defense (Increased Defense): +2 to one of Dodge, Block, or Parry
Move and Attack: dodge or block only; you cannot parry

Defender’s Posture
Crawling or lying down: -3
Kneeling or sitting: -2

Defender’s Situation

Above attacker: +1 if 3’ difference, +2 if 4’, or +3 if 5’
Affliction (coughing, retching, etc.): see Afflictions (p. 428)
Bad footing: -1 or more (GM’s option)
Below attacker: -1 if 3’ difference, -2 if 4’, or -3 if 5’
Can’t see attacker: -4, and a block or parry requires a Hearing-2 roll
Close combat: only reach ‘C’ weapons can parry
Distraction (e.g., clothes on fire): -1 or more (GM’s option)
Encumbered: penalty equal to encumbrance level to Dodge, or to Judo, Karate, or any fencing Parry
Mounted: penalty equal to difference between 12 and Riding skill (no penalty for Riding at 12+)
Stunned: -4

Nature of Attack

Attack from behind: no defense possible (defense at -2 w. Peripheral Vision)
Attack from side or “runaround” attack: -2 (no penalty w. Peripheral Vision)
Attacker used laser sight: +1 to Dodge if dot is visible
Deceptive Attack: -1 per -2 the attacker took to his attack
Dual-Weapon Attack: -1 if both attacks strike the same target
Flail: -4 to Parry/-2 to Block (-2/-1 vs. nunchaku); fencing weapons can’t parry at all
Successful feint: penalty equal to attacker’s margin of victory

Thrown weapon: -1 to Parry, or -2 to Parry if small (1 lb. or less)
Multiple parries: -4 to Parry per parry after the first, cumulative (halved for fencing weapons, and for Trained By A Master or Weapon Master)

Off-hand parry: -2 to Parry (no penalty w. Ambidexterity)
Retreat: +3 to Dodge, or to Boxing, Judo, Karate, or any fencing Parry; +1 otherwise

Other Actions by Defender

Acrobatic Dodge: +2 to Dodge if Acrobatics roll succeeds, -2 if it fails
Dodge and Drop: +3 to Dodge vs. ranged attack
Feverish Defense: +2 (costs 1 FP)

Acrobatics roll succeeds, +2 if it fails

GM’s option)
The main use for this table is ranged combat, but the GM can also use it for Sense rolls and other success rolls that size, speed, or range might believably affect.

This table uses the same progression for size as it does for the sum of speed and range, but the modifiers for size have the opposite sign from those for speed/range: large size give a bonus, while large speed and range give a penalty. Thus, if a target is twice as big but also twice as far away and twice as fast, the net modifier to hit stays the same.

### Size of Target

The larger the target, the easier it is to hit. The modifier to hit an object due to its size is its “Size Modifier” (SM). Humans have SM 0. Objects larger than man-sized give a bonus to hit, while smaller objects give a penalty.

The statistics for most nonhuman races, vehicles, etc. include SM. You can find the SM of other things using the table. Simply look up the being or object’s longest dimension (e.g., height, for a humanoid) in the “Linear Measurement” column, and then read across to the “Size” column to find SM. If size falls between two values, base SM on the next-highest size.

Box-, sphere-, or blob-shaped objects or characters add +2 to SM; elongated boxes, like most ground vehicles, add +1. If an object is much smaller in two of three dimensions (e.g., a steel cable 100 yards long but only 2” thick), use the smallest dimension instead of the largest.

**Examples:** A giant whose longest dimension is 4 yards has SM +2. A car with the same dimensions would have SM +3. A building 4 yards across would have SM +4.

### Target’s Speed and Range

In most combat between fighters on foot, and when attacking inanimate objects, you can ignore speed. Simply look up range in yards in the “Linear Measurement” column, and then read across to the “Speed/Range” column to find the speed/range modifier. If the range falls between two values, use the higher; e.g., treat 8 yards as 10 yards.

Note that there is no modifier at ranges of 2 yards or less – shooting a close target is no easier (and no harder) than attacking it in melee combat!

But for fast targets – including anything that requires the High-Speed Movement rules (p. 394) – the GM may rule that speed is important enough to consider. In that case, add speed in yards/second (2 mph = 1 yard/second) to range before looking it up in the “Linear Measurement” column.

**Examples:** A man 8 yards away is -4 to hit. A motorcycle rider 40 yards away, traveling at 30 yards/second (60 mph), has a speed/range of 40 + 30 = 70 yards, which gives -9 to hit. A missile passing within 5 yards while moving 1,000 yards/second has a speed/range of 5 + 1,000 = 1,005 yards, for -17 to hit.

<table>
<thead>
<tr>
<th>Speed/Range</th>
<th>Size</th>
<th>Linear Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-15</td>
<td>1/5”</td>
</tr>
<tr>
<td>0</td>
<td>-14</td>
<td>1/3”</td>
</tr>
<tr>
<td>0</td>
<td>-13</td>
<td>1/2”</td>
</tr>
<tr>
<td>0</td>
<td>-12</td>
<td>2/3”</td>
</tr>
<tr>
<td>0</td>
<td>-11</td>
<td>1”</td>
</tr>
<tr>
<td>0</td>
<td>-10</td>
<td>1.5”</td>
</tr>
<tr>
<td>0</td>
<td>-9</td>
<td>2”</td>
</tr>
<tr>
<td>0</td>
<td>-8</td>
<td>3”</td>
</tr>
<tr>
<td>0</td>
<td>-7</td>
<td>5”</td>
</tr>
<tr>
<td>0</td>
<td>-6</td>
<td>8”</td>
</tr>
<tr>
<td>0</td>
<td>-5</td>
<td>1 ft</td>
</tr>
<tr>
<td>0</td>
<td>-4</td>
<td>1.5 ft</td>
</tr>
<tr>
<td>0</td>
<td>-3</td>
<td>2 ft</td>
</tr>
<tr>
<td>0</td>
<td>-2</td>
<td>1 yd</td>
</tr>
<tr>
<td>-1</td>
<td>+1</td>
<td>3 yd</td>
</tr>
<tr>
<td>-2</td>
<td>+2</td>
<td>5 yd</td>
</tr>
<tr>
<td>-3</td>
<td>+3</td>
<td>7 yd</td>
</tr>
<tr>
<td>-4</td>
<td>+4</td>
<td>10 yd</td>
</tr>
<tr>
<td>-5</td>
<td>+5</td>
<td>15 yd</td>
</tr>
<tr>
<td>-6</td>
<td>+6</td>
<td>20 yd</td>
</tr>
<tr>
<td>-7</td>
<td>+7</td>
<td>30 yd</td>
</tr>
<tr>
<td>-8</td>
<td>+8</td>
<td>50 yd</td>
</tr>
<tr>
<td>-9</td>
<td>+9</td>
<td>70 yd</td>
</tr>
<tr>
<td>-10</td>
<td>+10</td>
<td>100 yd</td>
</tr>
<tr>
<td>-11</td>
<td>+11</td>
<td>150 yd</td>
</tr>
<tr>
<td>-12</td>
<td>+12</td>
<td>200 yd</td>
</tr>
<tr>
<td>-13</td>
<td>+13</td>
<td>300 yd</td>
</tr>
<tr>
<td>-14</td>
<td>+14</td>
<td>500 yd</td>
</tr>
<tr>
<td>-15</td>
<td>+15</td>
<td>700 yd</td>
</tr>
<tr>
<td>-16</td>
<td>+16</td>
<td>1,000 yd</td>
</tr>
<tr>
<td>-17</td>
<td>+17</td>
<td>1,500 yd</td>
</tr>
<tr>
<td>-18</td>
<td>+18</td>
<td>2,000 yd (1 mile)</td>
</tr>
<tr>
<td>-19</td>
<td>+19</td>
<td>3,000 yd</td>
</tr>
<tr>
<td>-20</td>
<td>+20</td>
<td>5,000 yd (2.5 miles)</td>
</tr>
<tr>
<td>-21</td>
<td>+21</td>
<td>7,000 yd</td>
</tr>
<tr>
<td>-22</td>
<td>+22</td>
<td>10,000 yd (5 miles)</td>
</tr>
<tr>
<td>-23</td>
<td>+23</td>
<td>15,000 yd</td>
</tr>
<tr>
<td>-24</td>
<td>+24</td>
<td>20,000 yd (10 miles)</td>
</tr>
<tr>
<td>-25</td>
<td>+25</td>
<td>30,000 yd</td>
</tr>
<tr>
<td>-26</td>
<td>+26</td>
<td>50,000 yd (25 miles)</td>
</tr>
<tr>
<td>-27</td>
<td>+27</td>
<td>70,000 yd</td>
</tr>
<tr>
<td>-28</td>
<td>+28</td>
<td>100,000 yd (50 miles)</td>
</tr>
<tr>
<td>-29</td>
<td>+29</td>
<td>150,000 yd</td>
</tr>
<tr>
<td>-30</td>
<td>+30</td>
<td>200,000 yd (100 miles)</td>
</tr>
<tr>
<td>etc.</td>
<td>etc.</td>
<td>etc.</td>
</tr>
</tbody>
</table>

Continue this progression indefinitely, with each 10x increase in linear measurement giving +6 to SM or -6 to speed/range modifier.

**Example:** Erin the archer shoots at a dragon. It is 40 yards away and flying at Move 15 (30 mph); 40 + 15 = 55 yards. Erin rounds up to 70 yards, for a speed/range modifier of -9. The dragon is 6 yards long, which rounds up to 7 yards, for SM +3. Erin’s final modifier to hit is -6.
By using the sum of range and speed, the table ensures that when one of range or speed is large relative to the other, only that factor has a significant impact on the outcome. Small variations in speed are negligible when firing at targets at extreme ranges, and vice versa. If a rocket is moving at 1,000 yards/second, it doesn’t really matter whether it’s 50 or 100 yards away. If an elephant is 1,000 yards away, it hardly matters whether it is walking at 1 yard/second or 2 yards/second.

**Firing Upward and Downward:** For every yard of elevation your target has over you, add one yard to effective range. For every two yards of elevation you have over your target, subtract one yard from effective range; if this would reduce effective range to less than half the real ground distance, use half the ground distance instead.

**Sense Rolls:** If making a Sense roll, or an Electronics Operation roll for sensors, do not add speed to range. Instead, subtract speed from range (but don’t reduce it below 0). It is actually easier to notice a moving target!

---

### Maneuvers

**Taking an active defense may spoil your aim or concentration.**

#### Maneuver Table

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Description</th>
<th>Active Defense</th>
<th>Movement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim</td>
<td>Aim a ranged weapon to get its Accuracy bonus.</td>
<td>Any*</td>
<td>Step</td>
<td>364</td>
</tr>
<tr>
<td>All-Out Attack</td>
<td>Attack at a bonus or multiple times.</td>
<td>None</td>
<td>Half Move</td>
<td>365</td>
</tr>
<tr>
<td>All-Out Defense</td>
<td>Increased or double defense.</td>
<td>Any†</td>
<td>Varies</td>
<td>366</td>
</tr>
<tr>
<td>Attack</td>
<td>Attack unarmed or with a weapon.</td>
<td>Any</td>
<td>Step</td>
<td>365</td>
</tr>
<tr>
<td>Change Posture</td>
<td>Stand up, sit down, etc.</td>
<td>Any</td>
<td>None</td>
<td>364</td>
</tr>
<tr>
<td>Concentrate</td>
<td>Focus on a mental task.</td>
<td>Any*</td>
<td>Step</td>
<td>366</td>
</tr>
<tr>
<td>Do Nothing</td>
<td>Take no action but recover from stun.</td>
<td>Any†</td>
<td>None</td>
<td>364</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Study a foe prior to a melee attack.</td>
<td>Any</td>
<td>Step</td>
<td>364</td>
</tr>
<tr>
<td>Feint</td>
<td>Fake a melee attack.</td>
<td>Any</td>
<td>Step</td>
<td>365</td>
</tr>
<tr>
<td>Move and Attack</td>
<td>Move and attack at a penalty.</td>
<td>No Parry</td>
<td>Full Move</td>
<td>365</td>
</tr>
<tr>
<td>Move</td>
<td>Do nothing but move.</td>
<td>Any</td>
<td>Full Move</td>
<td>364</td>
</tr>
<tr>
<td>Ready</td>
<td>Prepare a weapon or other item.</td>
<td>Any</td>
<td>Step</td>
<td>366</td>
</tr>
<tr>
<td>Wait</td>
<td>Hold yourself in readiness to act.</td>
<td>Any</td>
<td>Varies</td>
<td>366</td>
</tr>
</tbody>
</table>

* Taking an active defense may spoil your aim or concentration.
† Gives +2 to Dodge, Block, or Parry, or allows two defenses against each attack.
‡ Defenses are at -4 if taking Do Nothing due to stun.

---

### Postures

**Attack:** The modifier when making a melee attack from this posture. There is no effect on ranged attacks.

**Defense:** The modifier to all active defense rolls.

**Target:** The modifier to hit your torso, groin, or legs with a ranged attack. No penalty to strike other hit locations, if they are visible from that posture.

**Movement:** The effect on movement. For tactical combat, movement point costs appear in parentheses, and note that a human occupies two hexes while crawling or lying down.

#### Posture Table

<table>
<thead>
<tr>
<th>Posture</th>
<th>Attack</th>
<th>Defense</th>
<th>Target</th>
<th>Movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
<td>Normal; may sprint 2/3 (+1/2 per hex)</td>
</tr>
<tr>
<td>Crouching</td>
<td>-2</td>
<td>-2</td>
<td>-2</td>
<td>1/3 (+2 per hex)</td>
</tr>
<tr>
<td>Kneeling</td>
<td>-2</td>
<td>-2</td>
<td>-2†</td>
<td>1/3 (+2 per hex)</td>
</tr>
<tr>
<td>Crawling</td>
<td>-4*</td>
<td>-3</td>
<td>-2†</td>
<td>None</td>
</tr>
<tr>
<td>Sitting</td>
<td>-2</td>
<td>-2</td>
<td>-2</td>
<td>1 yard/second</td>
</tr>
<tr>
<td>Lying Down</td>
<td>-4</td>
<td>-3</td>
<td>-2†</td>
<td>1 yard/second</td>
</tr>
</tbody>
</table>

* Only reach “C” melee attacks are allowed.
† If attacker is at the same or lower elevation and farther away than his own height, he attacks your torso as if it were half exposed (-2 to hit), and cannot attack your groin, legs, or feet at all. If you also have your head down, he cannot attack your neck, eyes, or face.
**Hit Location Tables**

Use these tables in conjunction with the Hit Location rules (p. 398).

*Missing Parts:* If a random roll indicates that a missing body part would be hit (e.g., the neck, on a target with Injury Tolerance (No Neck)), treat it as a torso hit.

**Human and Humanoid Hit Location Table**

Use this table for humans, humanoids (e.g., giants and goblins), and semi-upright creatures (e.g., apes and bears). If rolling randomly, roll 3d. If deliberately targeting a specific hit location, apply the listed penalty. For example, a random hit to the skull would occur on a roll of 3-4, while a deliberate attack targeting the skull would be at -7 to hit.

**Winged Humanoids:** A deliberate attack on a wing is at -2 to hit. If rolling randomly, a 9 indicates a wing hit (roll randomly to see which wing) and a 10 indicates a torso hit. For wounding purposes, treat wings as limbs.

**Fish-Tailed Humanoids (Mermen):** A deliberate attack on the tail is at -3 to hit. If rolling randomly, treat random leg hits as torso hits and random foot hits as tail hits. For effects, see Quadruped, Hexapod, Centaur, and Avian Hit Location (p. 553).

**Human and Humanoid Hit Location Table**

<table>
<thead>
<tr>
<th>Roll</th>
<th>Location Penalty</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6</td>
<td>Neck (-3)</td>
<td></td>
</tr>
<tr>
<td>7-8</td>
<td>Groin (-2)</td>
<td></td>
</tr>
<tr>
<td>9-10</td>
<td>Heart, lungs, kidneys, etc.</td>
<td>Increase the wounding modifier for an impaling or piercing attack to ×3.</td>
</tr>
<tr>
<td>11-12</td>
<td>Shoulder (-3)</td>
<td></td>
</tr>
<tr>
<td>13-14</td>
<td>Arm (-4)</td>
<td></td>
</tr>
<tr>
<td>15-16</td>
<td>Head (-5)</td>
<td></td>
</tr>
<tr>
<td>17-18</td>
<td>Jaw, cheeks, nose, etc.</td>
<td>Treat hits to the skull or face as skull hits.</td>
</tr>
</tbody>
</table>

*Hit Location Tables*

Use the next two tables for the following categories of non-humanoid:

**Avian:** A creature with two wings, two legs, and no arms; e.g., a bird.

**Arachnoid:** A spider or similar eight-legged creature.

**Acanthoid:** A crab, lobster, scorpion, or similar creature with forelimb pincers.

**Centaur:** Any humanoid-quadruped hybrid.

**Hexapod:** A six-legged creature; e.g., an insect. A winged hexapod also has wings, like a fly.
**Ichthyoid:** A fish, cetacean, or similar creature.

**Octopod:** An octopus or similar creature with “arms” that double as legs.

**Quadruped:** A creature with four legs and no arms. A winged quadruped also has a pair of wings, like a dragon.

**Vermiform:** Any slithering creature (snake, worm, etc.) or variant (winged serpent, snake-man with arms but not legs, etc.).

### Quadruped, Hexapod, Centaur, and Avian Hit Location Table

<table>
<thead>
<tr>
<th>Roll (3d)</th>
<th>Quadruped</th>
<th>Winged Quadruped</th>
<th>Hexapod</th>
<th>Winged Hexapod</th>
<th>Centaur</th>
<th>Avian</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>Eye (-9)</td>
<td>Skull (-7)</td>
<td>Eye (-9)</td>
<td>Skull (-7)</td>
<td>Eye (-9)</td>
<td>Skull (-7)</td>
</tr>
<tr>
<td>3-4</td>
<td>Eye (-9)</td>
<td>Skull (-7)</td>
<td>Eye (-9)</td>
<td>Skull (-7)</td>
<td>Eye (-9)</td>
<td>Skull (-7)</td>
</tr>
<tr>
<td>5</td>
<td>Face (-5)</td>
<td>Neck (-5)</td>
<td>Neck (-5)</td>
<td>Face (-5)</td>
<td>Neck (-5)</td>
<td>Face (-5)</td>
</tr>
<tr>
<td>6</td>
<td>Face (-5)</td>
<td>Neck (-5)</td>
<td>Neck (-5)</td>
<td>Face (-5)</td>
<td>Neck (-5)</td>
<td>Face (-5)</td>
</tr>
<tr>
<td>7-8</td>
<td>Foreleg (-2)*</td>
<td>Foreleg (-2)*</td>
<td>Foreleg (-2)*</td>
<td>Torso (0)</td>
<td>Foreleg (-2)*</td>
<td>Wing (-2)*</td>
</tr>
<tr>
<td>9-10</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
</tr>
<tr>
<td>11</td>
<td>Torso (0)</td>
<td>Groin (-3)</td>
<td>Groin (-3)</td>
<td>Wing (-2)*</td>
<td>Groin (-3)</td>
<td>Groin (-3)</td>
</tr>
<tr>
<td>12</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
</tr>
<tr>
<td>13-14</td>
<td>Hind Leg (-2)*</td>
<td>Hind Leg (-2)*</td>
<td>Hind Leg (-2)*</td>
<td>Torso (0)</td>
<td>Hind Leg (-2)*</td>
<td>Leg (-2)*</td>
</tr>
<tr>
<td>15-16</td>
<td>Foot (-4)*</td>
<td>Foot (-4)*</td>
<td>Foot (-4)*</td>
<td>Torso (0)</td>
<td>Foot (-4)*</td>
<td>Foot (-4)*</td>
</tr>
<tr>
<td>17-18</td>
<td>Tail (-3)</td>
<td>Tail (-3)</td>
<td>Mid Leg (-2)*</td>
<td>Torso (0)</td>
<td>Extremity (-4)</td>
<td>Tail (-3)</td>
</tr>
<tr>
<td>–</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
</tr>
</tbody>
</table>

* If using random hit location, roll 1d: 1-3 is right, 4-6 is left. If it is somehow holding a shield, double the penalty to hit: -4 for a limb, -8 for an extremity.

† For centaurs, 9-10 means the animal body is hit, while 11 means the humanoid upper body is hit. Deliberate attacks on either are at no penalty.

| Arm, Eye, Face, Foot, Groin, Leg, Neck, Skull, Torso, Vitals: Use the rules for humans and humanoids. “Arm” means a human upper-body arm for a centaur. “Foot” includes paw, hoof, etc. “Torso” includes fore- and hindquarters, thorax, abdomen, etc.

**Extremity:** For centaurs, roll 1d: 1-2 is a human upper-body hand, 3-4 is a forefoot, and 5-6 is a hind foot; odd numbers are left, even numbers are right.

**Foreleg:** The right or left front leg.

**Hind Leg:** The right or left back leg.

### Vermiform, Octopod, Cancroid, Ichthyoid, and Arachnoid Hit Location Table

<table>
<thead>
<tr>
<th>Roll (3d)</th>
<th>Vermiform‡</th>
<th>Octopod‡</th>
<th>Cancroid§</th>
<th>Ichthyoid</th>
<th>Arachnoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>Eye (-9)</td>
<td>Eye (-8)</td>
<td>Eye (-9)</td>
<td>Eye (-9)</td>
<td>Eye (-9)</td>
</tr>
<tr>
<td>3-4</td>
<td>Skull (-7)</td>
<td>Skull (-7)</td>
<td>Skull (-7)</td>
<td>Skull (-7)</td>
<td>Skull (-7)</td>
</tr>
<tr>
<td>5</td>
<td>Face (-5)</td>
<td>Face (-5)</td>
<td>Face (-5)</td>
<td>Face (-5)</td>
<td>Neck (-5)</td>
</tr>
<tr>
<td>6</td>
<td>Neck (-5)</td>
<td>Neck (-5)</td>
<td>Neck (-5)</td>
<td>Fin (-4)</td>
<td>Face (-5)</td>
</tr>
<tr>
<td>7-8</td>
<td>Neck (-5)</td>
<td>Arm 1-2 (-2)*</td>
<td>Arm (-2)*</td>
<td>Torso (0)</td>
<td>Leg 1-2 (-2)*</td>
</tr>
<tr>
<td>9-11</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
</tr>
<tr>
<td>12</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Torso (0)</td>
<td>Groin (-3)</td>
</tr>
<tr>
<td>13-14</td>
<td>Torso (0)</td>
<td>Arm 3-4 (-2)*</td>
<td>Leg (-2)*</td>
<td>Fin (-4)</td>
<td>Leg 3-4 (-2)*</td>
</tr>
<tr>
<td>15-16</td>
<td>Torso (0)</td>
<td>Arm 5-6 (-2)*</td>
<td>Leg (-2)*</td>
<td>Fin (-4)</td>
<td>Leg 5-6 (-2)*</td>
</tr>
<tr>
<td>17-18</td>
<td>Torso (0)</td>
<td>Arm 7-8 (-2)*</td>
<td>Foot (-4)*</td>
<td>Tail (-3)</td>
<td>Leg 7-8 (-2)*</td>
</tr>
<tr>
<td>–</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
<td>Vitals (-3)</td>
</tr>
</tbody>
</table>

* If using random hit location, roll 1d: 1-3 is right, 4-6 is left. If it is somehow holding a shield, double the penalty to hit: -4 for a limb, -8 for an extremity.

† For winged serpents, treat 15-18 as Wing (-2). For snake-men, treat 7-8 as Right Arm (-2), 13-14 as Left Arm (-2), and 17-18 as Hand (-4).

‡ For squid, treat 17-18 as Torso (0). All arms other than arms 1-2 are extremities for injury purposes, and targeted at -3.

§ For scorpions, treat 12 as Tail (-3).
**Arm:** For an octopod, arms 1-4 are those it is currently using for manipulation, while arms 5-8 are those it is using for locomotion. For a cancroid, an arm is a forelimb pincer. Handle wounding, etc. as for humans and humanoids.

**Brain:** As skull, but only DR 1.

**Eye, Face, Foot, Groin, Neck, Skull, Torso, Vitals:** Use the rules for humans and humanoids.

**Fin:** An ichthyoid often has two or three fins or ray-like wings; roll randomly. Treat a fin as an extremity (hand, foot) for crippling purposes. A crippled fin affects balance: -3 DX.

**Leg:** For a cancroid, this is any of its true legs; roll randomly. For an arachnoid, legs 1-2 are the front pair; legs 3-4 are the mid-front pair; legs 5-6 are the mid-back pair; and legs 7-8 are the back pair. Handle wounding, etc. as for humans and humanoids.

**Tail:** See note under Quadruped, Hexapod, Centaur, and Avian Hit Location Table. For ichthyoids, most of the “tail” is considered the torso; this is just the tip.

---

**Vehicle Hit Location Table**

Every vehicle has a “body” hit location. To find a vehicle’s other hit locations (if any), look up the vehicle on the relevant vehicle table and check the “Locations” column. See Vehicle Statistics (p. 462) for details.

To choose a random hit location, roll 3d on the table below. If deliberately targeting a location, apply the penalty in parentheses plus the vehicle’s SM. For example, a random hit to a small glass window or exposed weapon mount would occur on a roll of 3-4, while a deliberate attack on either location would be at -7 to hit – or -3 on a vehicle with SM +4.

If a random location doesn’t exist, is retracted, or isn’t a logical target given the angle of attack (e.g., a window for a car attacked from below, or a vehicle with no windows), treat it as body hit. If multiple locations or possibilities exist (e.g., a roll of 3-4 for a vehicle with small glass windows and an exposed weapon mount), the attacker picks which was hit.

**Body:** The vehicle’s hull. If a powered vehicle sustains a major wound, roll against HT. On a failure, the power or propulsion system is damaged, halving Move.

**Caterpillar Track [C]:** A track is hit. Most tracked vehicles have two tracks. Damage over HP/2 cripples one track, reducing ground Move to 0. Excess damage is lost.

---

<table>
<thead>
<tr>
<th>Roll</th>
<th>Location (Penalty)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4</td>
<td>Small Glass Window [g] or Exposed Weapon Mount [X] (-7)</td>
</tr>
<tr>
<td>5</td>
<td>Small Superstructure* [s] or Independent Turret [t] (-5)</td>
</tr>
<tr>
<td>6-7</td>
<td>Caterpillar Track [C], Draft Animal** [D], Helicopter Rotor [H], Mast [M], or Wing [Wi] (-2)</td>
</tr>
<tr>
<td>8</td>
<td>Arm [A], Large Superstructure* [S], or Main Turret* [T] (-2)</td>
</tr>
<tr>
<td>9</td>
<td>Body* or Exposed Rider [E] (0)</td>
</tr>
<tr>
<td>10</td>
<td>Body* (0)</td>
</tr>
<tr>
<td>11</td>
<td>Large Glass Window [G] or Open Cabin [O] (-3)</td>
</tr>
<tr>
<td>12</td>
<td>Arm [A], Large Superstructure* [S], or Main Turret* [T] (-2)</td>
</tr>
<tr>
<td>13-14</td>
<td>Caterpillar Track [C], Draft Animal** [D], Helicopter Rotor [H], Mast [M], or Wing [Wi] (-2)</td>
</tr>
<tr>
<td>15-16</td>
<td>Runner or Skid [R] or Wheel [W] (-4)</td>
</tr>
<tr>
<td>17-18</td>
<td>Vital Area (-3)</td>
</tr>
</tbody>
</table>

* Usually manned; see Occupants and Vehicle Damage, below.
** The modifier to target a draft animal deliberately is the animal’s SM.
Draft Animal [D]: A harnessed animal is hit instead of the vehicle. The vehicle takes no damage, and its DR doesn’t protect the animal.

Exposed Rider [E] or Open Cabin [O]: A person in an exposed position (e.g., riding a bike, sitting in a jeep, or sticking his head out a hatch) is struck instead of the vehicle. The vehicle takes no damage, and its DR doesn’t protect the occupant. If no one occupies this position, treat as a body hit.

Exposed Weapon Mount [X]: A small external mount for a weapon, sensor, etc. is hit. Damage over HP/5 cripples it; excess damage is lost.

Helicopter Rotor [H] or Wing [Wi]: A main or tail rotor, or major wing or tail section. Damage over HP/2 (wing) or HP/3 (rotor) cripples it, causing an airborne vehicle to lose control and crash! Excess damage is lost.

Large Glass Window [G] or Small Glass Window [g]: A window or canopy is struck. Check for an occupant hit (see Occupant Hit Table, below). If a hit occurs, the attack strikes an occupant instead of the vehicle. A closed window gives half the vehicle’s DR (round up).

Large Superstructure [S]: A large, raised structure — e.g., conning tower, bridge, or castle — that often houses officers’ cabins or important control rooms. On an airship or a balloon, this is the gondola. If it sustains a major wound, roll against HT. On a failure, an important item of equipment is knocked out (GM’s option).

Main Turret [T]: A turret large enough to be a vital part of the vehicle, such as a tank’s turret. If it sustains a major wound, roll against HT. On a failure, a major item in the turret (e.g., a tank’s main gun) is knocked out, or the turret jams and can’t rotate (GM’s option).

Mast [M]: A mast and associated sails and rigging. Damage over HP/(2 x number of masts on vehicle) cripples one mast, reducing a sailing vessel’s Move by 1/(number of masts), rounded up; e.g., if three masts, loss of one results in 2/3 Move. Excess damage is lost.

Runner or Skids [R]: A skid, sled runner, or ski is hit. Damage over HP/3 cripples one skid, reducing ground Move to 0 and toppling a parked vehicle. Excess damage is lost.

Small Superstructure [s] or Independent Turret [t]: A turret or structure whose loss the vehicle could survive; e.g., the turrets on most naval vessels and infantry fighting vehicles. Damage over HP/3 cripples it, knocking out any weapons or equipment it contains. Excess damage is lost.

Vital Area: A powered vehicle (anything with a ST attribute) has vital areas: engines, fuel tanks, etc. The wounding modifier for a tight-beam burning attack is ¥2; that for an impaling or any piercing attack is ¥3! Unpowered vehicles (e.g., sailing ships and wagons) don’t usually have vital areas — treat as a body hit.

Wheel [W]: A wheel is hit. Damage over HP/(2 x number of wheels on vehicle) cripples the wheel; effects are the same as for a character with an equal number of legs losing one leg. Excess damage is lost. If the wheel of a vehicle with tires sustains any damage, roll vs. HT. Failure means a flat tire that cripples the wheel until changed.

Notes on Vehicle Damage

In addition to hit location effects, note that:

- Most powered vehicles are Unliving; most unpowered vehicles are Homogenous. See Injury to Unliving, Homogenous, and Diffuse Targets (p. 380).
- Many vehicles are Fragile: “c” after HT means Combustible, “f” means Flammable, and “x” means Explosive.
- Large-area injury will affect exposed occupants and the vehicle’s body; see Large-Area Injury (p. 400).

Occupant Vehicle Damage

When damage penetrates a vehicle’s DR, the occupants may suffer damage as well as the vehicle — the result of ricocheting projectiles, flying debris, etc. Whenever five or more points of damage penetrate an occupied location (usually the body, main turret, or a superstructure), roll 3d on the Occupant Hit Table, below. If an occupant is hit, he takes 1d cutting damage per five full points of penetrating damage the vehicle sustained. Roll randomly for hit location. The occupant’s own DR protects him.

If occupant damage exceeds 4d, the GM may opt to divide it among multiple occupants in 4d (or smaller) increments; e.g., 7d damage might inflict 4d on one occupant and 3d on another.

Note that occupant damage is separate from damage to the vehicle.

Occupant Hit Table

Use this table when an attack penetrates an object containing occupants (e.g., a vehicle body). Cross-index the number of occupants with the vehicle’s structure’s Size Modifier, and then roll 3d against the resulting number; the more tightly packed the object, the higher the number. On a roll of this number or less, an occupant is hit. If multiple occupants could be hit, the GM determines who was hit randomly or by fiat.

<table>
<thead>
<tr>
<th>Number of Occupants</th>
<th>+1</th>
<th>+2</th>
<th>+3</th>
<th>+4</th>
<th>+5</th>
<th>+6</th>
<th>+7</th>
<th>+8</th>
<th>+9</th>
<th>+10</th>
<th>+11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3-5</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6-10</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>11-20</td>
<td>17</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>21-50</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>51-100</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>101-200</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>201-500</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CRITICAL SUCCESS AND FAILURE

A roll of 3 or 4 is always a critical success. A roll of 5 is a critical success if your effective skill is 15+. A roll of 6 is a critical success if your effective skill is 16+.
A roll of 18 is always a critical failure. A roll of 17 is a critical failure if your effective skill is 15 or less; otherwise, it is an ordinary failure.
Any roll of 10 greater than your effective skill is a critical failure: 16 on a skill of 6, 15 on a skill of 5, and so on.

CRITICAL HIT TABLE

All doublings or triplings of damage refer to basic damage (not injury). In all cases, the target gets no active defense against the attack.

3 – The blow does triple damage.
4 – The target’s DR protects at half value (round down) after applying any armor divisors.
5 – The blow does double damage.
6 – The blow does maximum normal damage.

7 – If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
8 – If any damage penetrates DR, it inflicts double normal shock (to a maximum penalty of -8). If the injury is to a limb or extremity, that body part is crippled as well. This is only a “funny-bone” injury: crippling wears off in (16 - HT) seconds, minimum two seconds, unless the injury was enough to cripple the body part anyway.
9, 10, 11 – Normal damage only.
12 – Normal damage, and the victim drops anything he is holding, regardless of whether any damage penetrates DR.
13, 14 – If any damage penetrates DR, treat it as if it were a major wound, regardless of the actual injury inflicted.
15 – The blow does maximum normal damage.
16 – The blow does double damage.
17 – The target’s DR protects at half value (round up) after applying any armor divisors.
18 – The blow does triple damage.

CRITICAL HEAD BLOW TABLE

Use this table only for critical hits to the head (face, skull, or eye). In all cases, the target gets no active defense against the attack.

3 – The blow does maximum normal damage and ignores the target’s DR.
4, 5 – The target’s DR protects at half value (round up) after applying any armor divisors. If any damage penetrates, treat it as if it were a major wound, regardless of the actual injury inflicted.
6, 7 – If the attack targeted the face or skull, treat it as an eye hit instead, even if the attack could not normally target the eye! If an eye hit is impossible (e.g., from behind), treat as 4.
8 – Normal head-blow damage, and the victim is knocked off balance: he must Do Nothing next turn (but may defend normally).
9, 10, 11 – Normal head-blow damage only.
12, 13 – Normal head-blow damage, and if any damage penetrates DR, a crushing attack deafeats the victim (for recovery, see Duration of Crippling Injuries, p. 422), while any other attack causes severe scarring (the victim loses one appearance level, or two levels if a burning or corrosion attack).
14 – Normal head-blow damage, and the victim drops his weapon (if he has two weapons, roll randomly to see which one he drops).
15 – The blow does maximum normal damage.
16 – The blow does double damage.
17 – The target’s DR protects at half value (round up) after applying any armor divisors.
18 – The blow does triple damage.

CRITICAL MISS TABLE

3, 4 – Your weapon breaks and is useless. Exception: Certain weapons are resistant to breakage. These include solid crushing weapons (maces, flails, mauls, metal bars, etc.); magic weapons; firearms (other than wheel-locks, guided missiles, and beam weapons); and fine and very fine weapons of all kinds. If you have a weapon like that, roll again. Only if you get a “broken weapon” result a second time does the weapon really break. If you get any other result, you drop the weapon instead. See Broken Weapons (p. 485).
5 – You manage to hit yourself in the arm or leg (50% chance each way). Exception: If making an impaling or piercing melee attack, or any kind of ranged attack, roll again. If you get a “hit yourself” result a second time, use that result – half or full damage, as the case may be. If you get something other than “hit yourself,” use that result.
6 – As 5, but half damage only.
7 – You lose your balance. You can do nothing else (not even a free action) until your next turn, and all your active defenses are at -2 until then.
8 – The weapon turns in your hand. You must take an extra Ready maneuver before you can use it again.
9, 10, 11 – You drop the weapon. Exception: A cheap weapon breaks; see 3.
12 – As 8.
13 – As 7.
14 – If making a swinging melee attack, your weapon flies 1d yards from your hand – 50% chance straight forward or straight back. Anyone on the target spot must...
make a DX roll or take half damage from the falling weapon! If making a *thrusting* melee attack or any kind of ranged attack, or parrying, you simply drop the weapon, as in 9.  
15 – You strain your shoulder! Your weapon arm is “crippled.” You do not have to drop your weapon, but you cannot use it, either to attack or defend, for 30 minutes.  
16 – You fall down! If making a ranged attack, see 7 instead.  
17, 18 – Your weapon breaks; see 3.

### Unarmed Critical Miss Table

Use this table only for critical misses on *unarmed* attacks (bites, claws, grapples, head butts, kicks, punches, slams, etc.) or parries, including those by animals.

3 – You knock yourself out! Details are up to the GM – perhaps you trip and fall on your head, or walk face-first into an opponent’s fist or shield. Roll vs. HT every 30 minutes to recover.  
4 – If attacking or parrying with a limb, you strain it: take 1 HP of injury and the limb is “crippled.” You cannot use it, either to attack or defend, for 30 minutes. If biting, butting, etc., you pull a muscle and suffer moderate pain (see *Irritating Conditions*, p. 428) for the next (20 - HT) minutes, minimum one minute.  
5 – You hit a solid object (wall, floor, etc.) instead of striking your foe or parrying his attack. You take crushing damage equal to your *thrusting* damage to the body part you were using; DR protects normally.  
Exception: If attacking a foe armed with a ready impaling weapon, you fall on his weapon! You suffer the weapon’s damage, based on your ST rather than his.  
6 – As 5, but half damage only.  
Exception: If attacking with natural weapons, such as claws or teeth, they break: -1 damage on future attacks until you heal (for recovery, see *Duration of Crippling Injuries*, p. 422).  
7 – You stumble. On an attack, you advance one yard past your opponent and end your turn facing away from him; he is now behind you! On a parry, you fall down; see 8.  
8 – You fall down!  
9, 10, 11 – You lose your balance. You can do nothing else (not even a free action) until your next turn, and all your active defenses are at -2 until then.  
12 – You trip. Make a DX roll to avoid falling down. Roll at DX-4 if kicking, or at twice the usual DX penalty for a technique that requires a DX roll to avoid mishap even on a normal failure (e.g., DX-8 for a Jump Kick).  
13 – You drop your guard. All your active defenses are at -2 for the next turn, and any Evaluate bonus or Feint penalty against you until your next turn counts double! This is obvious to nearby opponents.  
14 – You stumble; see 7.  
15 – You tear a muscle. Take 1d-3 of injury to the limb you used (to one limb, if you used two), or to your neck if biting, butting, etc. You are off balance and at -1 to all attacks and defenses for the next turn. You are at -3 to any action involving that limb (or to any action, if you injure your neck!) until this damage heals. Reduce this penalty to -1 if you have High Pain Threshold.  
16 – You hit a solid object; see 5.  
17 – You strain a limb or pull a muscle, as in 4. Exception: An IQ 3-5 animal fails so miserably that it loses its nerve. It will turn and flee on its next turn, if possible. If backed into a corner, it will assume a surrender position (throat bared, belly exposed, etc.).  
18 – You knock yourself out; see 3.

*Fighters that cannot fall down* (e.g., snakes, and anyone already on the ground): Treat any “fall down” result as 1d-3 of general injury instead. Details are up to the GM – perhaps your opponent steps on you!  

*Fliers and swimmers:* Treat any “fall down” result as being forced into an awkward flying or swimming position with the same effective results (-4 to attack, -3 to defend).

## HP and DR of Objects and Cover

Use the table below to determine the HP of nonliving artifacts.

**Weight:** The artifact’s weight. If this falls between two values, use the lower of the two.  

**Unliving/Machine:** The HP of an Unliving object of this weight. This includes anything with complex or moving parts; e.g., electronics, firearms, powered vehicles, robots, and most other machines.  

**Homogenous/Diffuse:** The HP of a Homogenous or Diffuse object of this weight. This includes anything that lacks a complex internal structure; e.g., fabric (cloaks, drapes, etc.), furniture, and muscle-powered melee weapons.

---

If you have a choice between extra makeup or extra weapons, always take the weapons.

– Laurell K. Hamilton
Optionally, calculate HP as $4 \times \text{(cube root of empty weight in lbs.)}$ for Unliving objects and $8 \times \text{(cube root of empty weight in lbs.)}$ for Homogenous or Diffuse ones. Round up in both cases. The GM may alter HP for unusually frail or tough objects.

### HP AND DR OF STRUCTURES

The table below gives DR and HP for some common objects. All of these structures are Homogenous (see *Injury to Unliving, Homogenous, and Diffuse Targets, p. 380*). For the effects of damage, see *Damage to Buildings and Structures* (p. 484). Assume a structure in good repair has HT 12, should this become important (e.g., when rolling to see if a rope snaps under stress).

**DR:** The structure’s Damage Resistance.

**HP:** The structure’s Hit Points. Optionally, this can be calculated for buildings: $\text{HP} = 100 \times \text{(cube root of building’s empty weight in tons)}$, and typical weights per 1,000 square feet (sf) of area are 50 tons for wood frame or mud brick, 100 tons for steel frame or brick, and 150 tons for stone.

**Notes:** “No Crushing” indicates a structure so resilient that crushing damage cannot destroy it. Structures marked “Combustible” or “Brittle” are Fragile (p. 136).

#### Object Hit Points Table

<table>
<thead>
<tr>
<th>Weight</th>
<th>Unliving/ Machine</th>
<th>Homogenous/ Diffuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/64 lb.</td>
<td>1 HP</td>
<td>2 HP</td>
</tr>
<tr>
<td>1/8 lb.</td>
<td>2 HP</td>
<td>4 HP</td>
</tr>
<tr>
<td>1/2 lb.</td>
<td>3 HP</td>
<td>6 HP</td>
</tr>
<tr>
<td>1 lb.</td>
<td>4 HP</td>
<td>8 HP</td>
</tr>
<tr>
<td>2 lbs.</td>
<td>5 HP</td>
<td>10 HP</td>
</tr>
<tr>
<td>3 lbs.</td>
<td>6 HP</td>
<td>12 HP</td>
</tr>
<tr>
<td>5 lbs.</td>
<td>7 HP</td>
<td>14 HP</td>
</tr>
<tr>
<td>8 lbs.</td>
<td>8 HP</td>
<td>16 HP</td>
</tr>
<tr>
<td>11 lbs.</td>
<td>9 HP</td>
<td>18 HP</td>
</tr>
<tr>
<td>16 lbs.</td>
<td>10 HP</td>
<td>20 HP</td>
</tr>
<tr>
<td>27 lbs.</td>
<td>12 HP</td>
<td>24 HP</td>
</tr>
<tr>
<td>43 lbs.</td>
<td>14 HP</td>
<td>28 HP</td>
</tr>
<tr>
<td>64 lbs.</td>
<td>16 HP</td>
<td>32 HP</td>
</tr>
<tr>
<td>91 lbs.</td>
<td>18 HP</td>
<td>36 HP</td>
</tr>
<tr>
<td>125 lbs.</td>
<td>20 HP</td>
<td>40 HP</td>
</tr>
<tr>
<td>216 lbs.</td>
<td>24 HP</td>
<td>48 HP</td>
</tr>
<tr>
<td>343 lbs.</td>
<td>28 HP</td>
<td>56 HP</td>
</tr>
<tr>
<td>512 lbs.</td>
<td>32 HP</td>
<td>64 HP</td>
</tr>
<tr>
<td>729 lbs.</td>
<td>36 HP</td>
<td>72 HP</td>
</tr>
<tr>
<td>1,000 lbs.</td>
<td>40 HP</td>
<td>80 HP</td>
</tr>
</tbody>
</table>

#### Structural Damage Table

<table>
<thead>
<tr>
<th>Object</th>
<th>DR</th>
<th>HP</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ropes and Cables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rope, light (3/8” diameter)</td>
<td>1</td>
<td>2</td>
<td>Combustible;</td>
</tr>
<tr>
<td>Rope, heavy (3/4” diameter)</td>
<td>2</td>
<td>3</td>
<td>No Crushing;</td>
</tr>
<tr>
<td>Steel cable (1/4” diameter)</td>
<td>14</td>
<td>22</td>
<td>No Crushing;</td>
</tr>
<tr>
<td>Steel cable (1/2” diameter)</td>
<td>28</td>
<td>28</td>
<td>No Crushing;</td>
</tr>
<tr>
<td>Steel cable (1” diameter)</td>
<td>56</td>
<td>36</td>
<td>No Crushing;</td>
</tr>
<tr>
<td><strong>Bars, Poles, Logs, and Trees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronze/iron bar (1/2” diameter)</td>
<td>6</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Bronze/iron bar (1” diameter)</td>
<td>12</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Steel bar (1/2” diameter)</td>
<td>24</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Steel bar (1” diameter)</td>
<td>44</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td><strong>Doors and Walls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brick Wall (3” thick)</td>
<td>8</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Brick Wall (6” thick)</td>
<td>16</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Brick Wall (9” thick)</td>
<td>24</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Brick Wall (18” thick)</td>
<td>48</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Concrete, reinforced (8” thick)</td>
<td>96</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Concrete, reinforced (2’ thick)</td>
<td>288</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>Concrete, reinforced (5’ thick)</td>
<td>720</td>
<td>156</td>
<td></td>
</tr>
<tr>
<td><strong>Buildings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmhouse (1,000 sf)</td>
<td>2</td>
<td>370</td>
<td>Combustible</td>
</tr>
<tr>
<td>Mansion or manor (10,000 sf)</td>
<td>6</td>
<td>1,000</td>
<td>Combustible</td>
</tr>
<tr>
<td>Modern House (2,000 sf)</td>
<td>6</td>
<td>580</td>
<td>Combustible</td>
</tr>
<tr>
<td>Pillbox (10’-thick concrete)</td>
<td>1,440</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>Skyscraper (50-story, 500,000 sf)</td>
<td>10</td>
<td>3,700</td>
<td>Combustible</td>
</tr>
<tr>
<td>Stone Keep (5’-thick walls)</td>
<td>780</td>
<td>1,200</td>
<td>Combustible</td>
</tr>
</tbody>
</table>
* Repeated impaling, piercing, and large piercing attacks against the same small spot (an area with SM 0 or less) lower DR at that specific point as if it were semi-ablative; repeated burning, corrosion, crushing, cutting, or huge piercing attacks at that same spot reduce DR at that point as if it were ablative. DR never falls below 1 for wood or 3 for brick, concrete, or stone. For rules governing semi-ablative and ablative DR, see the Damage Resistance advantage (p. 46).

**Cover DR**

The following table gives the DR per inch of thickness that common materials afford as cover. This isn't always identical to an object’s own DR! For details, see Cover (p. 407).

<table>
<thead>
<tr>
<th>Material</th>
<th>DR/Inch</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>20-30</td>
<td></td>
</tr>
<tr>
<td>Brick</td>
<td>5-8*</td>
<td></td>
</tr>
<tr>
<td>Concrete</td>
<td>6-9*</td>
<td></td>
</tr>
<tr>
<td>Concrete, reinforced</td>
<td>10-12*</td>
<td></td>
</tr>
<tr>
<td>Glass, window</td>
<td>5-8</td>
<td>Brittle</td>
</tr>
<tr>
<td>Glass, bullet resistant</td>
<td>10-20</td>
<td>Brittle</td>
</tr>
<tr>
<td>Iron</td>
<td>40-60</td>
<td></td>
</tr>
<tr>
<td>Sandbags</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Steel, mild</td>
<td>50-60</td>
<td></td>
</tr>
<tr>
<td>Steel, hard</td>
<td>60-70</td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td>8-13*</td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>0.5-1*</td>
<td>Combustible</td>
</tr>
</tbody>
</table>

* Repeated damage to a small area lowers DR, as explained under the Structural Damage Table.

**NPC Reactions**

When the PCs meet an NPC whose reaction to them is not predetermined, the GM can opt to make a “reaction roll” on 3d. The higher the roll, the better the reaction. The GM then follows the guidelines on the Reaction Table, below. For more information, see Reaction Rolls (p. 494). Many factors can influence a reaction roll. A reaction bonus is any factor that makes NPCs friendlier, while a reaction penalty is something that biases NPCs against the PCs. Some common modifiers:
### Reaction Table

Roll 3d and apply the modifiers described above.

**0 or less: Disastrous**

- **General reaction:** The NPC hates the PCs and acts in their worst interest.
- In a potential combat situation, the NPCs attack viciously, asking for no quarter and giving none.
- **Commercial transactions** are doomed: The merchant has nothing to do with the PCs. Make a “potential combat” roll at -2.
- **Requests for aid** are denied totally. Make a “potential combat” roll at -4. If combat is called for but not possible, the NPC works against the PCs in any way possible.
- **Requests for information** are met with anger. Make a “potential combat” roll at -2.
- **Loyalty:** The NPC hates the PCs or is in the pay of their enemies, and takes the first good chance to betray them.

**1 to 3: Very Bad**

- **General reaction:** The NPC dislikes the PCs and acts against them if it’s convenient to do so.
- In a potential combat situation, the NPCs attack, and flee only if they see they have no chance. (A fight in progress continues.)
- **Commercial transactions** are next to impossible. The merchant asks three times the fair price, or offers half the fair price.
- **Requests for aid** are denied. Make a “potential combat” roll; no reaction better than “Neutral” is possible.
- **Requests for information** are met with malicious lies.
- **Loyalty:** The NPC dislikes the PCs, and will leave their service (probably taking everything he can carry) or sell them out as soon as possible.

**4 to 6: Bad**

- **General reaction:** The NPC cares nothing for the PCs and acts against them if he can profit by doing so.
- In a potential combat situation, the NPCs attack unless outnumbered. If they are outnumbered they flee, possibly to attempt an ambush later. (A fight in progress continues.)
- **Commercial transactions** go badly. The merchant asks twice the fair price, or offers half the fair price.
- **Requests for aid** are denied. The NPCs go about their business, ignoring the PCs.
- **Requests for information** are denied. NPCs lie maliciously or demand payment for information. If paid, the NPC gives true, but incomplete, information.
- **Loyalty:** The NPC has no respect for the PCs. He leaves or betrays them given even moderate temptation, and is a sluggish worker.

**7 to 9: Poor**

- **General reaction:** The NPC is unimpressed. He may become hostile if there is much profit in it, or little danger.
- In a potential combat situation, the NPCs shout threats or insults. They demand that the PCs leave the area. If the PCs stick around, the NPCs attack unless outnumbered, in which case they flee. (A fight in progress continues.)
- **Commercial transactions** are unprofitable. The merchant asks 120% of the fair price, or offers 75% of the fair price.

**10 to 12: Neutral**

- **General reaction:** The NPC ignores the PCs as much as possible. He is totally uninterested.
- In a potential combat situation, the NPCs are inclined to go their own way and let the PCs go theirs. (If a fight is in progress, the NPCs try to back off.)
- **Commercial transactions** go routinely. The merchant buys and sells at fair prices.
- **Requests for aid** are denied, but bribes, pleas, or threats might work. The PCs may roll again, at -2.
- **Requests for information** are unproductive. The NPCs claim not to know, or give incomplete data. A bribe may improve their memory; roll again if a bribe is offered.
- **Loyalty:** The NPC is unimpressed with the PCs or dislikes the job; he thinks he’s overworked and underpaid. He’ll probably betray them if offered enough, and would certainly take a “better” job if he thought he had one.

**Continued on next page . . .**

---

- **Personal appearance and behavior:** Especially true for the PC who does the talking! Above-average appearance, Charisma, Fashion Sense, Pitable, and Voice all give a bonus; so does high apparent Status, in most situations. Below-average appearance and numerous disadvantages give a penalty.
- **Skills:** A successful roll against an appropriate skill (Administration to deal with bureaucrats, Carousing when partying, etc.) can give +2 to reactions. A few skills (e.g., Diplomacy and Fast-Talk) give an automatic +2 to reactions at skill 20+.
- **Racial or national biases:** These are usually penalties, and take the
**REACTION TABLE (CONT’D)**

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 to 15: Good</td>
<td>General reaction: The NPC likes the PCs and is helpful within reasonable, everyday limits. In a potential combat situation, the NPCs find the PCs likeable, or else too formidable to attack. The PCs may request aid or information; roll again at +1. (If a fight is in progress, the NPCs flee.) Commercial transactions go pleasantly. The merchant buys and sells at fair prices, and volunteers useful information or small bits of help if possible. Requests for aid are granted if the request is reasonable. The NPCs' attitude is helpful. Even if the request is silly and must be denied, they offer helpful advice. Requests for information are successful. The question is answered accurately. Loyalty: The NPC likes the PCs or the job. He is loyal, works hard, and accepts any reasonable hazard that the PCs accept.</td>
</tr>
<tr>
<td>16 to 18: Very Good</td>
<td>General reaction: The NPC thinks highly of the PCs and is quite helpful and friendly. In a potential combat situation, the NPCs are friendly. The PCs may ask for aid or information (roll again at +3). Even sworn foes find an excuse to let the PCs go . . . for now. (If a fight is in progress, the NPCs flee if they can, or surrender otherwise.) Commercial transactions go very well. The merchant accepts the PCs' offer unless they tried to buy below 80% of the fair price or sell above 150% of the fair price. In that case, he offers those rates. He also offers help and advice. Requests for aid are granted unless they are totally unreasonable. Any useful information NPCs have is volunteered freely. Requests for information are successful. The NPC answers in detail and volunteers any related information he has. Loyalty: The NPC works very hard, and risks his life if need be. Under most circumstances, he puts the PCs' interests ahead of his own.</td>
</tr>
<tr>
<td>19 or better: Excellent</td>
<td>General reaction: The NPC is extremely impressed by the PCs, and acts in their best interests at all times, within the limits of his own ability. In a potential combat situation, the NPCs are extremely friendly. They may even join the party temporarily. The PCs may ask for aid or information; roll again at +5. (If a fight is in progress, the NPCs surrender.) Commercial transactions go extremely well. The merchant accepts the PCs' offer unless they tried to buy below 50% of fair price or sell above 200% of fair price. In that case, he offers those rates. He also offers help and advice. Requests for aid are granted. NPCs help in every way within their power; offering extra aid. Requests for information are extremely successful. The question is answered completely. If the NPC doesn't know everything the PCs need, he exerts himself to find out. He may even offer to help: roll a request for aid at +2, with no reaction worse than &quot;Poor&quot; possible. Loyalty: The NPC worships the PCs or their cause, works incredibly hard, puts the PCs' interests ahead of his own at all times, and would even die for them.</td>
</tr>
</tbody>
</table>

**General Reactions**

Make this roll to see, in general, how any NPC feels about the PCs. When nothing else seems appropriate, make a general reaction roll and wing it! The GM can use any modifiers he thinks appropriate, especially those for personal appearance.

**Potential Combat Situations (and Morale Checks)**

Roll in any encounter where combat is possible but not certain. For a foe in a pitched battle, no roll is necessary. For a group of armed strangers on a wilderness trail, a reaction roll is appropriate unless the GM has predetermined their actions.

When NPCs are losing a fight, the GM can make a combat reaction roll during the fight as a “morale check.” A “Good” or higher reaction indicates flight or surrender, as appropriate – not sudden friendship.

**Special Modifiers for Combat Reactions**

- +1 to +5 if the PCs seem notably stronger than the NPCs.
- -1 to -5 if the PCs seem notably weaker than the NPCs.

-2 if the PCs have no language in common with the NPCs.
-2 if the PCs are intruders on the NPCs' home turf.

---

Form of a Social Stigma disadvantage for the PC or an Intolerance disadvantage on the part of the NPC.

- **Appropriate behavior by the players:** A good approach should be worth +1 or more! A wholly inappropriate approach should give the party -1 or -2.

Remember that reaction rolls are meant to flesh out a situation, NOT to control it! In general, the GM should reserve them for incidental encounters, unplanned situations, etc. He should decide in advance how he intends to play the NPCs in vital encounters . . . but he can still pretend to roll, so that the players won't know for sure what is going on!
**Commercial Transactions**

Roll when the PCs try to buy or sell goods, find a job, or hire someone. If no bargaining is involved, no roll is necessary – unless there is a chance that the merchant won’t deal with the PCs at all.

As used below, “fair price” means the normal price, at that particular time and place, for the goods or services in question. The PCs can try to get a better price, at a -1 penalty for every 10% difference. Likewise, offering more than the fair price, or asking less than the fair price, will give a +1 bonus for every 10% difference.

If the players vary their offer, determine the NPC’s counteroffer based on the proposed price instead of the fair price, if that is less favorable to the PCs. **Example:** If they ask 120% of the fair price and get a “Bad” reaction, the NPC will offer half of that, or 50%.

Bargaining never reduces the price below 50% of “fair” unless the NPC has an ulterior motive!

**Special Modifiers for Transactions**

-1 per 10% by which proposed price favors the PC, relative to the fair price.

+1 per 10% by which proposed price favors the NPC.

+1 if the PC has Merchant skill at any level.

+2 if the PC has Merchant skill at level 20+.

**Requests for Aid**

Roll when the PCs ask for any sort of help. (If appropriate, make a roll for a “potential combat situation” first!) Examples include an interview with a bureaucrat; an attempt to get a newspaper editor or police captain to listen to your story about the mad scientist’s plot; or just a cry for help to the bystanders watching you get mugged!

**Special Modifiers for Request for Aid**

+1 if the request is very simple.

-1 to -3 (or more) if the request is very complex or unreasonable.

-1 if the request would inconvenience the NPC or cost him money.

-2 or more if the request would endanger the NPC’s job or social status.

-1 or more if the request would physically endanger the NPC. This depends on the degree of the risk and the bravery of the NPC!

If there is a question as to whether a given NPC (or PC, for that matter) knows some specific fact, roll against his IQ or an appropriate skill.

**Special Modifiers for Information Requests**

-1 for a complex question; -2 for a very complex question.

-3 if the NPC thinks it’s none of the PCs’ business!

-3 or more if an answer would endanger the NPC.

+1 to +4 if the PCs offer a bribe. To be effective, a bribe must be appropriate in size; use the Money Talks rule for Contacts (p. 44), reading the bonus as a reaction modifier. It must also be discreet. Not everyone will take a cash payoff. You don’t offer a newspaper reporter a $50 bill – he would be insulted – but buy him a good dinner and he’ll appreciate it.

+2 to +4 if the NPC is a librarian, historian, scribe, teacher, etc. Most such people are naturally disposed to help any seeker of knowledge.

**Loyalty**

When the PCs hire someone, the GM should determine his loyalty. This determines only the NPC’s attitude – not his competence. If the NPC is important, the GM should predetermine both his skills and his general attitude. Otherwise, a random roll is fine.

When the PCs take service with an employer, the GM should also determine (randomly or otherwise) how the employer feels about them. Loyalty reactions are known to the GM, but not to the players (unless they successfully use Empathy). The GM should record each NPC’s loyalty secretly, and let it guide him in determining all that NPC’s later behavior. Note that loyalty can change; see Changes in Loyalty (p. 519).

**Requests for Information**

Roll when the PCs ask NPCs for directions or advice, “Have you seen this man?,” etc. **Note:** If the NPC is a professional information dealer, roll for a commercial transaction instead. If the PCs are interrogating the NPC, they must use the Interrogation skill.

Remember that no NPC can tell more than he knows. Sometimes an NPC will tell the truth as he knows it . . . but be terribly mistaken! And certain NPCs may pretend to know more than they do, in order to earn money or impress the PCs.

**Special Modifiers for Loyalty**

+1 per 10% the PCs offer above the going pay rate.

-1 per 10% the PCs offer below the going pay rate.

+2 or more if the PCs are serving a cause that the NPC believes in, or a leader to whom the NPC is very loyal.

+ or - as appropriate for the PCs’ reputation in the area (if any).
active defense: An active attempt to avoid an attack: a block, dodge, or parry. See p. 374.

advantage: A useful trait that gives you an "edge" over another person with comparable attributes and skills. See Chapter 2.

adventure: The basic "unit" of play in a roleplaying game, representing a single mission or plot. It might require several sessions of play, or just one play session. See p. 500.

Adversary: An "assistant GM" who plays "enemy" non-player characters. The Adversary knows only as much about the game world and the player characters as the GM tells him. See p. 493.

affliction: A debilitating or incapacitating condition (choke, paralysis, unconsciousness, etc.), most often caused by a non-damaging attack. See p. 428.

armor divisor: A rating of an attack's armor-defeating power, given in parentheses after its damage dice. Divide Damage Resistance by this number before you subtract it from basic damage to find penetrating damage. See p. 378.

Associated NPC: A non-player character linked to a player character by an advantage (Ally or Patron) or disadvantage (Dependent or Enemy). See p. 31.

attack roll: A success roll against a combat skill to see if you can hit your target. See p. 369.

attributes: The most basic traits that describe a character: Strength (ST), Dexterity (DX), Intelligence (IQ), Health (HT). For all four, the human norm is a score of 10, and higher is better! See p. 14.

base skill: Your actual learned level in a skill – the number recorded on your character sheet – before any modifiers. See p. 171.

basic damage: The result of a damage roll, before accounting for the target's Damage Resistance. See p. 378.

Basic Lift (BL): The weight you can pick up in one hand in one second in combat. All carrying, lifting, and throwing capacities are multiples of Basic Lift. See p. 15.

Basic Move: A secondary characteristic, computed from Basic Speed, which rates ground speed (in yards per second) without encumbrance. See p. 17.

Basic Speed: A secondary characteristic, computed from HT and DX, which measures reflexes. See p. 17.

BL: See Basic Lift.

block: The active defense of interposing your shield or cloak to stop an attack. See p. 375.

bonus points: Character points awarded by the GM as a reward for good role-playing or for advancing the mission. You can use these to add or improve beneficial traits, or to buy off disadvantages. See p. 498.

build: Your height and weight, along with associated traits such as Size Modifier. See p. 18.

buy off: To spend bonus points to get rid of a disadvantage. See p. 121.

campaign: A continuing series of adventures. A campaign will usually have a continuing cast of player characters, and the same GM (or team of GMs). It may move from one game world to another, with a logical reason. See p. 504.

character: Any being – person, animal, robot, etc. – played by the GM, the Adversary, or a player. See Chapter 1.

character points: The unit of "currency" spent to buy traits for a character. The more points you have, the more capable you are. Point costs often appear in brackets; e.g., "Combat Reflexes [15]" means Combat Reflexes costs 15 points. See p. 10.

character sheet: A written description (possibly including a picture) of a character, including a complete list of his traits and their point costs. See p. 13.

character story: The fictional life history of a character, invented by the person playing that character. See p. 11.

character template: A list of traits the GM feels a character should have to fill a specific role in the campaign. This is a “quick reference,” not a strict requirement. See p. 258.

cinematic: A style of play where the needs of the story always outweigh those of realism, even when this would produce improbable results. See p. 488.

close combat: Combat between fighters less than one yard apart. See p. 391.

comprehension level: A measure of your command of a language. Your spoken ability (fluency) and written ability (literacy) may differ. See p. 24.

Contest: A competition between two characters in which each tries to make his success roll, to see who gets the better of the other. See p. 348.

Control Rating (CR): A general measure of governmental control in a society: the higher the CR, the more restrictive the society. See p. 506.

controlling attribute: The attribute most closely associated with a skill, used to calculate your base skill level. See p. 167.

CR: See Control Rating.

critical failure: A skill roll missed so badly that something disastrous happens to the character who tried the roll. See p. 348.

critical hit: A blow so well struck that the foe does not get to make a defense roll. It may also do special and unusual damage. See p. 381.

critical miss: An attack that fails so badly that the attacker is hurt, drops his weapon, etc. See p. 382.

critical success: A skill roll that succeeds so well that the character has an extra or unusual degree of success. See p. 347.

d: Short for "dice," which are always ordinary six-sided dice. “3d” means “roll three dice and add them up.” See p. 9.

Damage Resistance (DR): The protection against damage afforded by skin, armor, force fields, etc. When an attack hits a target, subtract the target’s DR from the damage roll. See p. 46.

damage roll: A die roll made to see how much damage you do when you hit with your weapon. Damage is measured in “dice plus adds.” For a “3d-2” weapon, roll 3 dice and add 2 to the total. Higher is better (for the attacker!). See p. 378.
damage type: The kind of injury a weapon causes, which determines its wounding modifier. See p. 269.
default: Your level with a skill on which you have spent no points. This is usually equal to one of your four attributes or another skill, minus a significant penalty. See p. 173.
Defense Bonus: A bonus to all defense rolls. The most common Defense Bonus is that for carrying a shield. See p. 374.
defense roll: A die roll made after your foe's attack roll succeeds, to see if you can use an active defense to avoid being hit. See p. 374.
Dexterity (DX): A measure of a character's agility and coordination. See p. 15.
disadvantage: A problem that renders you less capable than your other traits would suggest. See Chapter 3.
disadvantage limit: The maximum number of extra character points you can claim from all traits with negative point costs. The GM sets this value, if he wishes. See p. 11.
dodge: The active defense of ducking or evading an attack. See p. 374.
DR: See Damage Resistance.
DX: See Dexterity.
edefined points: Same as bonus points.
effective skill: Your base skill plus or minus any modifiers for the task at hand. See p. 117.
encounter: One "scene" of an adventure, usually a meeting between the PCs and one or more NPCs. See p. 502.
encumbrance: The weight of all objects you are carrying. The greater your encumbrance, the slower your movement will be. See p. 17.
enhancement: An extra capability added to a trait. This increases the point cost of the trait by a percentage. See p. 102.
extra effort: Pushing your physical abilities beyond their usual limits by spending FP. See p. 356.
Fatigue Points (FP): A secondary characteristic, computed from HT, which measures resistance to exhaustion. Strenuous activity and the use of some special abilities "cost" FP temporarily. See p. 16.
feature: A trait (usually racial) that can affect game play but that costs 0 points. See p. 260.
FP: See Fatigue Points.
Fright Check: A Will roll made to see how you react in a frightening situation. See p. 102.
Game Master (GM): The referee, who chooses the adventure, talks the players through it, judges the results, and gives out bonus points. See Chapter 18.
game time: Time that passes in the game world. See p. 497.
game world: A background for play; a setting. "World" might mean "planet," but it could also refer to a region and historical period . . . or an entire universe. See Chapter 19.
GM: See Game Master.
Health (HT): A measure of a character's energy and vitality. See p. 15.
hex: A hexagonal space on a game map. Different maps have different scales. A hex on a combat map is one yard across. See p. 384.
Hit Points (HP): A secondary characteristic, computed from ST, which rates a character's ability to absorb punishment. Physical threats such as accidents, attacks, and hazards can temporarily deplete HP. See p. 16.
HP: See Hit Points.
HT: See Health.
Influence roll: A Contest of skill against Will made to see if a character is affected by an Influence skill. Reaction modifiers always apply to Influence rolls. See p. 359.
Influence skill: A skill used to influence others: Diplomacy, Fast-Talk, Intimidation, Savoir-Faire, Sex Appeal, or Streetwise. See p. 494.
injury: Temporary Hit Point loss due to an attack, found by subtracting the target's Damage Resistance from the attack's basic damage and modifying the resulting penetrating damage for damage type. See p. 419.
Intelligence (IQ): A broad measure of a character's brainpower. See p. 15.
IQ: See Intelligence.
job roll: A monthly success roll made to determine your performance at a job. See p. 516.
LC: See Legality Class.
Legality Class (LC): A statistic that rates society's willingness to allow easy access to a piece of equipment. The lower an item's LC, the more likely it is controlled or illegal. See p. 267.
life history: Same as character story.
limitation: A restriction on the use of a trait. This reduces the point cost of the trait by a percentage. See p. 110.
major wound: A single injury equal to half the target's HP or more. See p. 420.
maneuver: An action you may choose on your turn in combat, such as Attack, Change Posture, or Feint. See p. 363.
margin of failure: The amount by which you overshoot your effective skill on a failed success roll. See p. 347.
margin of success: The amount by which you beat your effective skill on a successful success roll. See p. 347.
marginal of victory: A numerical comparison of the winner's margin of success or failure to the loser's in a Contest. See p. 348.
melee combat: Combat with melee weapons (axes, swords, etc.) or bare hands. See p. 369.
melee weapon: A (usually) muscle-powered weapon held in the hand and used to strike the foe directly; e.g., an axe. The opposite of ranged weapon. See p. 271.
mental trait: A trait associated with your mind, and that will come with you should you move to a new body. See p. 32.
meta-trait: A single trait that is actually shorthand for a collection of traits that represent one simple concept. Example: Machine. See p. 262.
modifier: 1. A number added to or subtracted from the target number of a success roll – or the actual die roll, for a reaction roll – in order to allow for a specific situation. See p. 344. 2. An enhancement or a limitation. See p. 101.
Move: Movement speed in yards per second. Find ground Move by modifying Basic Move for your encumbrance level. See p. 17.
nonplayer character (NPC): Any character played by the GM or the Adversary. See p. 493.
NPC: See nonplayer character.
parry: The active defense of using a hand or a weapon to ward off an attack. See p. 376.
party: A group of PCs taking part in the same adventure. See p. 8.
PC: See player character.
penetrating damage: The amount by which an attack's damage roll exceeds the target's Damage Resistance. Find this by subtracting the target's DR from basic damage. If DR is greater than the damage roll, penetrating damage is 0. See p. 379.
Perception (Per): A secondary characteristic, computed from IQ, which rates general alertness. See p. 16.
physical trait: A trait associated with your body, and that you will leave behind if you switch bodies. See p. 32.
player: A gamer who plays the role of a character participating in adventures refereed by the Game Master (GM). See p. 7.
player character (PC): A character created and played by one of the players. See p. 7.
points: See character points.
posture: Your bodily profile in combat: standing, crouching, kneeling, sitting, prone, or lying down. See p. 364.
power level: The average point total of the PCs in a campaign. See p. 487.

prerequisite: A trait you must have in order to buy some other trait. If the prerequisite is a skill, you must have at least one point in it. See p. 169.

quirk: A -1-point trait taken to flesh out a character. It is not necessarily a disadvantage. See p. 162.

racial template: A package of traits that all characters of a given race must purchase. See p. 260.

ranged weapon: A thrown or missile weapon; a weapon used at a distance. See p. 372.

reaction modifier: A penalty or bonus to reaction rolls. A bonus means you are especially likeable; a penalty means you are disreputable, obnoxious, unattractive, etc. See p. 494.

reaction roll: A die roll made by the GM to determine an NPC's reaction to a request or proposal made by the PCs. See p. 171.

real time: The time that passes in the real world, as opposed to game time. See p. 497.

relative skill level: The difference between the base skill level and controlling attribute for a skill. For example, if you had DX 12 and a DX-based skill at 14, your relative skill level would be +2. See p. 241.

repeated attempt: The second or later attempt at a success roll, after a failed initial attempt. Often subject to special penalties. See p. 348.

resistance roll: A Contest of skill against Will or HT, made to see if a character is affected by a supernatural ability such as magical mind control. See p. 241.

roleplaying game: A game in which players take on the personalities of imaginary individuals, or characters, in a fictional or historical setting, and try to act as those characters would. See p. 7.

sapient: Capable of possessing Languages and learning technological skills. This requires IQ 6+. See p. 15.

scenario: Same as adventure.

score: The numerical value of an attribute, secondary characteristic, or skill.

secondary characteristics: Several statistics determined from basic attributes: Damage (Dmg), Basic Lift (BL), Hit Points (HP), Will, Perception (Per), Fatigue Points (FP), Basic Speed, and Basic Move. See p. 15.

self-control roll: A roll to resist one of your mental disadvantages. Roll against the self-control number of the disadvantage. Lower is better. See p. 120.

self-imposed mental disadvantage: A mental disadvantage that comes from a belief or an honor code as opposed to a mental defect. See p. 121.

Sense roll: A success roll against Perception, made to see whether you notice something with one of your senses. See p. 358.

setting: Same as game world.

Size Modifier (SM): A numerical index of size, used as a modifier to rolls to see you or to hit you in combat, among other things. See p. 19.

skill: A number defining your trained ability in one specific area of knowledge or narrow class of tasks. See Chapter 4.

SM: See Size Modifier.

social trait: A trait associated with your identity. Identity might be primarily physical or mental, depending on the setting. See p. 32.

sourcebook: A game supplement that contains information that is not associated with any particular setting; for instance, a catalog of statistics for animals, vehicles, or weapons, or a collection of additional rules for magic, psionics, or martial arts.

specialty: A narrow focus within a skill. Some skills require you to pick a specialty; others leave this optional. See p. 169.

ST: See Strength.

starting points: The number of character points the GM gives the players to build their characters with at the start of the campaign. See p. 10.

starting wealth: The amount of discretionary cash a PC has available at the start of the campaign. See p. 26.

statistics: The numerical values that describe a character, piece of equipment, etc., taken collectively. Often called "stats."

step: A small amount of movement (1 yard, for most humans) allowed as part of a combat maneuver. It can come before or after the action portion of the maneuver. See p. 368.


stun: The result of an enemy blow, surprise, or a failed Fright Check. A stunned character defends at -4, and cannot initiate any action until he recovers. See p. 420.

success roll: A die roll (on 3 six-sided dice) made whenever a character attempts to do something, to determine whether he succeeds. Lower is better. See Chapter 10.

super: A comic-book style hero or villain with superhuman powers.

supplement: Anything designed to add to the basic GURPS rules. The most common types are sourcebooks and worldbooks. See p. 566.

tactical combat: Combat played out with figures on a map. See Chapter 12.

tech level: See technology level.

technique: A trait that represents training at one specific task covered by a skill. See p. 229.

technological skill: Any skill that has a tech level (marked "/TL") and that takes a penalty when used with the equipment or ideas of a different tech level. See p. 168.

Technology Level (TL): A number indicating a society's technological sophistication: the higher the TL, the more advanced the society. Used to describe characters, equipment, and skills native to that technological era. See p. 22.

template: A partially completed character sheet that contains all the traits needed to play a role (character template) or a member of a given race (racial template). See Chapter 7.

TL: See Technology Level.

trait: A character “building block” that affects game play and costs character points to add, modify, or remove. Includes attributes, secondary characteristics, advantages, disadvantages, quirks, skills, and techniques. See p. 13.

turn: One second of combat action by a specific character. It starts when he picks a maneuver and ends when he picks his next maneuver. It overlaps the turns of other combatants, but it is not entirely simultaneous with them. See p. 362.

wealth level: A description of a character's financial situation. Positive wealth levels are an advantage, and increase starting wealth; negative wealth levels are a disadvantage, and reduce starting wealth. See p. 25.

Will: A secondary characteristic, computed from IQ, which measures resistance to fear, stress, social pressure, and supernatural powers. See p. 16.

Will roll: A success roll against Will, made to determine whether a character has the “willpower” to do (or not do) something. See p. 360.

worldbook: A game supplement that gives a detailed background for a particular game world, along with rules for the special situations, abilities, hazards, rewards, etc., found there.
With so many supplements already in print for the first three editions of GURPS, there’s lots of support material available to jump-start your game. The following books are still in print and easy to use with GURPS Fourth Edition. The descriptive material, of course, is usable as is. Rules adaptation will be minor...e.g., recalculating point totals and changing the names of some abilities.

**SOURCEBOOKS**

“Sourcebook” supplements are not associated with particular game worlds. They provide support material that the GM can mix and match in almost any campaign.

- **Atomic Horror.** B-movie “reality” of the 1950s: commie spies, giant ants, and bug-eyed aliens.
- **Best Of Pyramid 1** and **Best Of Pyramid 2.** Digests of selected GURPS articles from SJ Games’ Pyramid magazine.
- **Cliffhangers.** Two-fisted heroism in the spirit of 1920s and 30s pulp fiction.
- **Cops.** Police adventure of all kinds, from no-nonsense procedurals to the excesses of the spirit of 1920s and ’30s pulp fiction.
- **Pyramid 2.**
- **Screampunk.** Hard-core military action involving elite troops.
- **Secret Masters.**
- **Space.** Adventures in space, from “hard” science fiction to “ray gun and cutlass” space opera.
- **Special Ops.** Secret wars – whether they involve commandos, criminals, spies, or terrorists.
- **Horror.** Terrifying tales, supernatural suspense, and gory splatter.
- **Illuminati.** How to run a conspiracy campaign: high weirdness, Men in Black, and Secret Masters.
- **Magic Items 1, Magic Items 2,** and **Magic Items 3.** Treasures of magical artifacts.
- **Time.**
- **WPF.**
- **Special Ops.** Hard-core military action involving elite troops.
- **Steampunk.** Historical science fiction in the spirit of Verne and Wells, with steam-powered difference engines and giant airships. The Steampunk supplement gives advice on adding in horror elements. SteamTech is a catalog of steampunk gear; the game stats will require some conversion, but the ideas behind the items are usable as is.
- **Transhuman Space.** Optimistic future history which biotechnology, cybernetics, and nanotechnology redefine “human” and make it possible to colonize the solar system. Ten supplements flesh out the setting; all but Personnel Files and Spacecraft of the Solar System should be usable in GURPS Fourth Edition with very little trouble.

**WAREHOUSE 23.** Warehouse of weird items, from UFOs to the Spear of Destiny.

**WORLDBOOKS**

A “worldbook” presents one particular game world in detail. It gives extensive advice on how to run a campaign there, recommends suitable characters, and includes rules for setting-specific abilities, artifacts, creatures, and so on. Players of Infinite Worlds, GURPS Fourth Edition’s official setting, will find these books extremely valuable. The historical worldbooks can be used as guides to “echo” timelines, and the others provide more-fantastic parallel worlds.

- **Age of Napoleon.** The world, especially Europe, during the life and times of Napoleon Bonaparte (1769-1821).
- **Alternate Earths and Alternate Earths 2.** Samplers of “what if?” worlds, split off from Earth’s actual timeline. Highly recommended for Infinite Worlds games.
- **Arabian Nights.** The Islamic Middle East of the seventh through 13th centuries.
- **Cabal.** Horror-conspiracy setting in which the Earth – in fact, the entire universe – is controlled by a secret alliance of powerful wizards and demigods.
- **Celtic Myth.** Britain and Ireland, from prehistory up to the fifth century, with special emphasis on folklore and myth.
- **Egypt.** Ancient Egypt, from prehistory to the end of the Ptolemaic Period (30 B.C.).
- **Goblins.** Twisted, humorous version of Georgian England populated by deformed (and mostly insane) goblins.
- **Greece.** The Heroic Age (1600 B.C.-1150 B.C.) and Classical Age (800 B.C.-323 B.C.) of ancient Greece.
- **Imperial Rome.** Rome during the Republic (509 B.C.-28 B.C.) and Empire (27 B.C.-476 A.D.).
- **In Nomine.** Adaptation of SJ Games’ In Nomine RPG. The PCs are angels and demons involved in the struggle between Heaven and Hell.
- **IOU.** Anything goes at Illuminati University, as long as it’s weird. The only entrance requirement is your sense of humor!
- **Mars.** The planet Mars, in reality and as it appears in speculative fiction.
- **Middle Ages 1.** England, 410-1485: the end of Roman rule to the death of Richard III.
- **Old West.** The 19th-century American West, Cowboys, Indians, frontiersmen, and the Gold Rush.

**LICENSERS**

These worldbooks are based on popular books, films, or other games. They can be used for standalone GURPS campaigns, for Infinite Worlds crossovers, or as source material for fans of the original property.

- **Alpha Centauri.** Adaptation of Sid Meier’s Alpha Centauri, a computer game from Electronic Arts Inc. “Transhuman” science fiction set on an alien world.
- **Blue Planet.** Futuristic adventure on an alien water world. Adapted from the Fantasy Flight Games RPG.
- **Castle Falkenstein.** A world of steampunk and sorcery. Adapted from the R. Talsorian Games RPG. Supported by a supplement on the Near East, the Ottoman Empire. Easily usable with Infinite Worlds.
- **Discworld Roleplaying Game.** Based on the humorous fantasy of Terry Pratchett. Supported by Discworld Also.
- **Hellboy Sourcebook and Roleplaying Game.** Based on Mike Mignola’s Hellboy comics. Defend the Earth from paranormal threats and evil Nazis! Prime material for an Infinite Worlds game.
- **Traveller.** The GURPS version of the classic Game Designers’ Workshop RPG. Space adventure at its finest! There are dozens of supplements; see our website for a list. GURPS Traveller: The Interstellar Wars will include GURPS Fourth Edition rules for the Traveller setting.
- **Lensman.** Space opera on a galactic scale, set in the starkly astounding world of E.E. “Doc” Smith’s Lensman novels.
- **Myth.** High-powered fantasy in a world of never-ending conflict. Adapted from the Myth and Myth II computer games, from Bungie Software Products Corporation.
- **New Sun.** Dark fantasy...in a futuristic world. Based on the award-winning novels of Gene Wolfe.
- **Planet of Adventure.** Based on the works of Jack Vance. Classic science-fiction adventure on the planet Tschai.
- **Uplift.** Far-future space adventure in the universe of David Brin’s Uplift series.
CAMPAIGN PLANNING FORM

GM: ___________________ Date: ___________

Campaign name: __________________ Starting year: __________ Rate game time passes: __________

Genre: _______________ Realistic or cinematic? ______________ Are there multiple planes of existence? ______________

General theme of campaign: _________________________________________________________________

Campaign Background

Campaign's base city, nation, empire, or planet: ________________________________ (Suggestion: provide a map.)

Society/government type: ______________ Control Rating: ______________ Exceptions to general CR: ________________________________

Tech level: ______________ Exceptions to general TL: ________________________________

Brief description of important neighboring powers, political/economic situation, etc.: ________________________________

Suggested or required reading for players: ____________________________________________

Information for PCs

Starting point value allowed for PCs: ____________________________ Disadvantage limit: ____________________________

Especially useful/useless character types: _____________________________________________________________ (Suggestion: provide character templates.)

Especially appropriate/inappropriate professions: ___________________________________________________________ (Suggestion: provide job descriptions.)

PC races allowed: __________________________________________________________ (Suggestion: provide racial templates.)

Starting wealth: ____________________________ Starting Wealth levels allowed: ____________________________

Starting Status levels allowed: ____________________________ Starting TLs allowed: ____________________________

Languages available: ____________________________

Cultural Familiarities available: ____________________________

Required advantages, disadvantages, and skills:

Especially appropriate or inappropriate advantages, disadvantages, and skills: ____________________________

Appropriate Patrons (and base value): ____________________________________________

Appropriate Enemies (and base value): ____________________________________________

Special Abilities Allowed for PCs

• Exotic/supernatural traits: ____________________________________________

• Cinematic skills: ____________________________________________

• Are PC mages allowed? ______________ General mana level: ______________ Do areas of higher/lower mana exist? ______________

  Are any of the spells from Chapter 5 off limits? ____________________________________________

• Are PC psis allowed? ______________ Are any of the powers from Chapter 6 off limits? ______________

• Are PC gadgeteers allowed? ______________ Are there special limits on gadgeteering? ______________

• Unusual Background cost(s) for these abilities: ____________________________________________

• Legal or social restrictions on these abilities: ____________________________________________

Other Notes

Book 1 optional rules or variants (advantages, disadvantages, skills, etc.): ____________________________

Book 2 optional rules or variants (success rolls, combat, injury, etc.): ____________________________

This form, those on the following pages, the Character Sheet, and other GURPS forms and support material may also be downloaded at www.sjgames.com/gurps/resources/.
<table>
<thead>
<tr>
<th>Character Name and Player</th>
<th>Reaction + or -</th>
<th>ST DX IQ HT</th>
<th>Will Per</th>
<th>Basic Speed Move</th>
<th>DR</th>
<th>HP Current HP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SPECIAL ABILITIES

<table>
<thead>
<tr>
<th>Character</th>
<th>Abilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### REQUIRED ROLLS

<table>
<thead>
<tr>
<th>Character</th>
<th>Roll</th>
<th>To Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Dai Blackthorn

- **Appearance:** Short; Honest face
- **Advantages, Disadvantages, Quirks:**
  - Absolute Direction
  - Danger Sense
  - Flexibility
  - Perfect Balance
  - Warp
  - Overconfidence (12)
  - Sense of Duty
  - Dislikes deep water (quirk)

#### Skills
- **Acrobatics:** -15
- **Body Sense:** -16
- **Fast-Draw (Knife):** -15
- **Guns (Pistol):** -15
- **Knife:** -17
- **Shortsword:** -15
- **Thrown Weapon (Knife):** -17

#### Weapon Statistics
- **Fine Large Knife:** 1d-3 cut/1d-2 imp
  - (thrown: 1d-2 imp, Acc 0, Range 6/12, Bulk -2)
- **Holdout Pistol:** 2d pi, Acc 1, Range 125/1,500, RoF 3, Shots 5+1(3), Bulk -2, Rcl 3

### Time Use Sheet

**Character Played by:**

**Period of time covered:**

**Time use:**
- 56 hrs/week (+/-7 per level of Extra/Less Sleep)
- Meals, personal care, etc.
- Study of skill
- Long Task

**TOTAL:** per week

### NPC Record Card

To make it easy to keep track of NPCs, all necessary data can be kept on a 3” x 5” card. A box

---

**NPC RECORD CARD AND TIME USE SHEET**

**569**
This index covers both books of the Basic Set. The pages are sequentially numbered; Book 2 starts on p. 337.

With rare exceptions, traits (advantages, disadvantages, skills, spells, and so on) are not listed in this index. Instead, they have their own alphabetical listings. See the Trait Lists on pp. 297-306.

Acceleration, see Gravity.

Accents, 24.

Acid, 428.

Acrobatic dodge, 375.

Active Defense Modifiers Table, 548.

Active defenses, 326, 363, 374; modifiers table, 548.

Advantages, 32; always on, 34; cinematic, 33; exotic, 32, 34; in templates, 447; magic, 34; mental, 32; mundane, 32; new, 117-118; learnable, 294; list, 297; physical, 34; potential, 33; Schrödinger's, 33; secret, 33; social, 32; switchable, 34.

Adventures, e23, 494; finale, 503; pre-packaged, 495; writing your own, 500-504.

Adversary, 493.

Afflictions, 35, 416, 428.

Age, 20.

Aging, 53, 66, 95, 153, 154, 444.

Aim maneuver, 372.

Air spells, 242.

Aircraft, 466; table, 465.

Alcohol, 122, 439-440.

Alien artifacts, 473.

Allies, 36; ally groups, 37.

All-Out Attack maneuver, 54, 324, 365, 385; after being grappled, 371.

All-Out Defense maneuver, 324, 366, 385.

Ally groups, 37.

Alternate worlds, 64, 160; travel, 189, 190; Centrum, 541-542, 545-546; classes, 526; close parallels, 526; Coventry, 540; echoes, 546; hell parallels, 528; myth parallels, 527; Reich-5, 543; weird parallels, 527; world classes, 535. See also Crossworld Travel, Infinite Worlds Campaign.

Alternative attacks, 61.

Always on; advantages, 34; magic items, 482.

Ammunition, 278.

Anomaly, 509.

Animals, 40, 87, 90, 137, 175, 187, 210, 211, 217, 223, 225, 226, 228, 395, 455-460; in combat, 461; individualizing, 457; draft, 459; pets, 458-459; riding, 459; trained, 458-459; see also Mounted Combat.

Apes, 455.

Appearance, 21.

Arc of vision, 389.

Area class, 176.

Area maps, 491.

Area spells, 239.

Area-effect attacks, 413; scatter, 414.

Arm lock, 370, 403.

Armor divisors, 378.

Armor, 110, 282-286; changing posture in armor, 395; combining and layering, 286; flexible armor and blunt trauma, 379; wearing, donning, and removing, 286.

Arrows, flaming, 410.

Artifacts, anachronistic, 478; futuristic and alien, 478, magic, 240, 480-483.

Artificial intelligences, 528.

Atmospheres, hazardous, 429; vacuum, 437.

Atmospheric pressure, 429.

Attack maneuver, 325, 365.

Attack roll, 369.

Attacks, 326, 369; alternative, 61; after being grappled, 371; Deceptive Attack, 369; dual-weapon, 417; from above, 402; in tactical combat, 388; innate, 51; linked effects, 381; modified, 114; runaround, 391; surprise, 393; swarm, 461; without damage, 381.

Attributes, see Basic Attributes.

Automatic weapons, 408.

Banestorms, 533.

Baron Janos Telkozep, character sheet, 312-313; illustration, 290.

Basic attributes, 14; in templates, 447; improving, 290.

Basic Lift, 15; table, 17.

Basic Move, 17.

Basic Speed, 17.

Basilisks, 460.

Bats, 461.

Battle maps, 239.

Battlesuits, 192.

Bears, 456.

Bees, 461.

Bends, the, 435.

Biotech tech levels, 512.

Bipods, 412.

BL, see Basic Lift.

Bleeding, 68, 420.

Block, 51, 324, 327; in tactical combat, 390.

Blocking spells, 241.

Blunt trauma, 379.

Boars, 458.

Boats, 458.

Body Control spells, 244.

Body modification, 294.

Bolas, 410.

Bounty hunters, 539.

Break Free, 370.

Breakdowns, 485.

Breaking a weapon, 401.

Breathing, 49, 55, 63, 68, 108; holding your breath, 351; smothering a foe, 401.

Build, 18.

Bulletproof nudity, 417.

Cabal, the, 543.

Camels, 459.

Campaigns, 486-489; cinematic, 488; continuing, 504; planning form, 567; power level, 10, 486; shared campaigns, 504; travel between campaigns, 504; see also Game Worlds.

Camping and survival gear, 288.

Cannon fodder, 417.

Cannon fodder, 417.

Camping and survival gear, 288.

Camping and survival gear, 288.

Characters, 7; concept, 11; creation, 9, 10, 258; development, 290, 499; origins, 33; sheet, 13, 335-336; stories, 12; types, 12.

Chi, 33, 93, 192, 214.

Children, 20.

Chimpanzees, 456.

Choke hold, 371, 404; see also Suffocation.

Cinematic advantages, 33; campaigns, 488; characters, 489; combat, 417; explosions, 417; knockout, 417.

Clerical magic, 77, 242; spells, 77.

Climbing, 89, 349.

Cloaks, 404.

Close combat, 391.

Clothing, 265.

Cold, 430.

Collisions, 430; whiplash, 432.

Coma, 429; see also Unconsciousness.

Combat Lite, 324.

Combat maps, 384, 492.

Combat, 9, 362-417; at different levels, 402; cinematic, 417; maneuvers, 324; table of combat modifiers, 547; techniques, 230; turn sequence, 324, 362; vehicular, 467-470.

Communication and Empathy spells, 245.

Communications and information gear, 288, 471.

Competence, 24.

Comprehension rolls, 359.

Computers, 48, 51, 55, 69, 71, 76, 100, 124, 184, 472; artificial intelligence, 528; complexity, 472; software, 472; virtual reality worlds, 520.

Concentrate maneuver, 325, 366.

Cone attacks, 413.

Conspiracies, see Illuminati.

Contacts, 31.

Contagion, 443; see also Disease.

Contests, 348; quick, 348; regular, 349; resistance rolls, 348.

Control Rating, 506; see also Legality Class.

Conventions of play, 9.

Copper, see Wealth.

Cosmic powers, 33.

Cost of living, 265, 516.

Coventry, 540.

Cover, 377, 407; Cover DR Table, 559.

Crippling, 59, 420-423.

Critical failure, spells, 236.

Critical Head Blow Table, 556.

Critical Hit Table, 556.

Critical hits, 381; table, 556.

Critical Miss Table, 556.

Cruelty, 381; Cover DR Table, 559.

Critical misses, 381; table, 556-557.

Critical success, 347; on defense, 381.

Crossbows, 410.

Crossfire bandits, 542.

Crossworld campaigns, 519-522; see also Infinite Worlds Campaign.

Crossworld travel, 514, 519-522; Infinite Worlds campaign background, 523-546; instant wealth, 514.

Crouching, 368.

Cultures, 23, 505-508.

Customizing rules, 486.

Dai Blackthorn, 12, 18, 22, 116, 162, 164, 227; character sheet, 310-311; illustrations, 32, 418.

Damage Resistance, 378; HP and DR of Structures Table, 558; Cover DR Table, 559.

Damage, 15, 327, 377; by animals, 461; Damage Table, 16; damage rolls, 9, 378; scaling, 470; to objects, 483-485.

Darkness, 47, 60, 71, 394; spells, 249; torches, 394.

David Pulver, 6.

Dead worlds, 527.

Dealing with players, 493.

Death, 296, 423; dying actions, 423; instant death, 423.

Decade scale damage, 470.

Deceptive attack, 369.

Deer, 457.

Defaults, 344; double, 173, 232; skills, 173; techniques, 229.

Defending, 326, 374; in tactical combat, 390.

Defenses, 46; enhanced, 51; limited, 46.

Dehydration, 426.

Demolition, 415.

Depressants, 441.

Design skills, 190.

Dexterity, 15.

Dice, 8, 9.

Digging, 350, 357.

Dimensional highways, 534.

Dirty tricks, 405.

Disadvantages, 11, 119; buying off, 121, 291; disadvantage limit, 11; good, 119; exotic, 120; in templates, 447; list, 299; mental, 120; mundane, 120; new, 162; physical, 120; secret, 120; social, 120; self-imposed, 121; supernatural, 120.

Disease, 442-444; worldwide, 528.

Dive for cover, 377, 407.

Divine origins, 33; see also Gods.

Drugs, 122, 130, 440; e23 scenario warehouse, 494.

Dying actions, 423.

Earth spells, 245.

Index
Echo timelines, 546.
Economics, 514.
Elbow strike, 404.
Elderly characters, 20; see also Age, Aging.
Electricity, 432-433.
Electronics, 471.
Elemental meta-traits, 262.
Elephants, 460; pink, 440.
Enchantment, 480-483; spells, 425.
Encounters, 502; sample encounter table, 503.
Encumbrance, 17.
Enhanced defenses, 51.
Enhancements, 101-102; limited, 111.
Equestrian gear, 289.
Equipment, 264-289; modifying success rolls, 345.
Eraser drug, 540.
Evaing, 368.
Evaluate maneuver, 325, 364.
Exotic advantages, 32, 34.
Exotic disadvantages, 120.
Explosions, 414-415; cinematic, 417.
Extra effort, 356.
Facing (in combat), 385, 386.
Falcons, 457.
Falling, 430-431; damage from falling objects, 431.
Fallout, 435; see also Radiation.
Familiaris, 38.
Fatigue, 16; 328, 426; fatigue points, 16; recovering, 427.
Feint maneuver, 325, 365.
Felinoit template, 261.
Fencing weapons, 404.
Fire, 61; burning things, 433, 434; damage, 433; flaming arrows, 410; incendiary weapons, 277, 411, 433; spells, 246; right-beam burning attacks, 399.
Firearms, 278-281; accessories, 289, 411; aim, 364; automatic, 408; bracing, 364; firing upward and downward, 407; malfunction, 382, 407; quality, 280; rapid fire, 408; shotguns, 409; suppression fire, 409; ultra-tech, 280.
Firing upward and downward, 407.
First aid, 424.
Flails, 405.
Flame, see Fire.
Flaming arrows, 410.
Flashlights, 394.
Flesh wounds, 417.
Flight, 56, 354; flying combat, 398.
Fnord, you’re not cleared for that.
Follow-up damage, 381.
Food, 95, 139, 159, 160, 265; foraging, 427; starvation, 426.
FP, see Fatigue Points.
Fragmentation damage, 414.
Free actions, 363.
Friends and foes, 31.
Fright Checks, 55, 93, 95, 121, 360; Fright Check Table, 360-361.
Gadgeteering, see Gadgets.
Gadgets, 56-58, 473-477, 479; limitations, 116.
Game balance, 11.
Game Mastering, 486-504.
Game preparation, 490.
Game worlds, 505-522; economics, 514.
Garrotes, 405.
Gate spells, 247.
Gerbilis, 113.
G-Increment, 350.
Glossary, 563-565; arms and armor, 268; basic terms, 7; magic, 234; Infinite Worlds, 524; psionics, 254.
GM Control Sheet, 490, 568.
Gold, see Wealth.
Gorillas, 456.
Government types, 509-510; see also Laws.
Grabbing and grappling, 370; and hit location, 400.
Gravity, 60, 350, 434; different gravity, 350; home gravity, 17.
Grenades, 277, 410.
Ground vehicles, 466; table, 464.
Griffons, 460.
Guided weapons, 412.
Hallucinations, 429, 440.
Hallucinogens, 440.
Handedness, 14.
Harpoons, 411.
Healing, 59, 79, 80, 155, 160, 162; magic, 248; medical gear, 289; medical tech levels, 512; psychic, 256.
Health, 15.
Hearing, 49, 72, 89, 94, 138, 358.
Heart attacks, 429.
Heat, 434; see also Fire.
Hell parallels, 528.
Heroic Knight template, 448.
Hexes, 384.
High-speed movement, 394.
Hiking, 351, 357, 426.
Hirelings, 517, 518.
Hit location tables, 552-555.
Hit location, 369, 398; and Injury Tolerance, 400; random, 400.
Hit points, 16, 418-419; HP and DR of Structures Table, 558; see also Injuries.
Home gravity, 17; see also Gravity.
Homing weapons, 412-413.
Horses, 459-460; equestrian gear, 289; see also Mounted Combat, Riding Animals, Weapons (Cavalry).
HP and DR of Structures Table, 558.
HP, see Hit Points.
HT (Health), 15.
I-Cops, 536-538.
Identities, 31, 39.
Illuminati, 60, 130, 193, 200, 525; the Cabal, 543.
Immunity, 443.
Importance in society, see Rank, Status.
Incompetence, 24.
Index, 329-334, 570-575.
Infection, 444.
Infinite ammunition, 417.
Infinite Worlds campaign background, 523-546.
Infinity Development, 536.
Infinity Patrol, 536-538.
Infinity Unlimited, 524, 535-538.
Influence rolls, 359.
Influence skills, 494.
Information spells, 241.
Initiative, 393.
Injuries, 327, 377, 380, 418-425; accumulated wounds, 420; and active defense, 374; bleeding, 420; crippling, 420-423; flesh wounds, 417; large-area injury, 400; last wounds, 420; major wounds, 420; mortal wounds, 423; shock, 419; to objects, 483-485; to shields, 484; see also Crippling, Healing.
Instant death, 423.
Intelligence, 15; and dirty tricks, 405.
Intoxication, see Alcohol.
Introduction, 5, 342.
Investigator template, 259.
Iotha, character sheet, 314-315, illustrations, 343.
IQ (Intelligence), 15.
ISWAT, 162, 536.
Jobs, 292, 499, 516-518; finding, 518.
Jumping, 89, 203, 352, 357.
Knee strike, 404.
Knockback, 364.
Knowledge spells, 249.
Knowledge, NPC, 496; player vs. character, 495.
Languages, 23, 205, 506.
Lariats, 411.
Lasers, 280, 399; seeker heads, 412; sights, 412.
Last wounds, 420.
Law enforcement, 507; police gear, 289.
Laws, 65, 204, 506-508, 518; punishment, 508; trials, 507.
LC, see Legality Class.
Legality Class, 267, 270, 507; legality of spells, 507.
Lethal strike, 404.
Lifting, 14, 15, 65, 205, 353, 357.
Light and Darkness spells, 249.
Limitations, 101, 110; gadgets, 116.
Limited defenses, 46.
Linked effects, 381.
Lions, 456.
Linked effects, 381.
Lions, 456.
Loyalty, 518-519.
Luck, 83, 89, 160.
Ludography, 566.
Lycanthropy, see Werewolves.
Machine weapons, 281.
Machines, 16; Machine meta-trait, 263.
Mage template, 260.
Magery, 66.
Magic Resistance, 67.
Magic, 66, 143, 144, 150, 218, 224, 225, 234-253; advantages, 34; ceremonial, 237; clerical, 242; colleges, 239; enchanted objects, 240, 480-483; racial, 453; ritual, 237, 242; staffs, 240.
Major wounds, 420.
Malf, see Malfunction.
Malfunction, 278, 382, 407.
Mana, 235.
Maneuvers, 324, 363, 385; table, 551.
Maps, 384, 490-491; mapping by players, 491; mapping for adventure design, 502.
Medical care, 424; surgery, 424.
Medical gear, 289.
Medicine tech levels, 512.
Melee AttackModifiers Table, 547.
Melee etiquette, 417.
Melee spells, 240.
Mental advantages, 32; disadvantages, 120; powers, see Psionics.
Mental stun, 420.
Mentality meta-trait, 263.
Meta-Spells, 250.
Meta-traits, 262.
Metric conversions, 9.
Military, 218, 221, 222, 260.
Mind Control spells, 250.
Mind reading, see Telepathy.
Mind transfer, 296.
Miniature figures, 383.
Miracle Workers Inc., 538.
Missile attacks, 240.
Missile weapon attacks, 373.
Modifiers (to traits), 101.
Movement and combat, 367.
Movement modifiers, 378, 416; overpenetration, 379, 408.
Movement points, 386, 387.
Movement skills, 251.
Mules, 459.
Multi-hex figures, 392.
Mundane advantages, 32; disadvantages, 120.
Mutations, 33.
Neck Snap attack, 370, 404.
Necromatic spells, 251.
Nets, 411.
New disadvantages, 162.
New inventions, 473, 475; see also Gadgets.
Nexus portals, 534.
Nonhumanoids, 32.
Non-player characters, see NPCs.
NPC Reactions Table, 559-562.
NPCs, 31, 493; NPC Reactions Table, 559-562; NPC Record Card, 569.
Oil flasks, 411.
Omens, 72.
Online gaming, 494.
Optics and sensors, 289.
Origins of characters, 33.
Overpenetration, 379, 408.
Overrun, by multi-hex figures, 392.
Oxen, 460.
Parachronics, bogus scientific explanation, 530; conveyor, 529; detector, 532; disasters, 532; minor accidents, 531; paradoxes, 533; projector, 524, 530; see also Infinite Worlds Campaign.
Parachronozoids, 544.
Parallel worlds, see Alternate Worlds.
Paralysis, 429.
Parry, 51, 93, 324, 327, 376; unarmed, 376; in tactical combat, 390.
Patient status, 421.
Patrons, 72-73.
Penetrating damage, 379.
Penetration modifiers, 378, 416; overpenetration, 379, 408.
Per, see Perception.
Perception, 16.
Perks, 100.
Pets, 458-459; see also Animals.
Physical advantages, 32; disadvantages, 120.
Physical feats, 349; extra effort, 356.
Picking things up, 383.
Picks, 405.
Pinning (in combat), 370.
Planet types, 180.
Plants, 75, 87, 90, 142, 197, 199, 211.
Pocket multiverses, 529.
Poison, 62, 437-439; treatment, 439.
Police gear, 289.
Pop-up attacks, 390.
INDEX 573
Postures, 367; changing posture in armor, 395; table, 551.
Potential advantages, 33.
Power level for campaigns, 10, 486.
Power tech levels, 512.
Preparing for play, 490.
Prerequisites, skills, 169; spells, 235; techniques, 229.
Pressure, atmospheric, 429, 435; the bends, 435; water, 435.
Privilege, 30.
Professor William Headley, character sheet, 318-319; illustrations, 234, 486.
Protection and Warning spells, 252.
Psi powers, see Psionics.
Psychological warfare, 359.
Pulling things, 353.
Punishment, legal, 508.
Pyramid Magazine, 494.
Quick contests, 348.
Quick learning under pressure, 292.
Quick Start rules, 8.
Quirks, 162; racial, 452.
Radiation, 80, 105, 192, 435.
Ranged attacks, 327, 372; half damage range, 378; hitting the wrong target, 389; modifiers table, 548; opportunity fire, 390; overshooting, 390; pop-up attacks, 390; shooting blind, 389.
Ranged Combat Modifiers Table, 548.
Rank, 29.
Rapid fire, 373, 408.
Rapid Strike, 54, 93, 370.
Rate of Fire, 270, 373.
Rats, 461.
Rattlesnakes, 458.
Rcl, see Recoi1l.
Reaction rolls, 8, 494-495; NPC Reactions Table, 559-562.
Reading, 134; see also Literacy.
Ready weapons, 369; readying, 382.
Realism, 11.
Reality Liberation Force, 543.
Reality quakes, 534.
Recoll, 271.
Recovery, 328; see also Healing.
Recovery, 423-424; from unconsciousness, 423.
Regular spells, 239.
Reich-5, 543.
Religion, 30, 226; see also Gods.
Reloading missile weapons, 373.
Repair skills, 190; repairing things, 484.
Reputation, 27.
Resisted spells, 241.
Resuscitation, 425.
Retreat (in active defense), 377.
Retreating, 391.
Roads, 351.
RoF (Rate of Fire), 270, 373.
Rounding, 9.
Rule of 14, 360.
Rule of 16, 349.
Rule of 17, 344.
Rules, customizing, 486; questions, 492.
Runaround attacks, 391.
Runes, 224.
Running, 354, 357; fatigue, 426.
Sacred dodge, 375.
Sapience, 15, 23.
Scopes, 412.
Sean Punch, 6.
Seasickness, 436.
Secondary characteristics, 15; improving, 290; in templates, 447.
Secret disadvantages, 120.
Secret identities, 31.
Self-control, 120.
Senses, 35, 78; sense rolls, 358.
Sensors, 471.
Sentence, 15.
Sharks, 457.
Shields, 287, 374; damage, 484; in close combat, 392; offensive use, 406.
ShiftnREALMS, 534.
Shock, electrical, 432-433; from injury, 419.
Shooting blind, 389.
Shotguns, 409.
Shove, 372.
Sign language, 25.
Silencers, 412.
Silver, see Wealth.
Size and Speed/Range Table, 550.
Size Modifier, 19, 372; and reach, 402.
Skills, 167, 174-233; buying, 170; defaults, 170; design, 190; difficulty level, 168; familiarity, 169; improving, 170, 292; in templates, 447; influence, 495; levels, 171; list, 301; maintaining, 294; physiology modifiers, 181; prerequisites, 169; racially learned, 453; repair, 190; scope, 176; specialties, 169; studying, 292, 499; teachers, 293; technological, 168; wildcard, 175.
Slam, 371; by multi-hex figures, 392.
Slaves, 518.
Sleep, 50, 65, 136, 140, 154, 155; drowsy, 428; missed sleep, 426.
SM, see Size Modifier.
Smartguns, 278.
Smell, 49, 243.
Snakes, 458; cobra venom, 439; pythons, 458; rattlesnakes, 458.
Social advantages, 32; adding and improving, 291.
Social background, 22.
Social disadvantages, 120.
Social restraints, 30.
Society types, 509-510.
Soldier of Fortune template, 260.
Sounds, see Hearing.
Space sickness, 434.
Spacecraft, 466; table, 465.
Spacing (in combat), 368.
Special spells, 241.
Speed/Range Table, 550.
Spells, 66; Air, 242; area, 239; backfire, 235; blocking, 241; Body Control, 244; caster, 236; casting, 235-238; clerical, 77; Communication and Empathy, 245; Earth, 245; Enchantment, 246, 480-482; Fire, 246; Gate, 247; Healing, 248; information, 241; Knowledge, 249; legality, 507; Light and Darkness, 249; Meta-Spells, 250; melee, 240; Mind Control, 250; missile, 240; Movement, 251; list, 304; Necromantic, 251; prerequisites, 235; Protection and Warning, 252; regular, 239; resisted, 241; special, 242; subject, 236; Water, 253; see also Magic.
Spirits, 41, 55, 68, 76, 113, 193, 200, 212; spirit advantages, 34; Spirit meta-trait, 263.
Spy gear, 289.
ST, see Strength.
Staffs, 240.
Starvation, 426.
Status, 28, 265, 516.
Step (in maneuvers), 368, 386.
Steve Jackson, 6.
Stimulants, 440.
Strangle, 370, 401, 404.
Strength, 14.
Striges, 461.
Striking at weapons, 400.
Structural Damage Table, 558.
Study, 292.
Stunning, 35; mental stun, 420.
Subduing a foe, 401.
Subject (of spells), 236.
Success rolls, 342; buying success, 347; critical success, 347; difficulty, 345; equipment modifiers, 345; influencing rolls, 347; player guidance, 347; repeated attempts, 348.
Success rolls, 8.
Suffocation, 428, 436.
Sunburn, 434.
Sunburn, 434.
Suffocation, 428, 436.
Supernatural advantages, 32, 33, 34; disadvantages, 120.
Supers, 34.
Supercience, 513.
Suppression fire, 409.
Surprise attacks, 393.
Swarms attacks, 461.
Swimming, 354, 357; fatigue, 426.
Swinging damage, 15.
Switchable advantages, 34.
Table talk, 493.
Taboo traits, 261.
Takedown, 370.
Taste and smell, 49, 358.
Tech level, see Technology Levels.
Techniques, 229; combat, 230; improving, 292; list, 304.
Technological skills, 168.
Technology Levels, 22, 99, 511-512; and equipment, 27; and genre, 514; and starting wealth, 27; divergent, 513; superscience, 513; table of TLs by field, 512.
Teeth, 91.
Telepathy, 69-71, 91, 210, 245.
Temperature, 9.
Templates, 258, 445-454; cultural, 446; dramatic, 446; occupational, 446; racial, 260, 450-454.
Terrain, 351.
Thief and spy gear, 289.
Throwing things, 355, 357.
Thrown weapon attacks, 373.
Thrusting damage, 15.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
Throwing things, 355, 357.
More GURPS – Direct to You!

As comprehensive as the Basic Set is, it’s only an introduction to the worlds of roleplaying. There’s a lot more . . . and it’s just a click away! Start with the free forums at forums.sjgames.com.

Pyramid is Steve Jackson Games’ weekly magazine, published every Friday at www.sjgames.com/pyramid/. Pyramid brings you great articles about GURPS . . . plus lots of other games. Reviews, news, regular columns (including Ken Hite’s legendary Suppressed Transmission), and comics like the infamous Murphy’s Rules and John Kovalic’s Dork Tower – Pyramid has it all!

What’s more, Pyramid subscribers get access to our private message boards and more than 10 years of back issues. Pyramid is the online home for the most enthusiastic GURPS fans, and your chance to rub virtual elbows with most of the GURPS authors . . . so point your browser to www.sjgames.com/pyramid/ and join us!

While you’re online, be sure to check out our GURPS PDFs at e23. We have a wide variety of GURPS adventures and sourcebooks in PDF form – both classic reprints and brand-new digital-only releases – including the new full-sized Fourth Edition book GURPS Mysteries, available only in PDF! And we add more every week. If you need an adventure in a hurry, an e23 download can have a complete scenario in your hands in the time it takes your players to get to your house.

You’ll also find support for In Nomine and many other game systems. e23 has the same safe, dependable interface and great customer service as our online mail-order store, Warehouse 23.

Check it out at e23.sjgames.com.