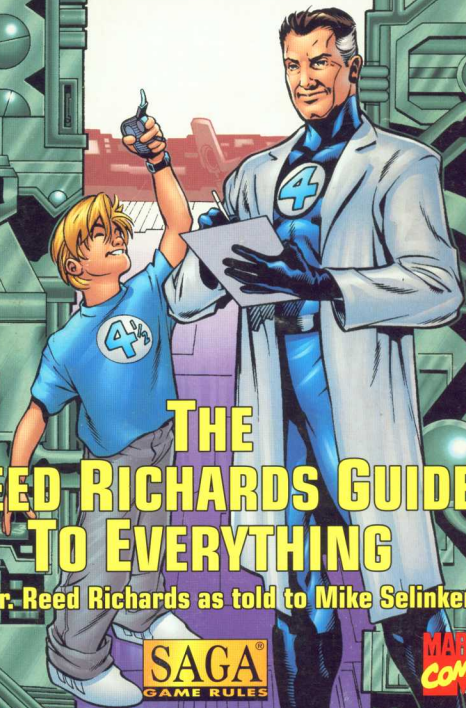


MARVEL SUPER HEROES ADVENTURE GAME



THE REED RICHARDS GUIDE TO EVERYTHING

By Dr. Reed Richards as told to Mike Selinker



SAGA
GAME RULES

MARVEL
COMICS

THE REED RICHARDS GUIDE to EVERYTHING

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FOREWORD

by J. Jonah Jameson

As all readers of the award-winning *Daily Bugle* know, its humble editor-in-chief is a man of deep passions. Crusading all day for the rights of the common man leaves little room in his schedule for weak sentiments and wishy-washiness. So it is with all the strength I can muster that I, J. Jonah Jameson, welcome you to the greatest book ever published in our fair city of New York! Welcome to **The Reed Richards Guide to Everything!**

It heartens me to write this foreword, as it allows me to introduce you to one of the most important men on the planet. Reed Richards is that rarest of breeds—unique, perhaps, among all those of his ilk. He is a good super hero.

I know you, Dear Reader, are shocked to see me write such words. “A good super hero, indeed!” you scoff. But before you rush into hasty judgment, let us pause to examine the differences between Reed Richards and another of his costumed contemporaries, that wall-crawling menace, Spider-Man.

Where Reed Richards sports a code-name that connotes achievement—Mister Fantastic—Spider-Man assumes a code-name that conjures fear and loathing.

Where Reed Richards tells the world who he is, Spider-Man hides cravenly behind a mask that shields his shame.

Where Reed Richards stands with his family as one unit, Spider-Man works alone, assuredly because even his own kind will not have him as an ally.

Where Reed Richards selflessly shares his accomplishments with the world to better our way of life, Spider-Man thinks only of himself and his rewards.

Where Reed Richards protects mankind from monsters and criminals, Spider-Man constantly is accused of crimes against the people.

And where Reed Richards puts himself forward before the public in this very book, Spider-Man refuses to answer even the most legitimate inquiries about his base behavior.

Dear Reader, can we as a country afford to have such a threat as Spider-Man in our midst? Thankfully, we have an ally in our fight against this scourge—Reed Richards, man of the people!

Enjoy!

J. Jonah Jameson

Editor-in-Chief, *The Daily Bugle*

Jonah,
Here's your
foreword. Should we
check it with Reed first?
Robbie

RUN IT! — III

Like J. Jonah says, welcome to **The Reed Richards Guide to Everything**, the book that players of the **MARVEL SUPER HEROES™ Adventure Game** have been clamoring for since the boxed set came out. This book contains variant rules, Narrator options, and play style suggestions that you can use to fill out your MARVEL game.

The smartest hero of them all, Reed Richards, introduces the game material herein. For this book, we posit that Mister Fantastic writes a newspaper column for the *Daily Bugle*, the newspaper of choice in Manhattan. In this column, he answers kids' questions about science and the universe, such as "Is there life on other planets?" and "How can Archangel fly?" Facing each of these entertaining newspaper articles is some related optional material that can add spice to your game. That's "Optional" with a capital O, because nothing in this book is meant to be canon. Like Reed Richards himself, the **SAGA®** game rules are highly flexible. So players and Narrators can try out all these suggestions, then pick and choose what they like and leave behind what they don't like. We think you'll find that having rules for falling damage and weather and retroactive continuity will help flesh out your game. Of course, the Narrator has final say on what parts of this book make it into your game.

Some sections are not rules per se, but rather play-enhancing suggestions. For example, you'll find a full-color section that gives descriptions of the events on the Fate Cards. These plus the other ideas herein can provide springboards for adventures and hero development—plus you can use the material to develop your own game rules.

So again, welcome to **The Reed Richards Guide to Everything**. This is your book, and you can mold the information it provides into whatever you want to make it.

Have a great game!



Jonah,
I've collected about
a year's worth of
Reed's columns for
inclusion in the book.
Let me know if you
have any comments.

Robbie

INTRODUCTION



When the *Daily Bugle* asked me to write a weekly newspaper column, naturally I was a bit hesitant. I've always shied away from the media spotlight. Maybe it's the fact that there are so many popular people around me—my wife is a former model, my brother-in-law bathes in attention, and my best friend is beloved from here to Yancy Street. I'm the shy, retiring member of the Fantastic Four. Give me a lab and a test tube, and I don't need to speak to anyone for days.

But the editor-in-chief of the *Bugle*—J. Jonah Jameson himself—explained that he wanted me to teach the young people of America. Through this column, I could encourage their interest in science and the world around them. I could

speak to them about what they wanted to learn.

Presented with such an opportunity to reach young minds, how could I refuse? I have always believed that no matter how much you think you know, the only way to improve yourself is to continue being a student all your life. If the world is your teacher, you will never go hungry for lessons.

But kids today have a new impediment to learning—one that I didn't face. I'm not talking about alcohol or cars or even the opposite sex. I'm talking about information overload. A wealth of data is available today through television, the internet, billboards—every venue you could imagine and more. Nowadays, the human brain is bombarded with information in all its waking hours. Kids are in danger of losing out on knowledge precisely because they get so much of it.

How then to separate the wheat from the chaff? How can you determine what the children need to know so that they can survive and thrive?

Simple. You just ask them.

My nationally syndicated column, "Dear Dr. Richards," answers the questions of children. The letters come in every week from young readers all over the nation. These are hard questions, born of a confusing age of immersion in the products of science. But when a child asks you a question, you must answer.

This book is dedicated to the millions of children across America who choose to ask "why?" I hope you've come to join them.

Reed Richards

Reed Richards

P.S. Needless to say, a book like this is not the product of one man's efforts. I'd like to thank J. Jonah Jameson, the man who talked me into this, Joseph "Robbie" Robertson, my line editor, Cathy Polombo, my research assistant from State University, and my lovely wife Susan, who does what she can to turn me into an extrovert. Most of all, I'd like to thank my son Franklin, who gives me a year's worth of questions for my column every day.

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Who is the fastest man alive?

—*Adam Sensenbrenner*
age 12
Rye, NY

Adam, your question should perhaps be phrased, "Who is the fastest BEING alive?" After all, there's no guarantee that it's male, or even a human. The Alpha Flight heroine Aurora and the Greek god Hermes are certainly contenders, but neither is a human male. Even stated that way, however, your question still needs clarification before I can give you a definitive answer. As it stands, I can think of at least six possible replies.

Your question might really be, "Who is the fastest being alive in terms of raw speed?" In that case, we'd have to look at superpowered speedsters. Among the contenders might be the mutant Quicksilver, the criminal Speed Demon, Aurora and her brother Northstar, and the Whizzer of the Squadron Supreme. That would be a very close race, but if I were a betting man, I think I'd pick Northstar.

What if the question were, "Which being can run the fastest?" Northstar might not get his full momentum then, since he achieves his best speed in flight. In that case, I'd probably pick the Whizzer.

On the other hand, maybe the question

is, "Who is the fastest being alive with the most maneuverability?" Quicksilver and the Whizzer might tie then. Northstar, though, seems to be limited in terms of the acrobatics he can do at high speed.

Of course, we haven't included those who employ equipment to augment their movement. Suppose your question were, "Including those who use special equipment, who is the fastest being alive?" Then Iron Man and the Silver Surfer might best everyone I've mentioned so far. In fact, I'd pick the Surfer's surfboard over any kind of manmade propulsion.

Finally, what if we ignore speed entirely and just ask, "Who is the being with the fastest reflexes?" Then, though the Surfer and some of the speedsters are still contenders, my selection would probably be someone supernormally agile, like Spider-Man, Tigra, the Beast, or Nightcrawler.

All those we've discussed have hypernormal speed or agility because of mutations or equipment. What if the question were, "Ignoring superpowers, who is the fastest being alive?" Then none of the above contenders would be in the running, so to speak. Take away their powers, and all of them would eat the dust of highly trained athletes like Iron Fist,

Take away their powers, and all of them would eat the dust of highly trained athletes like Iron Fist, Wolverine, and my choice for nearly any physical contest, Captain America.

Wolverine, and my choice for nearly any physical contest, Captain America.

By the way, I think the immortal Elder of the Universe known as the Runner could beat everyone. But I guess you were thinking of people on Earth.

And of course, this all assumes you mean fast in a physical sense. If you're talking about mental speed, that's another column entirely.

ABILITY CODES IN PLAY



Ability codes measure how well-trained a hero is in using each of his or her abilities—that is, they define the number of specific skills associated with each ability score. The alternate rule presented here provides a way for players and Narrators to get an additional game enhancement from these codes. Heroes are forever being called upon to do things that are outside their skill bases. With this alternate rule, the higher your hero's ability code, the more likely it is that he or she can "fake" a skill associated with that ability in the heat of the moment.

If you play in trump on an action for which your hero *doesn't* use a skill, you get a difficulty reduction based on the appropriate ability code, as follows:

Code	Action Difficulty Modifier
X	None
D	-1 point
C	-2 points
B	-3 points
A	-4 points

So a hero with an A code (four skills) in a given ability can get the effect of having any other skill associated with that ability just by playing in trump. Heroes cannot simulate world-class ability in a skill this way, however, nor use a world-class skill to simulate another skill.

For example, Nightcrawler's Strength is 6C. He wants to show his finesse in Axes (a skill he doesn't have) on a challenging Strength (12 difficulty) action. He plays a 4 of Strength, and his trump draw is a 1 of Intellect. That makes his total action score 11, which would normally be a failure, but the -2 modifier from his C code drops the difficulty to 10, so he succeeds.

SIMULATING SKILL EFFECTS

Many skills grant the user a special ability—something that people untrained in that area just could not do. Ricochet, for example, allows a hero to bounce an attack between two targets. If the Narrator approves, a player can use the above ability code rule to gain the use of such a unique skill effect for an action.

However, there should be some limits on this. After all, someone without the Medicine skill could not necessarily perform brain surgery successfully, even with an A Intellect code—particularly if his or her Intellect skills are Dimensional Geography, Journalism, Time Machinery, and Trivia (though Trivia in Medical Dramas might help). The Narrator should set difficulties quite high on unique skill effects such as these—a minimum of daunting (or even desperate or above) is appropriate. Of course, the Narrator can always rule that an effect is simply impossible without the appropriate skill, or impose a difficulty increase anywhere from one to ten levels (+4 to +40 points).



What makes one super-villain smarter than another?

—“John Smith”
age 18
Riker’s Island, NY

John, I wouldn’t want to give aspiring super-villains any tips. That wouldn’t exactly help my chances of defeating them, now would it? (And by the way, your address reinforces my belief that I should be careful in answering your question.) Hypothetically speaking, however, we can look at theories as to what makes one person smarter than another. Then maybe we’ll have some idea about what separates a Hydro-Man from a Magneto.

At the heart of the debate raging over intelligence is the “nature vs. nurture” concept. Some scientists believe that “nature” (that is, genetics) is the foundation of intelligence. By this logic, a smart father and mother would produce a smart child. Other scientists favor the “nurture” argument, which suggests that upbringing is far more important than raw genetic material in the development of intelligence. According to this theory, a child raised by smart people will be smart also. Neither argument represents the whole truth, but both have merit. Let’s take a look at some isolated cases involving those super-villains in whom you are so interested, John.

Case One: The terrorist Magneto, who is by anyone’s estimation one of the smartest men alive, had two very sharp children—the Scarlet Witch and Quicksilver, both of Avengers fame. Interest-

ingly, however, Magneto did not raise his own children. For some unknown reason, he abandoned them on a mountain in the European country of Transia, where the High Evolutionary and his New Men found and “adopted” them. The children’s surrogate mother, the cow-woman Bova, is certainly a kind and wise creature, but by no means a high intellect. So in this case, it would seem that nature was responsible for their intelligence.

Case Two: My implacable foe, Doctor Doom, once rescued a child named Kristoff, the son of a simple gypsy woman with no formal education. When Doom’s enemies killed the mother, the Latverian monarch took the child in and raised him as his own son. Kristoff became nearly as brilliant as his adopted father, and just about as ruthless. So in this case, you could make an argument that nurture was the key.

Whatever the basis for brainpower is, however, raw intelligence is useless without motivation, experience, and training. I consider the last of these to be the most important. So if I were an aspiring super-villain, I would invest some of my hard-stolen money in a proper education—perhaps at one of the Taskmaster’s training academies for criminals. Once I understood the basics, I’d commit some smaller, less dangerous crimes, building on each success and slowly working my way up in criminal society. Then, and only then, would I stake my claim to serious super-villainy. After all, it’s not just a job, it’s twenty-to-life.

Of course, this discussion is completely hypothetical. Don’t try to put what I’ve said here to any practical use—such as starting your own super-villainous activities. Those who use their personal gifts, including intelligence, against others always come to a bad end, and I wouldn’t want to see that happen to you, John.

ACTIVE CHARACTERS

In the MARVEL game, heroes perform all the actions and counteractions. Villains don't have hands of cards, they don't get trump or Edge bonuses, and they don't actively do much of anything. This makes for a fun and exciting game in which it is the heroes who make things happen. However, once in a while the Narrator may want to give major characters more options and more resources—and possibly throw a bit of a scare into the players in the bargain. In that case, he or she can choose to treat an important character like a hero.

If the Narrator wants to make a character active, he or she should draw a hand of cards equal to the character's Hand Size and play them as a player would. The Narrator does not track an active character's Health; instead he or she discards cards to account for wounds received.

Instead of the heroes performing counteractions against the character, the latter gets to perform his or her own action during the counteractions step. Players can play cards against the action, but the character is the acting individual. This means that the player opposing that character must actually beat an action score, rather than just reach a counteraction target number.

To perform a character action, the Narrator plays cards from his or her hand just as a player would for a hero. The Narrator card does not come into play in determining action scores, though it still counts for aura effects and dramatic events as usual. The character is entitled to Edge and trump bonuses, and the Narrator should make full use of these privileges unless the situation demands otherwise. Most rules that apply to heroes apply to an active character as well, superseding the regular rules for characters. (For example, an active character with the *Fatally Vulnerable* hindrance loses one card per exchange, not 5 Health.)

Only major characters should become active; empowering a thug is a waste of effort in most cases. Also, making a large group of villains active can quickly burn through a deck and slow down a battle, so a Narrator who wants to empower a whole superteam should have more than one deck available.

PLAYING WITHOUT A NARRATOR

You can play a MARVEL fight without a Narrator if everybody at the table agrees on a few ground rules. This usually works only for combat, not full adventures (with the exception of special Narrator-free scenarios).

In a Narrator-less battle, each person plays a hero, and no characters are active (though an exception might be made for characters who are extensions of a hero, such as Shadowcat's dragon Lockheed). One player draws a "pseudo-Narrator card" at the start of the first exchange, placing it face-up in front of him or her. This is an aura draw to determine card recovery; the card serves no other purpose. (However, the event from the card could also come into play as long as everyone agrees upon its effect.) There is no counteractions step. In the actions step, the player who drew the pseudo-Narrator card acts first, then the remaining players act, moving in clockwise order around the table. Assessment of damage from wounds occurs in the results step of the exchange, after everyone has acted.

When the exchange is over, the player with the pseudo-Narrator card discards it, and the person to his or her right draws a new card for the next exchange and becomes the first active player. This process repeats itself until the combat ends.

It is important to settle disputes as quickly as possible when there is no Narrator present. If two players disagree over a matter, one draws a card and consults the aura. A positive result favors the player who drew the card, a negative result favors the other player, and a neutral result indicates that the matter has no effect on either player's hero.

DEAR DR. RICHARDS



Why does my baby brother look like a hairy little monkey?

—Cassie Fluornoy
age 10
Queens, NY

Basically because ontogeny recapitulates phylogeny, Cassie.

Ontogeny is the process by which an individual being develops from a fertilized egg into an adult, while phylogeny is the course of evolution that a species has experienced over the millennia. According to nineteenth-century biology, the ontogeny of a single creature recapitulates (that is, serves as a small example of) the phylogeny of the whole species.

Let me put it more simply. This theory states that on the way to becoming an adult, a human being passes through several developmental stages at which he or she resembles more primitive animals. Essentially, your brother's physical development mirrors the entire evolutionary path of the human race.

At conception, he looked much like an amoeba, a single-celled organism. But as his cells divided, he came to resemble a tadpole, with a long tail and gills. Later, while still in the womb, he appeared much like the saucer-eyed bush babies—tree-hopping marsupials of the Australian wild. Finally, after birth, your

brother appeared to you as "a hairy little monkey"—a perfectly reasonable perception under the ontogeny-recapitulates-phylogeny model.

Of course, your brother will continue to advance beyond this stage. He'll grow up fast, just like my son Franklin did. Perhaps he can barely crawl now, but soon he'll learn to walk—stumbling at first, but getting there.

He'll learn to talk too, and his speech will progress from the warblings of a newborn to complete sentences, and finally to the elegant expression of creative thoughts. His appearance will change, hardening into chiseled features and muscles that channel his amazing, youthful energy. And most importantly, he'll learn to think and create, changing the world around him in ways that seem impossible to you now.

You can help him grow into the adult he needs to be, Cassie. Environmental forces spur growth and adaptation, and one of the most powerful such effects is sibling reinforcement. If you protect and guide him through this early part of his life, he will have a much better chance of achieving

his full potential. But if you make him feel unwanted, you might stunt his growth and stop him from becoming everything he can be.

Someday I'd like Franklin to have a baby brother or sister so that he can understand this responsibility. We tried once. We were heartbroken when it didn't work out, but we may try again someday.

So Cassie, take heart in the thought that you have an opportunity Franklin may never have. Take advantage of it while you can.

... the ontogeny
of a single creature
recapitulates the
phylogeny of the
whole species.

Next to the existence of superpowers, aging (or lack thereof) is perhaps the oddest aspect of the Marvel Universe. Characters introduced in the 1960s don't appear appreciably older now than they did back then. One explanation for this is that the Marvel Universe is only about ten years old—that is, the *Fantastic Four* rocketed into the cosmic ray storm ten years before you read this—whenever you read this.

But aging does happen in the comics, and it might become an issue in your game as well. Two of your heroes might have a child, just like Reed and Sue did. The writers of the *Fantastic Four* comics quickly realized that an infant wasn't all that interesting, so Franklin soon jumped from infancy to pre-school age. Since then, he has become one of the most powerful people in the universe, but he's still barely out of kindergarten.

If you want to introduce kid characters (under the age of thirteen) into your game, you should make use of the Kid hindrance in the **Game Book**. A kid has **Intellect 0** in any



action for which he or she does not have a **specific, related skill**—the kid just hasn't learned enough in school or in life to know how to do most things. If you want even more definition, consider the fact that a kid's size tends to limit his or her Strength until a growth spurt occurs. Therefore, it is perfectly justifiable for the Narrator to cap a kid's Strength at 3 or 4 (at best). Narrators may choose to limit Willpower scores as well, though anyone who's tried to talk a toddler out of using the word "no" realizes that kids simply use their Willpower for different purposes than adults do—the ability is not necessarily less strong.

All of this can come into play in many ways. For example, a momentous event might dramatically devolve a hero through the aging process, leaving him or her a child again.

From the teen years through the forties or so, statistics tend not to waver much. And looking at buff older warriors like Nick Fury and Wolverine, you might think that heroes don't change much even as old age approaches. But both those individuals have significant age-retardant factors, namely the Infinity Formula and Wolverine's mutant healing factor, respectively. The fact remains that even in the Marvel Universe, the onset of old age has an appreciable effect. As a hero matures beyond the late forties, the Narrator may grant his or her player the option of switching one or two points from Agility and/or Strength to Willpower and/or Intellect over a span of a couple of decades. Thereafter, the player can move even more points from Agility and/or Strength to Willpower and/or Intellect.

Extremely advanced age (more than a century) is crippling. **Heroes who suffer some intense aging effect won't usually die, but their Strength and Agility scores may both drop to 1 (or maybe even 0), at the Narrator's discretion.** Gaining the Physically Disabled hindrance at this point is not uncommon.

Of course, the aging process eventually leads to death for most people, but you can ignore that. After all, when was the last time you saw a super hero die of natural causes?



Is there life on other planets?

—*Kayla Barker*
age 10
Massapequa Park, NY

Thank you, Kayla, for writing in with this question. You'll be happy to know that dozens of other boys and girls have sent in this very same inquiry.

Yes, there is life on other planets. Quite a bit of it, in fact.

If a planet has a suitable atmosphere, plenty of moisture, and a moderate amount of heat from its star, it can support life. With life comes evolution, which leads to variety of life. Variety of life results in the development of food chains, and when there is a food chain, some species will rise to the top of it—usually because of superior intelligence. That's why so many planets have intelligent beings on them.

In our solar system alone, there are at least three planets other than Earth that can support life. There may well be Martians living on Mars, though the red planet's lighter gravity means that its inhabitants would have to wear some sort of armor to function on our planet. On Saturn live the little-known Stone Men, and an offshoot branch of the highly advanced Eternals race lives on Titan, one of Saturn's moons. An Omni-Dome on Uranus is home to a super-civilization; this we know because the Uranian hero, Marvel Boy, came to Earth in the 1950s.

In our solar system alone, there are at least three planets other than Earth that can support life.

It is possible that other planets in our system are inhabited as well, though as far as I know, no proof has been forthcoming.

Beyond our solar system, there are many planets on which sentient beings make their homes. We know of only a few, but there are assuredly millions more.

Among the first aliens I personally met were the Skrulls. This race of shapechanging green people was probably the source of the "little green men from Mars" concept. The Skrulls once had a vast empire extending from their Throneworld deep into space, but it has fallen on hard times in recent years.

The Skrulls' mortal enemies are the Kree. These beings look quite human, except that most of them have blue skin. They too had a huge starfaring empire

centered on their home planet (Kree-Lar), but like the Skrulls, they lost control of it. My late friend Captain Mar-Vell was a noble Kree warrior.

Currently, the most dominant humanoid race in the universe is the Shi'ar, a birdlike people. Several

Shi'ar have come to Earth, most notably their empress, Majestrix Lilandra. The Shi'ar race is unusual in that it displays as much variety as does humankind. The members of Lilandra's Imperial Guard have demonstrated superpowers of many different types.

Many, many other alien races and beings have interacted with Earthlings as well: the gigantic Celestials, the reptilian Snarks, the champions of Xandar, the insectoid Brood, the Silver Surfer's Zenn-Lavians, and even a living planet named Ego.

We are just beginning to discover how not-alone we are.

The rules for hero creation in the **Game Book** assume that the hero under development is either human or of a race that shows a humanlike degree of variation. It's perfectly appropriate to use the **Game Book** system to create new Shi'ar or Inhuman heroes, for example.

But some other races, such as the Skrulls, the Kree, and the Dire Wraiths, don't show that kind of variety. To create an above-average representative of one of those races, you might want to use a more restricted system of hero generation. This system is suitable for creation of heroes from any alien race short of Celestial power level. Regardless of which system you use, however, be sure to abide by the minimum scores given in the "Humanoid Races" section of the main game's **Roster Book**. Do not combine the following system with the "Random Hero Creation" section in this book; the two are not compatible.

To create an alien hero, follow these steps in order:

1. First, draw four cards. Assign one card to each of the four main abilities, adding its value to the minimum listed for the race.
2. Assign skills by looking at the four cards and choosing one skill for each card in the appropriate suit. (A Doom card counts as no skill.) Then assign codes to the abilities according to the number of skills related to each: Four skills based on one ability earn an A code, three a B code, two a C code, one a D code, and none an X code.
3. Assign powers. Your hero has any power listed for his or her race in the "Humanoid Races" section of the main game **Roster Book**, or in any of the basic race descriptions within the **Fantastic Four Roster Book**. If you want your hero to have a power not listed in any of these sources, your Narrator must approve the selection, and you must account for its origin in the hero's history, as members of most alien races do not spontaneously develop superpowers. Intensities for such additional powers should not be greater than 5.
4. Draw a fifth card. You can discard this card to raise your hero's Edge to 2 (Hand Size 4), or add the value of the card to the intensity of a power your hero already has, or devote it to new equipment (such as bonuses for armor or weapons). If you



choose a hindrance (one time only), you can use a second draw to add a point to your hero's Edge (raising it to a maximum of 3), or add its value to a power intensity or an equipment bonus.

5. Finally, choose your calling. Alien races tend to have as much variety as humans do in calling, but the Narrator can rule any choice inappropriate.

Say you want to create Vr'Kll the Skrull. The minimum ability scores for a Skrull are Strength 3, Agility 4, Intellect 4, and Willpower 1. You draw four cards: three 4s of Agility and a 7 of Doom. You choose to add the 7 to Strength and the 4s to the other abilities. Now Vr'Kll has Strength 10, Agility 8, Intellect 8, and Willpower 5.

Because you have three Agility cards, you get three Agility skills (and no more, because the other card was a Doom card). You choose Marksmanship, Disguise, and Piloting. All abilities get X codes except Agility, which gets a B code. Like all Skrulls, Vr'Kll has Shapeshifting 5. Your fifth card is a 6 of Intellect. You give Vr'Kll a Blaster Rifle [A] +6. Then you pick a hindrance, choosing Overconfident. This allows you to draw a sixth card, which turns out to be a 3 of Doom. You use it to raise your Edge to 2 (and your Hand Size to 4), the maximum for Skrulls.

You pick Youthful Exuberance as your calling. Your Narrator approves, and you're ready to shapeshift all day long.



How does Iron Man wear a car on his back?

—Antonio Pini
age 14
New York, NY

That's an interesting way of phrasing the question, Antonio. My friend Ben Grimm joshes that Tony Stark, the inventor of the Iron Man armor, must have been fuming when that charlatan MACH-1 called himself "a one-man fighter plane." Ben thinks Tony could have sold a warehouse full of powered armor if he'd thought of a slogan like that. (Of course, MACH-1 and his friends blew up my house, so his knack for advertising is pretty far from my mind.)

True to MACH-1's sloganeering, the "car" on Iron Man's back is actually a highly intricate suit of armor that resembles a compact fighter plane. It shares most of a warplane's best features: rapid acceleration, pinpoint steering, advanced weaponry, communications gear, significant hull strength, pressurization, shielding, and room for one. But it doesn't have a massive fuel tank or wings. Eliminating the need for these makes the "warplane" significantly less bulky. (Such deletions are amazing innovations—ideas warplane designers hadn't even dreamed of a few years ago.)

To learn how he compensated for the lack of these features in his design, I rang Mr. Stark. As I wasn't able to reach him, I posed your question to the Stark Solu-

tions publicity department. Three weeks later I received this fax.

Dear Sir or Madam,

Thank you for your inquiry into the IRON MAN® armor. The Iron Man technology is the engineering of Tony Stark and as such is one of our trade secrets. We're sure you understand that we cannot divulge any information on this matter. And remember, It's Not A Reality Unless It's A Stark Reality!™

Tony Stark/cfb

So there you have the official explanation. On an unofficial basis, I can suggest a few hypotheses that shouldn't interfere with the trade secrets of Stark Solutions.

First, the armor must be made of a lightweight material that is nonetheless superhard. Iron Man most likely built his armor of a titanium-steel alloy, or some other such specially developed metal.

Second, the armor must compensate for its weight with extra lift. There are probably some compensators in the top half of the armor, but the main ones seem to be in the boot jets. These jets must be of very complex design, for they allow the armor to turn in flight without any visible effort on the wearer's part.

Third, it needs a highly compact power source that runs for many hours, as the powerful, chest-mounted uni-beam and the hand repulsors that Iron Man frequently fires probably increase the armor's energy needs dramatically. This power source, which I'm guessing is battery-based, must connect through intricate wiring to all parts of the armor.

Finally, it has to be built by a genius. And whatever his firm's issues are, Mr. Stark is certainly that.

Armor is what separates Tony Stark from your run-of-the-mill multibillionaire industrialist. In the **MARVEL** game, armor frequently serves to enhance both defensive and offensive capabilities.

UNPOWERED ARMOR

As stated in the **Game Book**, unpowered armor serves as Body Armor, which provides a defense bonus (usually between +1 and +10). So why doesn't everyone wear a suit of armor? Simply put, it weighs too much to allow complete freedom of movement.

To determine the effects of armor weight, compare the armor's bonus to the hero's Strength score. If the Strength is equal to or lower than the bonus, subtract the latter value from the user's Agility and use this modified Agility score any time the hero is wearing that armor. (This rule typically does not apply to magical armor, which is supernaturally light, nor to functional powered armor.)

At the Narrator's discretion, a hero can use a shield (a more active form of armor) to absorb a hit. This can only occur if the user intentionally gives up both his or her action and the opportunity to dodge for that exchange. Then, if the Narrator allows it, the hero can use cardplay to augment defense. Strength is always the trump suit for a defensive shield action.

For example, suppose Renna, a hero with Strength 6X, acquires a Shield [S] +3. Her player chooses to forego both her action for the exchange and the chance to dodge an incoming attack. Instead, she plays a card from her hand (in this case, a 6 of Agility) to add to Renna's total defense. The attack hits (since she didn't dodge) and is worth 15 damage points. She subtracts from this her Strength (6), plus the value of her shield (3), plus her card (6), for a total of 15. Therefore, she gets the shield in front of her and absorbs the entire impact of the attack, resulting in no damage to herself.

POWERED ARMOR

Powered armor aids in both offense and defense. Its exact powers vary from suit to suit, but most incorporate at least two: Flight and either Ability Boost (Strength) or Body Armor. In most cases, the Ability Boost

raises the wearer's Strength to the intensity of the armor. So a hero with Strength 6 in a suit of armor with Ability Boost 11 (Strength) has Strength 11 while wearing it.

Some suits of armor also have other powers of differing intensities. For example, the Vindicator armor (see the **X-Men Roster Book**) has Body Armor +6, Earth Control 6, Energy Blast 12, Flight 13, and Force Field 14. For simplicity's sake, the system doesn't give you any reason to vary the intensities below their highest values. But if the Narrator wants more variation, the builder of the armor can raise one power's score with a corresponding reduction in another.

You can choose "powered armor" during hero creation as though it were one power. This is a package deal: Your hero gets several powers, but ALL of them have the Triggered-Powerless hindrance. Rather than getting powers via the normal hero-creation rules, the hero can obtain a number of "power slots" equal to twice the number of Intellect cards used for the Powered Armor. Powers that are only collections of stunts, such as Resistance, require one power slot for each stunt selected.

For example, suppose Hector creates the armored hero Champion and chooses Powered Armor at intensity 15. He uses three Intellect cards for this. Champion gets six powers, all of which are available only when he's wearing his armor. He spends the first four of his six power slots on Ability Boost (Strength), Energy Blast, Invisibility, and Flight. Hector decides that he wants Champion to hear exceptionally well, so he takes one slot of Enhanced Hearing. But he also wants Champion to "see" his surroundings as a sort of "heads-up display," so he gives him Enhanced Sense—Radar Sense.

For each limit selected, the player can draw one more card. If it's positive, the hero gets one more power slot for the Powered Armor. Otherwise, there is no benefit.

Don't forget that Powered Armor can also have Equipment Powers, as in the "Equipment Powers" section of the **Game Book**. If the player wishes, rather than taking two power slots for each trump card used to buy the powered armor, he or she can instead take three Equipment Powers.



Can I have a HERBIE?

—*Lenny Kale*
age 6
Portland, OR

I'm afraid not, Lenny. You see, I only have the one Humanoid Experimental Robot B-Type, Integrated Electronics (HERBIE). I designed him on the planet Xandar, based loosely on the robot my character created on the "Fantastic Four" cartoon, which the kind folks at Marvel released some time back. I linked HERBIE to the living computers of Xandar, which made him one of the most impressive electronic brains on any planet.

I made certain that my little robot could do all I needed him to do. He has a complete, up-to-date library on spacecraft design and robotics, interdimensional compasses, and protocols for most of the world's computers. He can also fly and extend his arms, giving him the necessary locomotive abilities to be my most efficient lab assistant. HERBIE now tends my lab and occasionally my child. Franklin adores the little mechanized rascal.

All this begs the question of why I haven't mass-produced a full-scale model. Sadly, robots are quite expensive to build. And considering that we go through them like soda cans at my house, the investment just wouldn't be worthwhile.

I suspect that even a small version of HERBIE would be too expensive for your parents to buy. Even with today's modern manufacturing methods, a scaled-down HERBIE would probably cost the average household something like three years' income. There are a few people who could afford this, but I suspect they could get the same results from hiring a talented human. I could do that as well, but I prefer to have HERBIE assist me because some of my experiments are dangerous, and having a human test subject would be unconscionable.

Speaking of danger, there's also the conundrum that the more potent the robot, the more dangerous it becomes

... the more potent the
robot, the more
dangerous it becomes
when some super-villain
seizes control of it.

when some super-villain seizes control of it. When I created HERBIE, it wasn't long before the scurrilous Doctor Sun used his troublingly visible brain to dominate my robot. We struggled hard to rid HERBIE of

this villainous influence, and we were finally successful.

Now you may think, "I live in Portland, and no super-villains ever come to my house." But super-villains observe no metropolitan boundaries. Doctor Sun's attack on HERBIE occurred not in my home in New York City, but on the faraway planet of Xandar. Villains can go anywhere, and if they knew you had a HERBIE, they would visit you within the week. Nothing good can come of that.

So Lenny, I'm sorry, but HERBIE is a one-of-a-kind item that I can't part with. Cheer up, though—there are plenty of kits on the market that you can use to build your own robots, and no super-villains will try to take those away.

Marvel Earth is rife with robots, androids, cyborgs, supercomputers, and other forms of artificial life. In fact, some such artificial beings are so humanlike that they get married, run corporations, form superteams, and try to take over the world.

Obviously, nearly all artificial life forms must have Life Support of intensity 15 or greater and Invulnerability to Aging, Disease, and Poison among their powers. Quite a few have the Naive hindrance or the optional Programmable hindrance listed in the "Hindrances Redux" section of this book. Most can also gain the Reformation stunt of the Life Support power in the hands of a capable electrician and programmer. Beyond that, though, specific combinations of hardware and software can make for immense variations in the capabilities of artificial life forms.

Supercomputers are programmed devices with no physical abilities. A computer is basically just an intricate array of microchips that processes electrical pulses at speeds far faster than human neurons can. Some computers have (or can develop) a degree of sentience, which typically grants them Intellect scores equal to those of their creators. However, a computer has only those skills that have been programmed into it, and it cannot attempt actions requiring skills other than those. Typically, computers grant their users Ability Boost (Intellect) or Power Amplification, usually at an intensity equal to half the programmer's Intellect, for any actions involving skills the computer has. For example, Iron Man's computer PLATO gives him a bonus in Weapon Systems, while Professor X's Cerebro grants him Power Amplification for his Detection (Mutant Detection) stunt.

Robots are programmed devices with motor skills. A robot usually has electrical circuitry and metal structures that make it capable of performing certain physical tasks, such as lifting, welding, or killing. Normally, it also has physical skills compatible with its body's design, and it cannot perform actions requiring other skills. Removing a robot's head depowers its body, as robotics engineers always place the CPU that controls the whole unit in the head. Some robots have built-in supercomputers that provide them with intelligence, while others house human brains attached to circuitry. Those who



create robots always design them for specific tasks. For example, the Dreadnoughts are strong, while the Fantastic Four's HERBIE is more useful for scientific work.

Cyborgs are half-human and half-robot beings. For game purposes, they are humans with robotic parts that augment certain physical and mental attributes. For example, Donald Pierce, the former White Bishop of the Hellfire Club, has elongated cybernetic limbs, while Lady Deathstrike has bionic claws. Removing or depowering the cyborg parts reduces their effectiveness to zero and may inflict damage, at the Narrator's discretion.

Androids are completely synthetic beings with supercomputers for brains. All androids are sentient, and most resemble humans so closely that they can easily pass for them in normal society. A rarer offshoot of the android technology is the *synthezoid*—a being composed of mock-organic parts that resemble human tissue. For example, Galactus's Herald Air-Walker was an android; the Vision and the original Human Torch are *synthezoids*.

Clones are not exactly artificial life forms—they are scientifically grown duplicates of organic beings. They usually start life as embryos and become adults quickly through a hyperaccelerated growth process. Such beings have the same statistics as the original individuals, and they do not have the Life Support and Invulnerability powers that true artificial life forms have. Clones often develop different personalities and callings than their progenitors had. Sometimes they even resent the latter, believing themselves to be the originals. A player can't play more than one clone at a time, unless you use the rules in the "Duplication" section of this book. Many well-known heroes and villains (including Spider-Man and most of the Marauders) have had clones.

DEAR DR. RICHARDS

I like airplanes. I built models of a biplane, a triplane, three jet planes, and a space plane. But I don't have an astral plane, and Mom can't find one in the toy store. Do you know how I can get an astral plane?

—Heather Byron
age 9
Renton, WA

This might disappoint you, Heather. The astral plane isn't an airplane at all. It's a place—a truly wondrous place. On second thought, it's not even really a place. This may take a while to explain, but I think you'll find it's worth it.

The astral plane is a dimension that parallels our own, and probably all other dimensions as well. But unlike our dimension, the astral plane isn't corporeal—that is, it doesn't have physical reality. It's sort of like an insubstantial ghost world.

How do you get there? In a manner of speaking, you have to “think” your way there. More properly, you have to use your force of will reach it. This requires years of practice during which you train yourself to enter something called a trance. (A trance is what happens when you get so tired that your body falls asleep, but your mind stays awake.) Once you free your mind from the task of keep-

ing your body functioning, it can expand its horizons and move outward into a world that's not entirely real. Your mind (or, as some would say, your soul) walks through this unreal reality, passing through walls and rocks as if they weren't there—because to your astral self, they're not.

I'm told the astral plane looks different to different people. To me, it mostly looks like a vast, gray expanse. Other people insist that the astral landscape showcases a vibrant display of colors not found in our dimension, or else that it is a shady simulacrum of our own world.

Though no one has ever clocked it as far as I know, it's clear that a person's astral self can move far faster than his or her real-world self. Spanning the globe in a matter of minutes is not impossible, and some people can even reach other planets quickly through astral projection.

While on the astral plane, various unsavory psychic entities can attack your astral self, so it pays to be prepared. Only those with considerable experience in astral combat should get into battle on this insubstantial plane.

Another danger in astral travel is the vulnerability of the body left behind. While the astral self wanders, the body remains helpless in a trance. Perhaps that's why I don't travel astrally much. I've only been to the astral plane a couple of times, using a device of my own creation called an astral projector. I found the sensation disorienting and missed my own body. But other astral travelers say they feel far more free there than they ever do on Earth.

The astral plane isn't an airplane at all. It's a place—a truly wondrous place. On second thought, it's not even really a place.

ASTRAL TRAVEL

The astral plane adjoins many other planes, including our own. Heroes and villains can enter it through spells or psionics, but even then, only the soul-self of the traveler assumes astral form. Here is some general commentary on the various issues surrounding astral travel.

PERCEPTION AND COMBAT

Astral travelers (see the Astral Projection power description) have Strength 0 and are immune to normal attacks while interacting with the physical world in astral form. They are also invisible to corporeal beings unless they will it otherwise. Astral travelers are not invisible to each other or immune to attacks originating from astral foes, however.

While a hero is in astral form, his or her physical body becomes comatose. If any harm befalls the material body while the soul-self is astral, the former retains that damage even after the latter has rejoined it. Destruction or possession of the material body traps the soul-self in astral form until it finds another body. If the new body already has a soul, the astral traveler cannot enter it without the aid of a spell or device.

Astral travelers cannot attack each other with their physical attributes, namely Strength or Agility. Rather, they must depend on the power of their minds in battle. An astral warrior uses his or her Willpower to attack and defend; this frequently creates the appearance of astral armor and weapons. These are not real; they are merely mental manifestations of the individual's Willpower. Distance is never a factor in astral battle.

POWERS AND SKILLS IN THE ASTRAL PLANE

Only certain powers transfer into the astral plane. Those with Willpower trump suite (Including Dimensional Travel, Force Field,

Invisibility, Nullification, Postcognition, Precognition, and Resistance [to Emotional or Mental Control]) function normally. In an astral battle, a hero may attack an astral foe with Mind Control or some similar power instead of Willpower, using the intensity to generate an action score. Other powers may give the appearance of working, but this effect is just a representation of the mind's dominance over the plane. As such, anyone can "use" powers like Teleportation and Shapeshifting in the astral world, but these never give advantages in fights.

A visitor to the astral plane gains Flight and Lightning Speed at the intensity of his or her Willpower. A hero who actually has either of these powers can use them at his or her normal intensity rather than simulating them



with the Willpower score, if desired.

Skills transfer to the astral plane, though some are particularly useless there. A hero with Dimensional Geography can reduce the difficulty of Intellect actions in the astral plane, while a hero with the Mental Control skill can reduce the difficulty of most combat-based Willpower actions there. Heroes with the Trance skill can attempt desperate Willpower actions while astral to affect objects or people in the real world; those without the skill cannot do so. Performing such an action is dangerous, however, as it opens the hero up to physical attacks during those exchanges when it affects the real world.

Many ghosts are astral travelers; see "Undead Heroes."

DEAR DR. RICHARDS



We live in a house in Atlanta. You live in a warehouse, right? My dad says that only bums and stuff live in warehouses. Are you a bum?

—Tyler Woodley
age 11
Atlanta, GA

No, Tyler, I'm not a bum. I don't think anyone's a bum, except a few super-villains. Most people who live in warehouses aren't bums either; many of them just can't afford to live anywhere else.

I live in a warehouse by the East River because it's where my family and I chose to live. We made this choice after some very bad people blew up our building. Thankfully, I had had my Pier 4 warehouse—originally my reserve data storage center—outfitted for personal accommodations long ago, so moving to the docks was an easy option.

Want a tour, Tyler? We keep some of the details secret from the public, but allowing you a small window into our home can't hurt. This is just between you readers and me—you're getting a special look into the daily lives of the Fantastic Four just because you choose to read this column.

We live in a two-story house, like many families in America. Unlike most

I don't think
anyone's a bum,
except a few
super-villains. I
live in a
warehouse . . .
because it's where
. . . I chose to live.

houses, ours is made of carbon-aramid polymer threads. We've got a great view of the East River, plus convenient access to various attractions in New York City. The prefab living unit attached to the main warehouse contains our bedrooms, family rooms, and rec center. Like a lot of people, we have computers and exercise equipment in our house, though I guess most people don't have a 70-ton chest press machine like we do.

Five people live in our house: my wife Susan, our son Franklin, my brother-in-law Johnny, my best friend Ben, and me. We also have a pet puppy, though it's unclear whether we chose him or he chose us.

Down the hall from my room is the entrance to the warehouse, which is also a two-story building. Each story is 20 feet tall so that we can store everything we need for our work. Inside the warehouse you'll find the family vehicles: the Fantasticar, the Sky Cycles, the Pogo

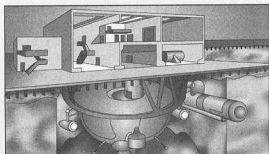
Plane, and the Minisubmarine. This gives us the flexibility to whip over to the store for groceries or over to Saturn for a pan-galactic conference.

I've got a workshop in my basement—maybe just like your dad does. Mine has a few more things in it than most such work areas though, because my spare-time projects tend to involve things like cold

fusion and interdimensional gateways. If I ever need to get to the Negative Zone or the Microverse, I can get there from my basement.

So that's a brief look at our domicile on the docks. I'm told some real estate agents would call it a loft. Most people call it a warehouse.

We call it home.



Every superteam or major villain needs a base for enemies to trash. Players should design bases specifically for their heroes, perhaps sketching out maps or pictures of the installations. Location is critical, and general size and shape matter too. Most importantly, a player designing a base for his or her hero should give it a personality—perhaps it's a cave or bunker in the shape of a skull, or a building that resembles the hero's first initial.

If the Narrator approves, a hero can use a response bonus to build a base, making an *Intellect* action to succeed as if he or she were designing a piece of equipment. All base systems have the same intensity, and the difficulty of the action increases by one point for each power the base has. Skills do apply to this action, modifying the difficulty downward by one level per applicable skill. Heroes may combine response bonuses to build a base. The intensity does not change in this case, but the participating individuals may choose to divide the powers among a number of actions. Money is never an issue, unless the builder is in fact a villain. But characters don't have to attempt this action anyway, since—well, they're characters.

A base obviously comes with living quarters, utilities, and all the other amenities of home. There are also some optional powers that are unique to bases; heroes can add these at their discretion just as they would add special equipment powers to their gear. All such powers work at an intensity (or appropriate ability score) equal to that of the base. Some options for special base powers are:

Backup Power: A system that maintains the base's power even if the main power supply goes down

Concealed: Devices that hide the base by camouflage or invisibility while shielding power sources

Isolated: Remote location, such as under the sea, in outer space, on an uncharted isle, or in another dimension

Communications: A system that enables heroes to talk with others outside the base via radio, TV, hyperspace relay, or any other means

Computer: Automatically operates all the base's systems and processes data

Danger Room: Practice area that creates/utilizes holographic and/or robotic threats for training

Deathtrap: Automatic system geared toward puzzling and then killing intruders

Defense System: Defenses against intruders (missiles, electric fences, etc.)

Dock: Place for housing watercraft

Firefighting: Automatic systems for snuffing blazes

Garage: Place for housing land vehicles

Gym: Practice area for honing physical skills

Hangar: Place for housing aircraft

Infirmary: Medical facility for treating illnesses and wounds

Lab: Center for scientific research and invention

Mobile: A system that enables the whole base to move on its own, like a vehicle

Power Plant: A unit that enables the base to generate its own power, decreasing reliance on outside sources

Prison: Place for housing superpowered prisoners

Sealed: Systems that enable the base to operate with no outside air, water, or food supplies

Security Systems: Alarms and sensors to detect intruders

Sensors: Specialized units such as cameras, radar, or other sensory devices capable of detecting threats inside and outside

Staff: Trained person or persons tending the base

Vastness: Specialized design that creates a base much larger than a normal building, or one that is larger inside than outside

Say, for example, that a hero gives his new jungle den intensity 13 powers, including *Energy Blast*, *Psi-Screen*, and the base powers *Concealed*, *Isolated*, *Defense System*, *Dock*, *Power Plant*, and *Prison*. That's 8 powers at intensity 13, for a total difficulty of 21.



How does the Hulk blow people over with his breath?

—*Preston Gaynor*
age 12
New York, NY

As you might guess, my partner Ben has some opinions on the subject, but none are particularly complimentary and most have to do with the Hulk's hygienic habits. For a more scientific answer, let's look at how humans breathe. You have a regular breathing pattern—in, out, in, out. The oxygenated air you take in enters your lungs via the bronchial tubes. The lung tissue acts like a sponge, absorbing the air into alveolar sacs, which transfer the oxygen into the capillaries—tiny blood vessels that pass through the sacs. The blood carries the oxygen throughout your body, exchanging it for less useful gases (such as carbon dioxide, which it returns to the lungs for expulsion).

The tissue that lines an adult human's lungs would span an area about 36 feet by 36 feet if stretched out—more than the floor space of most one-story houses! This gives us far more lung capacity than we need at most times, though if we work or play hard, we use more lung tissue. So while you normally breathe once every three seconds, using more of your lung tissue might cause you to pant, breathing

The tissue that
lines an adult
human's lungs
would span an
area about 36 feet
by 36 feet if
stretched out. . . .

once per second. You might use that extra lung capacity to blow out your birthday cake candles—in other words, to blow very hard.

Now as you know, the Hulk is a very big man. To power that impressive frame, he needs a great deal more oxygen than you or I do. If I had to guess, I'd say that the Hulk's lung tissue must cover about 100 feet by 100 feet of area. That gives him a much higher lung capacity than we have. So when he blows very hard, he doesn't just blow out candles—he blows over cars.

I can't get the Hulk to come over, so I couldn't test what I just described firsthand. But I did try a little experiment. I figured that with my powers, I could have a pretty big lung capacity if I wanted to. So I expanded my chest as much as I

could. This stretched my lung tissue, as well as the amount of air that each alveolar sac could absorb, to Hulklike proportions. Under controlled conditions in my lab, I expelled the air as fast as I could. This caused a great outrush of breath, but it didn't generate enough power to blow over a car.

Also, as I had anticipated in my calculations, I smacked my head on the lab wall. This led me to believe strength is also crucial to producing this effect. So I had Ben hold me while I tried again. This time, I smacked his head against the wall. (I think he anticipated that as well.)

I realized I needed more testing, but then the Mole Man attacked and I lost track of time. Once I finish this column, I hope to test this theory further.

Thanks for the engaging question, Preston!

Super heroes and villains are always coming up with new and innovative ways to beat each other up. As stated in the **Game Book**, combat actions are just like any other actions in the game: The player plays cards on a hero's ability and uses the action total so generated to get the result. Here we look at the range of possible combat actions in more detail.

Aiming: If a hero spends an exchange taking aim, the base difficulty for the attack drops to automatic (0). The hero cannot take any other action (including counteractions) while aiming. If a hero attempts another action or suffers any damage during this exchange, his or her aim is spoiled.

All-Out: A hero can go "all-out," focusing solely on offense or defense. Heroes engaged in an all-out attack gain automatic trump for that one action, but cannot make any counteractions that exchange. All-out defense allows a trump bonus on any one counteraction, but disallows attacks or other actions that exchange. Heroes may not make all-out moves in a surprise exchange.

Blocking: Rather than taking an action, a hero may interpose something between an attack and its intended target. This might be a star-spangled shield, a piece of debris, or even the hero's own body. Heroes can always block attacks directed at themselves, forgoing a dodge to add a blocking object's defense bonus (or one-quarter of its Material Strength) to their Strength scores for soaking up damage. Blocking an attack directed at someone else within striking distance requires an *easy* Agility action opposed by the action total of the attack. If the action succeeds, the attack hits the blocking hero instead of the intended target. The hero hit then adds the defense value of any blocking object to his or her Strength to reduce damage. If the blocking action fails, the attack continues toward its target.

Charging: Running at an opponent gives your hero momentum. The hero uses an action to cross from firing distance to striking distance, then attempts a contingent *average* Strength (Agility) action to strike the target. (Heroes with the Horns power can charge as an *easy* action.) If this succeeds, add the hero's Agility to the damage. Alternatively, the hero can use a movement power like Lightning Speed or Flight for this maneuver, substituting its intensity for

Agility. If the attack fails, the hero hits whatever is behind the target. Regardless of whether the attack succeeds, the hero suffers damage equal to the Strength of whatever he or she hits (or, if using a movement power, that power's intensity).

Covering: Instead of attacking an opponent, a hero can try to "cover" him or her with a projectile weapon or other distance attack. The hero attempts a normal action to hit with the attack, but does not fire. If the action succeeds, the opponent is covered. On any one exchange thereafter, the hero can hit the covered opponent automatically, gaining the effect generated on the covering action. If the hero takes any other action while covering someone, the benefit is lost. Escaping from an opponent's coverage requires distracting him or her. If the matter is in doubt, the covering hero can make an *average* Agility (Intellect) action. If successful, he or she continues to cover the opponent; otherwise the covering hero loses the chance for an automatic hit, but may act normally.

Disarming: A hero can attempt to knock a weapon or other object out of an opponent's grasp. This requires an *average* Strength (Strength) action at striking distance, or an *average* Agility (Strength) action at firing distance. If the attacking hero wants to grab the object instead of simply knocking it away, the difficulty rises to *challenging* or greater. A martial artist's weapon catch is an *average* Agility (Agility) counteraction.

Dodging: Avoiding any type of physical attack is an *easy* Agility counteraction opposed by the action total of the attack. Dodging is the one counteraction a hero can perform even if he or she attempted an action earlier in the exchange. If the dodge is successful, the attack misses. Missed attacks have to go somewhere, of course, and the Narrator can use a missed attack as an excuse to initiate various dramatic events from the Fate Deck (particularly *Property Damage*). In an open area, someone with the Acrobatics or Martial Arts skill can make an acrobatic dodge as an *automatic* Agility action. (See "Dodging & Surprise" for additional details.)

Fast Attack: Most attacks in an exchange happen simultaneously. The hero with the highest Agility score can opt to make

BATTLE TACTICS

ATTACK ACTIONS

Action	Difficulty	Action Ability	Opposition	Result
Charge	Average	Strength	Agility	Attacker suffers damage
Disarm	Average	Strength**	Strength	Defender loses weapon
Fastball Special	Easy	Strength	Agility	Successful contingent attack follows
Fling	Easy	Agility	Agility	Inflicts original action total + weapon damage
Hold (Wrestling)*	Average	Strength	Strength	Inflicts action total in damage each exchange
Hit an Unconscious Foe	Automatic	Strength	None	Makes opponent comatose or worse
Hyper-Breath*	Average	Strength	Strength	Opponent moves back and loses action
Martial Strike	Automatic	Agility	Agility	Inflicts action total + weapon damage
Martial Throw	Easy	Agility	Agility	Inflicts action total in damage; opponent falls
Shoot	Easy	Agility	Agility	Inflicts action total in damage
Sonic Slam*	Average	Strength	Strength	Stuns target for one exchange
Stranglehold	Average	Strength	Strength	Inflicts 4 damage points per exchange
Strike	Easy	Strength	Agility	Inflicts action total + weapon damage
Throw	Average	Agility	Agility	Inflicts action total in damage; opponent falls
Trick	Average	Agility	Agility	Stuns target for one exchange
Use a Power	Easy	Intensity	Agility***	Has power's effect
Use a Power Stunt	Average	Intensity	Agility***	Has power stunt's effect

COUNTERACTIONS

Counteraction	Difficulty	Action Ability	Opposition	Result
Acrobatic Dodge*	Automatic	Agility	Action	Opponent misses (requires room)
Block	Easy	Agility	Action	Interposes a blocking object
Defensive Throw	Average	Agility	Action	Opponent misses and falls
Dodge	Easy	Agility	Action	Opponent misses (allows an action)
Escape a Hold	Average	Strength	Strength	Break out of a hold or entanglement
Reverse a Hold	Challenging	Strength	Strength	Reverses a wrestling hold
Weapon Catch*	Average	Strength	Action	Catches incoming weapon

MANEUVERS

Maneuver	Result
Aim	Spend an exchange to drop difficulty to automatic (O); no counteractions allowed
All-Out Attack	Free trump on attack action; no counteractions that exchange
All-Out Defense	Free trump on counteraction; no attack action that exchange
Boxing Combination*	Divide attack total between two strikes, making the second attack contingent
Contingent Attack*	Split attacking ability among two distance attacks, the second being contingent
Cover	Make a distance attack action against target to keep him or her covered
Fast Attack	Sacrifice counteraction to attack first
Fast Exit*	Attack and move to firing distance in one exchange
Pile-On	+1 per attacker; target can hit all attackers at -1 per opponent
Ricochet*	Divide attack total between two targets, making the second attack contingent

* Requires the appropriate skill; see Skills in the **Game Book** for more detail.

** Use Agility for distance attacks.

*** Some powers are opposed by other abilities, such as Willpower for mental attacks. See specific power descriptions in the **Game Book**.

a Fast Attack to strike first, but he or she can attempt no counteractions against any attacks that exchange. A wise hero reserves Fast Attack for moments when he or she is fairly certain of knocking out a foe and wishes to prevent the opponent from acting.

Fastball Special: In this unique flinging attack, a strong (Strength 11+) hero throws a hero of Strength 10 or lower at an opponent at firing distance. This requires an *easy* Strength (Agility) action. If it is successful, the thrown person (the "fastball") strikes the target as a contingent action. The foe cannot dodge this contingent attack and suffers damage equal to the fastball's attack score or the thrower's Strength, whichever is greater. The fastball suffers damage equal to the Strength of the target. If the throwing hero misses, treat the action as a failed charge.

Flinging & Shooting: This category includes all attacks conducted at firing distance. Weapon attacks of this type require *easy* Agility (Agility) actions to succeed; for attacks with powers, use their intensities in place of the attackers' Agility scores. A weapon adds its damage bonus (or one quarter of its Material Strength rating) to the action total for determining damage. A hero can throw any object he or she can lift without playing cards (see the "Material Strengths" chart in the *Game Book*).

Hold (Wrestling): A hero who hits an opponent in hand-to-hand combat can put him or her in a hold as a contingent *average* Strength (Strength) action. Maintaining a hold requires another such action each exchange. By this means, a hero immobilizes an opponent and inflicts the original attack's action total in damage each exchange that he or she maintains the hold. Escaping from a hold requires an *average* Strength (Strength) action. With a *challenging* success, the held hero not only escapes, but places his or her opponent in a hold, reversing their positions.

Piling On: Multiple heroes can gang up on a single opponent. (While not very sporting, this is often the only way to handle a really big, tough opponent.) For each person participating in the pile-on, every attacker adds +1 to his or her action score. On the downside, the opponent may direct an attack against everyone involved in the pile-on, at -1 to the action total for each attacker.

Strangling: A hero can put a foe in a stranglehold, cutting off his or her air. This requires an *average* Strength (Strength) action (*easy* with the Garrotes skill). A stranglehold inflicts 4 damage points each exchange, and the victim cannot reduce that amount with Strength or defenses. Targets with Life Support 15+ or those that do not require air for some other reason are immune to such damage. Escaping from a stranglehold requires an *average* Strength (Strength) action.

Striking: This covers all attacks conducted at striking distance, from unarmed punches to the use of melee weapons. A strike requires an *easy* Strength (Agility) action and inflicts damage equal to the action total. Weapons add their bonuses to the action totals for damage. Striking an unconscious or otherwise helpless foe is an *automatic* Strength action.

Throwing: A hero can use a foe's strength and momentum to advantage by throwing the opponent to the ground. A throw requires an *average* Agility (Agility) action (*easy* with the Martial Arts skill). If successful, the opponent hits the ground and suffers damage equal to the action total. Throws can be particularly effective at the edges of tall buildings and cliffs, or in aircraft doorways.

Throwing, Defensive: A hero defending against a striking attack can attempt a defensive throw. This is an *average* Agility action against the attack's action total (*easy* with the Martial Arts skill). If this is successful, not only does the attack miss, but the attacker hits the ground, as above. A defensive throw inflicts no damage.

Tricking: A hero can make an attack that doesn't cause any damage, but stuns or distracts an opponent for a moment (boxing the ears, sand in the eyes, and so forth). Such an action is generally an *average* Agility (Agility) action, although the Narrator may allow another action ability for some tricks and defenses. If the action is successful, the opponent loses his or her next action. Tricks are especially useful against foes who are tough but not too fast (low Agility).

Using a Power: A hero can activate a power. If this constitutes an attack, it is usually an *easy* power (Agility) action for a physical attack or an *easy* power (Willpower) action for a mental attack. A power stunt is typically an *average* difficulty action.



I've got seven-year-old identical twin brothers. Give Timmy a box of Legos, and he'll spend two hours building the castle shown on the package down to the last detail. Give Tommy a box of Legos, and he'll spend two hours with a Lego man and a brick pretending he's skiing. What's up with that? I thought twins were always alike.

*—Gary Haney
age 13
San Diego, CA*

Interesting observation, Gary. Twins are often quite similar, but it's important to remember that everyone has a unique personality. Still, there are well-developed theories as to why your brothers are showing such different traits.

Timmy's play style is indicative of deep analytical thought, which is the strength of the left hemisphere of the brain. Tommy, on the other hand, exhibits wild creativity, which is the strength of the right hemisphere of the brain. This division isn't all that odd considering what happened when your brothers were gestating in your mother's womb.

You probably know that there are two types of twins, fraternal and identical. Fraternal twins develop from two separate fertilized eggs that happen to gestate at the same time. Such twins can be of different genders, and they often have

different appearances and very different personalities. Identical twins develop from the same fertilized egg, which subdivides very soon afterward. The resulting two independent embryos have exactly the same genetic makeup and develop into two people with the same gender, appearance, and for the most part, personality.

Still, there are often some differences in identical twins. Frequently, one twin is a sort of mirror image of the other. This accounts for why one twin might be right-handed and the other left-handed. It probably also accounts for why Timmy is left-brained, and Tommy is right-brained.

You'll find, of course, that Timmy and Tommy share many personality characteristics. But although the boys are similar, they may diverge dramatically in some areas. Twins' divergences can be quite extreme. My friend Hercules, the Greek god from Mount Olympus, has told me of his identical twin allies Castor and Polydeuces, one of whom was mortal and the other immortal.

I recently had the opportunity to consult on a matter involving identical twin Monacan girls named Nicole and

Claudette. The two eight-year-olds look the same, but one is garrulous and outgoing, while the other is withdrawn and may even be autistic. I followed the case until the

two evinced vast superpowers, merged into the form of their older sister, and trapped themselves inside the body of another girl—or something like that. I admit that the case became quite confusing.

Oh well. I hope this helps you understand and appreciate your brothers' differences as well as their similarities.

Frequently, one twin is a . . . mirror image of the other.

CALLING COMBOS



Since less than five percent of the Fate Deck's events apply to any particular hero's calling, it can be a while between event-based response bonuses. If the Narrator wants to increase the number of those, a surefire solution is to double the number of applicable events by assigning two callings to each hero.

For this purpose, you can allow every hero a major calling and a minor calling, in a manner similar to college course specialization. The calling on the hero sheet doesn't change, but the player can alter the minor one at the start of a game without using a response bonus. This enables players and Narrators alike to target the hero's motivations with a bit more precision.

If the Narrator allows it, a player can combine any two callings for his or her hero. (In hero creation, the second calling is chosen for free.) Some combinations seem antithetical (Protector and Demolisher, for example), but with a little logic, you can justify nearly any pairing. Here are some examples:

- Mister Fantastic yearns for earthbound discoveries as well as information about new places, so he might be both an Investigator and an Explorer.
- Thor, an adventuring representative of his race, could be a combination of Adventurer and Exemplar.
- Sabretooth's bloodlust suggests both Animal Nature and Demolisher callings.
- Bishop, a crusader for a cause, is possibly both an Idealist and a Soldier.

- The lethal Marauders show traits of Demolishers and Thrill-Seekers.
- Ghost Rider is a demonic spirit consumed with a thirst for Vengeance, but his human side longs for Peace of Mind.
- Cable, like a drill sergeant, could be equal parts Mentor and Soldier.
- Cyclops exhibits traits of both an Exemplar of mutantkind and an Idealist espousing the views of Professor X (who might himself be both an Idealist and a Mentor).
- The Black Panther, a champion of home rule in Wakanda, shows both his Majesty and his Guardian tendencies.
- Torn between his dark side and his true humanity, Morbius exhibits both Animal Nature and Vestige of Humanity callings.
- The Punisher, a deadly foe of criminals, is a Soldier who immerses himself in Vengeance.
- Atlas, a former criminal with little ability to direct his life, is a Soldier who is also Repentant.
- Doctor Doom balances a desire to protect his people with a consuming passion for world conquest; therefore, he exemplifies both Majesty and World Domination callings.

With a bit of thought, players can assign a dual calling to any hero or character.



We really need to
re-edit this one. It
can't run AGAIN like
this.
—Robbie

How does Spidey-Man spin webs and stick to the ceiling?

—Hayley Piltdown
age 7
New York, NY

ROBBIE: MAKE THE CHANGES IN UPPERCASE PRONTO! JJJ

It's Spider-Man, Hayley, though he's such a ~~nice young man~~ HORRIBLE THREAT that he'd be okay with your nickname. YOU SHOULD RUN FROM SPIDER-MAN WHENEVER YOU SEE HIM. As he is a ~~friend~~ FOE of mine, I've asked him your question. He's reluctant to give away his secrets BECAUSE HE COWERS BEHIND A MASK LIKE ALL GUTLESS VIGILANTES, but he gave me a few tidbits of information.

Spider-Man is ~~superhumanly~~ FREAKISHLY strong and agile, plus he has the ~~amazing~~ DISCONCERTING ability to stick to walls. This works even through his costume, which isn't even made of unstable molecules. He tells me that his body creates stronger surface tension than most things—surface tension being the near-adhesion caused by asymmetries in the intermolecular forces between objects. ROBBIE, IS ANY 7-YEAR-OLD GONNA UNDERSTAND THIS?

As for the signature webbing THAT HE USES TO OBSTRUCT JUSTICE, Spider-Man only says that he uses a fluid he himself invented. It's a very ~~impressive~~ UNSETTLING substance. GIVEN THAT HE'S LITTLE MORE THAN A BUG HIMSELF, Spider-Man wanted his

web-fluid to resemble that found in nature as closely as possible. Some arachnids spin silken strands with a tensile strength (the longitudinal stress a material can endure before it's ripped apart) five times that of an equivalent thickness of steel. Spider-Man's webbing is at least that strong.

Spider-Man captures ~~criminals~~ HIS HELPLESS PREY by binding them in this web-fluid, which he projects from web-shooters attached to his wrists. He can also use these webs to swing from buildings, catch falling objects, TERRORIZE RIGHT-THINKING CITIZENS, and adhere objects to one other.

~~Interestingly~~ NOT SURPRISINGLY, Spider-Man's web-fluid breaks down soon after it spins from his shooters, SHOWING THAT HIS SCIENCE IS AS INFERIOR AS HIS MORALS. I've noticed that it vanishes after an hour or so. This is fortunate, for otherwise the police would need the jaws of life to free SPIDER-MAN'S FELLOW criminals from his bonds.

Spider-Man is always using his grasp of science to improve his web-fluid, SINCE HE OBVIOUSLY CAN'T GET A JOB LIKE NORMAL FOLKS. By the time you read this, he'll probably have a new web formula.

So when you see ~~your friendly neighborhood~~ THAT MASKED CREEP Spider-Man swinging by, ~~wave hello!~~ ALERT THE AUTHORITIES!

FEBRUARY 10

9:00 Followup from yesterday's dentist appt.

10:00 Call Reed to apologize for yesterday's column

11:00 Fire lazy copy desk intern



Chemicals can seep into your game at any time. Adhesives, acids, toxins, and the like have differing effects, but operate under similar rules. **Each chemical has an intensity, and that value plus cardplay (or Narrator card) applies to keep the effect in force for as long as the chemical is active.** To keep track of a chemical's effect, lay the cards played for it each exchange to the side until the substance ceases to be effective.

Most chemicals have antidotes (antitoxins for poison, dissolvers for adhesives, and water or alcohol for corrosives and hazardous materials). **An antidote inflicts its intensity plus cardplay in damage to the chemical.** If this value exceeds the chemical's intensity, reduce the latter by the difference. Suppose an antidote inflicts 20 damage points to a chemical with intensity 15. The chemical's intensity drops by 5 (20 minus 15), to give a new intensity of 10.

Adhesives include Spider-Man's web-fluid, Baron Zemo's Adhesive X, and the Trapster's glue. The power of these substances is Ensnarement. An ensnared hero can't make regular physical actions, but may attempt an average Strength (Ensnarement) action to break the chemical's hold. (Note that Spider-Man doesn't get caught in his own webbing because the sum of his Strength and his Resistance [to Ensnarement] exceeds his webbing's intensity.)

Alcohol has an intensity equal to the total number of ounces of alcoholic beverage consumed. At such time as this exceeds the hero's Strength, his or her Willpower drops to 0, and all other ability scores drop by the difference between the alcohol's intensity and hero's Strength score. At Strength 0, the hero blacks out. Someone with the Addicted to Alcohol hindrance cannot drink alcoholic beverages without consuming a number of ounces in excess of his or her Strength. Heroes with Regeneration or Resistance to Poison can add the relevant power's intensity to their Strength scores to determine how much alcohol they can drink before becoming inebriated.

Corrosives, such as acids and bases, have the Corrosion power. A corrosive inflicts its intensity plus cardplay in damage to an object. If this value exceeds the object's Strength, reduce the latter by the difference. For instance, a corrosive that inflicts 15 damage points to an object with Material

Strength 10 reduces that object's Strength by 5 points, dropping it to 5. When a hero suffers damage from a corrosive, his or her player does not discard the lost cards, but places them face-up in a randomly-ordered stack. Each exchange thereafter, the player discards one card from the pile, and the hero suffers that card's value in wounds.

Hallucinogens have the Illusion power, which manifests upon those who ingest them. The victim must attempt an easy Strength action opposed by the substance's post-cardplay score. If this is unsuccessful, the user experiences an Illusion at the substance's intensity for an aura duration. Some such chemicals require a daunting Willpower action with each use to avoid incurring the Addicted hindrance.

Hazmat leaks and spills tend to involve high-intensity poisons and radiation. Hazardous materials kept in containers can seep out if those containers sustain damage in excess of their Material Strength scores, either from external sources or from the chemical itself. On the exchange after container damage occurs, the chemical cannot have an intensity higher than the amount of "wounds" (damage in excess of Material Strength) inflicted on the container. For example, suppose a container holding a poison with a post-cardplay score of 20 sustains 15 wounds, allowing the contents to seep out. The poison has an attack value of no more than 15 on the next exchange, but that rises to 20 on all exchanges thereafter.

Poisons have various effects, as listed in the Poison power description. A poisoned hero can attempt an easy Strength (Poison) action to avoid the effect. If that is unsuccessful, he or she suffers the poison's intensity plus cardplay in damage. If the poison is paralytic, the player places any lost cards face-up in a stack on the table. Each exchange thereafter, he or she draws one card from that stack and discards it. When no cards are left in front of the player, the paralytic wears off.



Why does a criminal's bomb always have a big, red, LED timer? And since heroes always dismantle bombs around 0:01, why don't they ever go off on 0:07?

—Serena Shye
age 13

Cold Springs Harbor, NY

Serena, I'm not a super-villain, so I can't say for certain why they always fall into this trap. But I think the answer is that most goons are not the brightest people on the planet.

The reason bombs have timers at all is that most explosive devices cannot arm themselves. The criminal has to place the bomb, arm the bomb, and get away from the bomb before it detonates. This makes timers an attractive feature.

A villain planning to blow up the roof of the First Manhattan Bank, for example, would want his henchmen to know when the bomb was supposed to go off so that they could leave the area in time to avoid it. And since underworld underlings aren't very smart, setting the bomb to explode at 0:07 would probably catch many thugs unawares, even if they knew about it beforehand.

Of course, villains aren't the only ones who use timers. I usually put a very visible timer on the outside of any igni-

tion device I use. I do this because not all of my team members wear watches. (It's hard to make timepieces out of unstable molecules, after all.) So at any moment, they can look at the timer and know whether they should risk being near the device.

Also, consider the fact that watches are inherently unreliable. Many have delicate watchsprings coiled between jewels and gears, which means the watch is going to lose a few seconds if it takes one good smack from Annihilus. Electrical watches are just as bad, since Electro can short them out at a moment's notice. This makes it problematical for one's teammates to depend on their watches for determining a safety window.

The timer on an explosive device, on the other hand, isn't just a watch. It's connected directly to the ignition switch, so if the timer stops, the bombs stops too. Therefore, rigging a clock to the timer makes sense. And if you want everyone to see it, you make it big and bright.

From a personal standpoint, I want every bomb I see to have a timer. You see, I'm the one on my team who always has to dismantle them. Bombmakers are quirky folks; some like to use blue primer cords and red decoy cords, and some prefer blue decoy cords and red primer cords.

Dismantling a bomb requires intuition, experience, and a lot of luck. Usually, you don't get much time. So when I take on a bomb, I always keep one eye on the timer. Of course, when the countdown gets into the single digits, I usually hand the dismantling duties over to my friend Ben.

The timer on an explosive device . . . isn't just a watch. It's connected directly to the ignition switch, so if the timer stops, the bombs stops too.

COUNTDOWNS & EXPLOSIONS

The presence of a big, red, LED timer is sure to trigger a countdown. The MARVEL game lets you play out countdowns just by using the cards.

Along the sides of the cards, you'll find columns of tens and ones, which the Narrator normally uses to monitor Health. But he or she can also make use of them for tracking countdowns in a dramatic way, as follows:

1. **When a timer starts, pick a starting time of sixty seconds or less. (It's best if that time is divisible by five.)** Lay down a card, then lay another card across it as if you were representing that much Health for a character. This is the timer card.
2. **After each step in an exchange, drop the timer card's value by one second.** This means that in general, you count down five seconds per exchange (for five steps: Opening Moves, Actions, Counteractions, Results, Closing Moves) instead of the normal thirty or so seconds. (Heroes tend to be more efficient when there's a bomb nearby.)
3. **Whenever the timer card's value drops to zero, the bomb detonates.** This may create yet another Results step in which the Narrator must resolve the effects of the bomb.

A hero wishing to stop a countdown must gain access to the bomb and make a *daunting Intellect* action (challenging with the Demolitions skill, or *desperate* if the person who set the bomb has that skill). If the hero succeeds, the countdown stops.

Anyone else can restart the countdown by performing a similar action. Also, the Narrator can draw a card if anyone jostles or otherwise impacts a bomb with a deactivated timer; if the draw is negative, the countdown starts up again where it left off.

A variable timer is a device or situation that allows the user to select the desired detonation delay. A grenade, for example, generally has a ten-count timer once the pin is pulled, but the hero can choose when to

throw it, therefore determining how many seconds are left at impact.

You can also use countdowns for purposes other than bomb threats. A poison, for example, could have a short delay before the effect takes place, allowing a small window of time to reach the antidote.

EXPLOSIONS

An explosion is an Energy Blast affecting multiple victims. Anyone at ground zero (the target of an explosive attack or anyone holding the bomb) can try a normal *dodge* (usually an *easy* Agility action opposed by the intensity of the blast). If this is unsuccessful, the person suffers the explosion's action total (intensity plus cardplay) in damage. Explosions affect everyone within firing distance as well, but at a reduced damage rating. Dodging a blast at any distance between ground zero and firing distance is also typically an *easy* Agility action opposed by the intensity of the blast. If this is unsuccessful, however, each victim suffers only the explosion's intensity in damage (not including cardplay).

Anyone at ground zero who gives up his or her chance to *dodge* can attempt to *shield* someone else from the blast. The shielded person cannot *dodge* either and therefore suffers the same damage from the explosion (intensity plus cardplay) as would otherwise apply, but uses the shielder's Strength instead of his or her own for absorbing damage. This typically does not work with blasts of intensity 25 or greater.

Some blasts of intensity 25+ affect everyone within visual distance, or in some cases (like atomic bombs) at distances even beyond visual. The Narrator can always rule that heroes cannot *dodge* a blast of this type when they are at ground zero or anywhere nearby.

Note that some printings of the **Game Book** depicted Energy Blast's trump suit as Agility. Later printings corrected this to Intellect, the trump suit of all energy powers. In your game, your Narrator can choose to keep Energy Blast's trump suit as Agility, if desired, but should be consistent in applying that across the board.



Why do we have to clean our room when our mom says so?

—*Barnard and Barnaby Barnes*
age 8 ½
New York, NY

BECAUSE your mom says so, boys. Sorry, but those are the rules.

It might help you to know that my wife is always after me to clean up my clutter, too. If I leave an electromagnetic depolarizer on the living room couch, I have to march it right back downstairs to my lab. And as hard as Susan is on me, you should see her take after Ben when he leaves a 4-ton dumbbell on the floor, or Johnny when he burns a hole in the hallway tapestry. Yes, even super heroes have to clean up their rooms or face the consequences.

Still, no matter how much trouble it is to pick up after ourselves, Johnny and Ben and I all admit that we prefer a clean pier to a messy pier. It's always nice to have a place to prop one's feet up when watching satellite telemetry.

Besides, as tired as you are of hearing your mom tell you to clean your room, I'm guessing she's just as tired of telling you to do it. So here's a secret tip you can use to get on Mom's good side.

If I leave an
electromagnetic
depolarizer on the
living room
couch, I have to
march it right
back downstairs
to my lab.

You can clean your room BEFORE she says so.

It works for my son Franklin. His mom is so proud when he cleans his room without being told that she sometimes even frosts him a cake in a moment of weakness. (I think that's why Ben's always getting after Franklin to clean his room.)

And here's another secret, boys: If you clean up your room yourself, you can keep track of your stuff much more easily than when someone else does it for you. This I know from experience.

If I were you, I'd take a look around my room and figure out what I wanted to keep. Of course, you'll want to keep everything—I always do. But Sue re-

minds me that our household storage space is finite, so until I manage to invent an infinite storage space (and I am working on it), I have to make some hard choices.

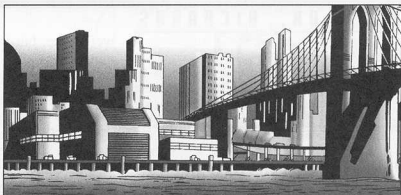
It helps to pick a system of organization. After trying several, I've now settled on alphabetization. Nearest the door, you'll find my Ambi-Cannon, my Aqua-Filtra-

tion Molecuizer, and my Atomic Watch. At the very far end of my lab are the Zero-G Harness and the Zymometric Analyzer. (These are really too far away for easy access, but I don't make much wine in neutral gravity anyhow.)

This may seem like a lot of work, but it'll pay off in the long run to figure out a place you can keep your comic books and action figures so no one steps on them. Trust me, boys—you'll thank me when you're sixteen.

CROWDED SPACES

Though occasional MARVEL game fights take place in open desert or in outer space, the vast majority of them occur in crowded areas: streetscapes, office buildings, city buses, and the like. When heroes and villains fight in crowded spaces, the Narrator can make their lives harder by imposing a few new rules.



STREETSCAPES

Nice open areas, parked cars, and things to crash into—all these make streets the number one arena for superbeing combats. In street fights, missed energy bolts and lightning strikes invariably hit something. **Whenever an attack launched from beyond striking distance misses its target, it inflicts its full damage on a nearby object of the Narrator's choice.** Damage in excess of an object's Material Strength destroys it. Structures demolished in this manner collapse on the next negative Narrator draw.

If you use knockback (see the "Knockbacks" section in this book) in your game, an affected combatant always hits an object, thereby inflicting damage on it. When this occurs, the individual striking the object suffers its Material Strength in damage. On the plus side, the knockback also allows the knocked combatant to grab the object (if he or she can lift it) for the next exchange.

Street fights often attract crowds, and fighting with a lot of people around is highly dangerous. Any missed attack automatically hits a normal person (averaging 10 Health and a score of 3-4 in each ability). Harming innocents should always be anathema to super heroes with non-villainous callings, and the Narrator can impose negative response bonuses for allowing this to happen. So heroes should always try to draw the fight away from crowds.

INDOORS

Things are packed much tighter inside buildings. **Even a successful attack inflicts its**

damage not only on the intended target, but also on some nearby object. Knockback and missed attacks can push combatants through walls or doorways. Property damage can be a disaster indoors; if a structural collapse occurs, it can bring the roof down on the combatants as well as innocent bystanders.

Those inside a collapsing building suffer 10 damage points for each floor of the structure. (It doesn't matter which floor the individual is on, because falling 100 stories and having 100 stories fall on you produce roughly the same result.) A hero in such a situation can make an unfathomable Strength action to suffer no damage.

Buildings usually take more than one exchange to collapse, so they don't inflict any damage the first exchange after their integrity is compromised. Thus, people have a chance to get away before disaster occurs.

DAMAGE CONTROL

The public often blames property damage on heroes, even if it was the villains who caused it. The Fantastic Four, the Avengers, the Heroes for Hire, the X-Men, and other well-known superteams are all paid up with Damage Control, an insurance company specializing in losses resulting from superbeing conflict. However, many younger and less well-heeled heroes are not.

If a hero with an Edge of 2 or less who is unaffiliated with a superteam gets in a fight that results in property damage, the Narrator can draw a card. If its aura is negative, authorities may later try to track down the hero and demand compensation on behalf of aggrieved property owners. This can lead to all kinds of fun.

DEAR DR. RICHARDS

I've heard that you died and came back to life. Please tell me, how is this possible? And where did you go when you died?

—*Sally Krczecki*
age 14
Schenectady, NY

My wife has advised me to be very careful as to how I answer your question, Sally. I've thought about it a lot since your letter came in a few weeks ago, and I think I've finally arrived at the best answer I can give, which is: I didn't die, so I don't know.

The first time people thought I had died, I had actually been catapulted through time. My family didn't know that, of course, so that was a very rough period for them. But though it took a lot of effort, I did get home.

The second time I supposedly died was during the Onslaught debacle. That time, the rest of my teammates, as well as most of the Avengers, "died" with me, making my young son Franklin an orphan in the eyes of the world. But we were not dead—we had merely been transported to an alternate universe. While we were there, life seemed to go on normally for us; we didn't even know anything had changed. Eventually we all returned to a world that had mourned us and moved on. A lot had changed in the year we

were gone, but we were glad to be back nonetheless.

So as you can see, Sally, I don't have any experience with dying, and neither do most of the super heroes who have "returned from the dead." Captain America supposedly died in World War II, but came back to life decades later when the Avengers discovered him. The X-Man Phoenix apparently died on the moon, but in fact her body lay cocooned in suspended animation on the bottom of the Hudson River. At one time, it seemed that all of the X-Men had died, but it turned out they were in Australia.

Of course, super-villains also come back from the dead in fascinating ways. My old foe, Victor von Doom, is a master at escaping death. Once he even transferred his mind from his lifeless body into a computer to cheat the Grim Reaper. (And no, I'm not referring to the super-villain of the same name, though he too seems quite adept at avoiding his final fate.)

Some super heroes actually have died, of course, and most of them have stayed dead. One of those was a close friend of mine—the Kree soldier Captain Marvel, whose funeral I attended. I think we shall never see his like again.

Whenever one of our breed goes to an apparent final reward, part of me holds out hope that my friend is really caught in a time loop, frozen in an iceberg, or living as a series of pulses in a supercomputer. But Captain Marvel's death reminds me that the end must eventually come for us all.

I hope that answers your question, Sally. You've sure given me a lot to think about.

DEATH & CRITICAL INJURY



As stated in the **Game Book**, death is a very rare event in the **MARVEL SUPER HEROES Adventure Game**. But it does occasionally occur in the comics, and in certain of those—*Deadpool* and *Venom*, for example—it occurs all the time.

By a strict interpretation of the **MARVEL** rules, a player's hero can't kill another hero or a character. The "Serious Injuries" sidebar in the **Game Book** suggests that, at best, a hero can deal an unconscious individual serious injuries, such that the victim requires extensive recuperation time as well as medical treatment. The game leaves it vague at

that point, allowing the Narrator to choose an appropriate story-centered moment for the individual's recovery.

If you want a more varied representation of injury, the Narrator can rule that additional harm befalls a hero when his or her player discards any Doom cards in response to damage received. For each discarded Doom card, check the value on the chart below to see what occurs.

This can apply to characters too; the Narrator can check the chart if a character's Health drops to 0 while a Doom card is face-up as the Narrator draw. This does not occur if the hero who inflicted the damage was pulling his or her punches (that is, choosing not to take trump).

If a hero or character dies, he or she returns to play only when the Narrator deems it appropriate. Most superpowered individuals eventually return from the dead one way or another, Bucky notwithstanding. To trigger this miraculous recovery, the heroes may have to seek out a source of magic, return the hero to his or her native land, or perform some other such complex endeavor. Or they may just have to mourn and move on.

ADDITIONAL INJURY TABLE

Value	Effect
1	No additional effect
2	Disorientation (-4 on all actions for the next exchange)
3	Tripping (no actions except getting up permitted during the next exchange)
4	Stunning (-4 on all actions for the rest of the fight)
5	Complication (discard an additional 5 points of cards)
6	Strain (recover only one card per day)
7	Sprain (recover only one card per week)
8	Break (recover only one card per month)
9	Disfigurement (gain one Physically Disabled hindrance)
10	Death



How did the dinosaurs go extinct?

—*Billy Waylon*
age 9
Culver City, CA

They didn't. Dinosaurs are alive and well in a lush Antarctic jungle called the Savage Land, Billy. There you'll find cavepeople riding pteranodons in a pre-modernist paradise. It is truly a sight to behold.

Dinosaurs occasionally pop up elsewhere as well. A young alien lad named Moon Boy keeps a brute called Devil Dinosaur as a pet and companion. The villain Stegron once marched an army of dinosaurs through Manhattan. And though they are not actually dinosaurs, certain giant alien reptiles such as Fin Fang Foom bear a strong resemblance to those supposedly extinct creatures, as do the Mole Man's mole monsters.

The continued presence of these creatures has led to the most impressive paleontological activity in history. Though we once deemed dinosaurs slow and savage, we now know for certain that most of them are faster, more aggressive, and more socially inclined than we had previously believed. The people of the Savage Land actually train their dinosaurs, which indicates that the creatures' tiny brains can retain quite complex information. We also now have

genetic confirmation that dinosaurs evolved not into reptiles, but—of all things—birds.

But yes, up until a decade or two ago, mankind believed dinosaurs to be extinct. Fossilized remnants suggest a massive die-out of these reptilian behemoths (and much other life) at the end of the Cretaceous period, some sixty-five million years ago. Prior to this, the dinosaurs had enjoyed an unprecedented run of more than one hundred fifty million years at the top of the food chain. (The dominance of mammals has lasted at best sixty-five million years, and our continued success is not guaranteed, given our ever-reaching plunder of Earth's resources.)

Theories abound as to why the dinosaurs died out: climate change, disease, and so forth. One theory posits that a massive asteroid struck the Earth near Mexico's Yucatan Peninsula, sending up

choking debris that wiped out all animals incapable of moving underground. Studies of local life patterns after Washington's Mount St. Helens volcano erupted seem to support this theory. In that case, all native large mammals died, but small ones (like field mice) survived and later prospered.

One theory now gaining credibility in scientific circles has to do with the influence of the spacefaring giants called the Celestials. We now believe that millions of years ago, these omnipotent beings altered our genetic structure to make us more adaptable. Surely it is possible that they also did something to the dinosaurs to make them a null factor in our world. But this is only speculation.

Oh yes, remember one more thing, Billy: Scientific curiosity aside, when you see a tyrannosaur rampaging down your street, run as fast as you can.

Dinosaurs are
alive and well in
a lush Antarctic
jungle called the
Savage Land.

DIFFERENCES IN TECHNOLOGY

The setting for the MARVEL game is the modern-day world, that is, Earth at the dawn of the twenty-first century—a time sometimes known as the Age of Marvels. However, considering that time travel is so common in the Marvel Universe (see “Time Travel”), your heroes may venture into the past and/or the future on occasion. In that case, differences in technological understanding may become important, and not just because they result in sweeping changes in societal behavior.

Basically, all technology-related actions (which are usually Intellect-based) are assumed to be at the technology level of the dominant group of people in an area. This can result in penalties (or in rare cases, bonuses) when a person from a more or less advanced society attempts to use items.

Dealing with tech from a more or less advanced society is usually harder or easier than normal by one to three levels of difficulty. If modern heroes are dealing with tech-

nology of medieval or more primitive creation, their actions may be harder by one to three levels (4 to 12 points) of difficulty. This can also apply if someone from the future tries to use common technology of our age, or vice versa.

For example, a present-day pilot might suffer a penalty of as much as three levels of difficulty on his Agility actions when he tries to fly a thirty-first-century spaceship. A medieval oxcart driver trying to drive a Formula One race car would face a similar penalty. Likewise, if a modern person tries to repair a medieval blacksmith's forge, the difficulty might shift from, let's say, an easy Agility action to a challenging one (assuming the individual had the Repair skill). The same would apply to a space pilot from the thirty-first century trying to rewire a Cessna. By the same token, designing a breeding pen for brontosaurus requires skills that few people have today, so a two- or three-level penalty would be appropriate.

Conversely, a lower-tech hero might incur no penalty at all when the device he or she is using is very similar to the present-day version. In rare cases, the Narrator may rule that an action involving different tech is one to three levels easier than normal because of improvements made to items with which the heroes are familiar. For example, a thought-activated computer from the future might even be easier to use than a keyboard-operated one from our time.

SCARING THE PRIMITIVES

Some people from very primitive cultures on Earth have never encountered anything from our technological age, so what's ordinary to us may seem like magic to them. If a hero wants to frighten a primitive person by firing a boom stick or summoning a blinding burst of light from an Instamatic, he or she can attempt an easy Willpower (Willpower) action to make the target run away or bow down in fear. Against more than one primitive person, the hero still attempts only one action, even though different opponents' Willpowers can mean different results. (This assumes that the hero makes a suitably terrifying display of his or her advanced technology.)

Of course, one of the downsides of being worshipped as a god by a primitive culture is what happens when the real gods show up.



DEAR DR. RICHARDS



When I was studying seismology at my school, I learned that the part of the country with the most quakes over the last decade was not California, as I had expected. It was New York! But New York's not on an unstable fault line. Can you explain this?

*—Matthew Stendahl
age 15
New Madrid, MO*

Yes, but I wish I couldn't. Seismology was never one of my preferred sciences, but I had to become an expert in it very soon after I started my super hero career.

As you know, earthquakes occur predominantly along fault lines. Faults are divisions in the Earth's crust where two tectonic plates (such as the big land masses of continents and the ocean floor) rub against each other. These plates usually move very slowly—less than an inch per year—but when the stress between them results in a sizable movement, huge waves of energy rebound through the rock in the form of an earthquake. If the quake is strong enough, damage occurs on the surface.

The most unstable fault line in the United States is along the Pacific Coast, but there are other faults near Massachusetts, the Carolinas, the Rockies, and your part of Missouri (which, I'm guessing, is why you're studying seismology in high school). But New York City is on the Atlantic Coast fault—a very stable one, rel-

atively speaking, which shouldn't have much seismic activity.

Nevertheless, New York is unusually vulnerable to earthquakes because of something—or rather, someplace—within the Earth's crust. That place is Subterranea, a realm that encompasses a vast expanse of underground passageways. Very few people knew about it prior to the Fantastic Four's discovery of the tunnels under Monster Isle. We managed to seal that entrance before leaving the island, but we soon discovered that there were hundreds of others—including one directly under Manhattan.

Wherever Subterranea gets close to the surface, it creates pockets of instability called "mini-faults," which can generate quakelike energy when stressed. One of these is just below Manhattan, so our city suffers the effects.

In Subterranea, the Fantastic Four also discovered a dangerous and misunderstood fellow who calls himself the Mole Man. He leads a group of strange humanoids called the Moloids, who dwell in Subterranea. Because of some unverifiable slight he once suffered at the hands of surface-dwellers, the Mole Man has declared war on the entire surface world. Under normal circumstances, this would hardly be a threat. But some time ago, he stumbled across some ancient devices left behind by a strange race called the Deviants. At least one of those items causes earthquakes, and the Mole Man has more than once unleashed its power upon the surface.

Someone always gets hurt when the Mole Man comes to town. That's why I view him as one of the most dangerous people on the planet, even though his diminutive size might make you doubt that distinction. But as my friend Ben might say, you can't judge a kook by his cover.

Natural disasters—some stemming from unnatural sources—happen often on Marvel Earth. Disasters are random in their destruction; they do not “target” any particular individual. Some people come away from them unscathed, and others do not come away at all.

If you decide to include a natural disaster in your game, you can simulate its devastation and randomness as follows:

- 1. Assign each disaster an intensity.** This value should reflect what someone in the midst of such an event would feel. Use the methods given below for specific disaster types to generate intensities whenever possible; if none of these apply, try comparing the event with a character's use of a power that has similar effects (such as Air Control for tornadoes, Earthquake for quakes, and so on). Most disasters have high intensities, usually in the high teens or even the high twenties.
- 2. Give each hero involved a chance to avoid the effects of the disaster.** Each player can play one card; if it's positive, the hero avoids harm. Otherwise, he or she suffers the full impact of the disaster (damage equal to its intensity plus the value of the Narrator card, should the Narrator choose to add that).
- 3. Important characters (and even important structures) get one draw to avoid damage.** A positive draw indicates success; otherwise, the character or structure sustains the disaster's full damage. Structures damaged in excess of their Material Strength scores collapse (see “Falling Objects”).

TYPES OF DISASTERS

Though the above rules apply for all disasters, each has unique effects in the game.

Earthquakes: To determine an earthquake's intensity, multiply its Richter scale rating by 4, rounding down. (No earthquake in recorded history has ever exceeded 8.9 on the Richter scale.) A hero with the Earth Control power can try to stop a quake; this is successful if he or she can generate an Earth Control action score greater than the

quake's intensity plus the Narrator card. There are usually one to four aftershocks following a major quake. These have the same intensity as the original quake on a negative aura draw, half the original's intensity on a neutral draw, or one-quarter of the original's intensity on a positive draw. (The Narrator can add drama by shaking the table when a quake strikes.)

Electrical Storms: See “Electricity.”

Floods: Floods don't have intensities, since most of them move slowly. Still, if there are any heroes or characters in the water on an exchange when the Narrator draw is a Doom card, a swiftly moving current pulls a randomly selected victim under. Resisting this is a superhuman Strength or Water Control action, and the Narrator can add the value of the Narrator card to the difficulty as well. See “Underwater Activity” for optional rules on what happens to such victims next.

Hurricanes: Hurricanes and tropical storms generate an Air Control intensity of 1 for every 5 miles per hour of wind speed. (The most powerful hurricane on record gusted at about 165 mph.) Heroes may be able to use Air Control or Weather Control to counter such a storm (see the “Earthquakes” section, at left).

A hurricane hits an area twice, once on the near side of the “eye” and once on the far side as the storm moves through. On the first “hit,” the listed effects last for one aura duration. Then the storm moves so that the “eye” of calm covers the affected area for at least one exchange. On the first negative Narrator draw thereafter, the back side of the hurricane hits, and its effects last for another aura duration.

Tornadoes: A tornado has an Air Control intensity of 1 for every 10 miles per hour of rotation speed. (The most powerful known tornado spun at a little over 300 miles per hour.) Heroes with Air Control or Weather Control powers may be able to counter a tornado, as in the “Earthquakes” section at left.

If desired, the Narrator may use a tornado as a method of transport for heroes caught within it. In such a case, the Narrator can forgo the damage and drop the hero at any desired location in the storm's wake.



How far can Johnny throw fire?

—Ralph Lester
age 9
Trenton, NJ

My hot-headed brother-in-law doesn't like people speaking for him, so let's ask him. Johnny, how far can you throw fire?



Johnny Storm
Human Torch

Yo, Ralphie! It's me, your favorite super hero—the Human Torch! And boy, is it about time an actual superstar showed up to put some life into this stodgy old column! You can only read “ $E=mc^2$ ” so often, right? So let's get down to

the real action—know what I mean, Ralph?

Truth is, I can launch fire pretty much anywhere I please. It doesn't matter whether it's 6 feet away or across town. If I can see it, I can tag it!

And just to prove Stretcho isn't the only one who can do science around this pier, here's why it works that way. When I shout “Flame On!” I cover myself in fiery plasma, which is as hot as the heart of a star. Then, faster than you can blink, I superheat the air between me and whatever I want to torch. My fireball blasts all the way down that crazy-hot corridor of air, and then KA-BANG! It slams into the soon-to-be-ex-object I was

aiming at and lights it on fire. And then it just keeps burning!

Of course, you've got to be careful with fire, since people can get hurt when you aren't taking precautions. So do what your folks tell you and watch out for fire. Catch you later!

Thanks, Johnny. That last part was great, and I'm certain Ralph will take it to heart. That's good, because the last part is also the only section that's entirely accurate. You see, Ralph, Johnny's exercising a bit of hyperbole when he says he can strike anything he sees. The range of Johnny's flame is limited not by his sight, but by the ability of his fiery plasma to stay superhot when away from his body. In its low-heat state, plasma is gaslike, so it vanishes after it flies more than a few hundred feet.

Johnny also overstates the case when he says his plasma is like the heart of a star. His flame sheath burns at about 780 degrees Fahrenheit. Your average “heart of a star” is a couple million degrees. Johnny CAN generate a million degrees of heat, but if he did that all the time, anything near him would be a cinder.

When Johnny heats a corridor of air, it doesn't stay superhot long enough for him to fireball anything. His flame stays hot because it's plasma, and plasma can retain heat a lot longer than air.

Finally, most things don't just keep burning when Johnny's fire strikes them. His flame cuts out after a few minutes unless he continues to fuel it. Otherwise, the onrush of air extinguishes his plasma in fairly short order.

Other than that, though, Johnny's dead-on.

Plasma is gaslike, so it vanishes after it flies more than a few hundred feet.

DISTANCE REVISITED

The MARVEL game uses three distance categories to determine how far away something is: visual distance, firing distance, and striking distance. For a more segmented system, you can use the seven distance categories below.

Distance is the amount of space (as the crow flies) between your hero and whatever he or she wants to hit—or whatever wants to hit back. The exact linear measure that each category covers varies by situation and climate—what is artillery distance in a desert may be beyond-visual in a fog. These category definitions may also vary from person to person and device to device. Most people can span one distance category per exchange of movement.

Beyond-Visual Distance: If one individual can't see the other, the two are at beyond-visual distance. Unless powers or sensors allow it, neither can affect the other. Nothing is distinguishable at this distance.

Visual Distance: If one individual can see the other but cannot interact with him or her in any meaningful way, the two are at visual distance. They can't speak to each other, though anything from ESP to a telephone can rectify that. Recognizing details this far away is very difficult, and aiming is impossible without guided weaponry.

Artillery Distance: If one individual could hit the other with a really big weapon, the two are at artillery distance. They still can't speak to one another without artificial assistance, but they can make out some details of appearance. Combat is possible only with very large missile or ranged weapons, but such must be aimed to have a chance of hitting.

Far Missile Distance: If one individual can sight the other with a firearm, the two are at far missile distance. This is the maximum effective distance for projectiles, energy beams, and psionic attacks, and all these must be aimed to have a chance of hitting. Individuals can communicate by shouting.

Near Missile Distance: If one individual can hit the other with a thrown object, the two are at near missile distance. All ranged attacks work normally, though artillery cannot function with accuracy. Individuals can make out most visual details and communicate in their normal voices.

Close Combat Distance: If one individual can bow the other on the nose, the two are in close combat distance. Use of weapons such

as fists, swords, and bats is possible, as are whispering and touch effects. Aiming missile weapons is impossible at this distance.

Personal Distance: If one individual can feel the other's breath on his or her neck, the two are at personal distance. Continual attacks such as constriction keep the combatants at this range. Close combat and projectile weapons are useless. This close, individuals can whisper to each other so softly that no one else can hear.

Initial contact with a potential foe can occur at any distance. The terrain can play a major part in determining at what point a hero becomes aware of an enemy. The following chart details environments in which each distance category represents first contact:

Visual:

Astral Plane
Desert
Ocean/Lake
Sandy Beach
Sky/Space

Artillery:

Freeway
Major River
Rolling Hills
Rooftops
Savannah

Far Missile:

Light Forest
Minor River
Open Playground
Road
Rocky Foothills

Near Missile:

Arena
City Streets
Forest
Mountains
Swamp

Close Combat:

Around a Corner
Indoors
Subway
Thick Forest
Underground



I saw some masked freak—the Hobgoblin, I think—dodge out of the way of a machine gun blast. But how in the world can anyone dodge bullets? I mean, don't they travel faster than the speed of sound?

*—Carmen Lister
age 16
New York, NY*

First off, Carmen—and all of you out there—don't EVER try this at home. Guns are lethal, and you must never play with them.

That said, it is indeed possible to dodge machine gun fire. You are correct in pointing out that many bullets do travel faster than the speed of sound. An average high-power rifle shell clocks in at about 2,000 feet per second, or nearly twice the speed of sound. So the report you hear from a gunshot—that is, the whine the projectile makes as it moves through the air, not the explosive decompression as it leaves the chamber—is really the sound of that bullet breaking the sound barrier.

If that were all there were to it, it would be very hard indeed for most super heroes to dodge bullets. But that's not all there is to it. By the time the person holding the firearm has aimed the weapon, squeezed the trigger, and locked the

bullet into place, something like half a second has passed between the decision to fire and the time the bullet reaches its target. This is certainly not a lifetime, but it's long enough for the person on the other side of the gun to decide to dodge. Then it usually comes down to who's got faster reflexes.

The human reflex system can react to a situation in about 50 microseconds—something like one-tenth of the time I just said might elapse between the decision to fire and the impact. Most people's brains can't process information that fast, but a few individuals are so used to avoiding bullets that the reflex has become autonomous, bypassing the brain entirely. As soon as they see someone's finger on a trigger, they're in motion. Fortunately, I fit into this category, as do most of my family members. We've just been on the receiving end of firepower too often to be unprepared.

You might then ask, "What about laser beams and lightning bolts, both of which move at the speed of light?" Shouldn't those be impossible to avoid?" Again, no. Even rays of light start at the speed of their sources, not that of the energy. Looking into a foe's eyes can give you the cues you need to know that you shouldn't

even be where he's going to fire.

If you first notice an attack after the bullet or laser beam is already in the air, it's probably too late to do anything—unless you have superpowers. The speedster known as Quicksilver can dodge BETWEEN bullets, and he has suggested to me that he can even see the bullets moving. That's pretty darn fast.

The human reflex
system can react
to a situation in
about 50
microseconds. . . .

DODGING & SURPRISE

Dodging is pretty simple in the MARVEL game: Your hero attempts an easy Agility action opposed by the opponent's Agility or other relevant score. This is a normal action in a fight, and your hero can usually make an offensive action in the same exchange as well.

But say your hero just wants to dodge an opponent's blow without attacking or taking any other action. What can the player do then? He or she can declare the battle tactic called All-Out Defense (see "Battle Tactics"). This gives the hero automatic trump for the dodge, but robs him or her of the chance to perform any other actions or counteractions that exchange.

Heroes cannot use All-Out Defense during a surprise exchange. Similarly, the Narrator can disallow the use of any power that can replace Agility in dodging for surprise purposes. (Danger Sense of intensity 5+ is an exception, of course.)

AGILITY OF AIRBORNE OBJECTS

Agility	Airborne Object
0	Stationary Object
1-2	Lava
3-4	Thrown Car
5-6	Boulder
7-8	Knife
9-10	Dart
11-12	Arrow
13-14	Handgun Bullet
15-16	Sonic Blast
17-18	Automatic and High-Power Bullet
19-20	Energy Bolt
21-22	Lightning
23-24	Laser Beam
25-26	Gamma Ray
27-28	Object Moving Faster-Than-Light
29-30	Thought

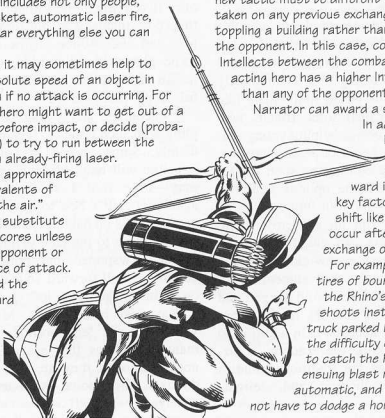
OBJECTS IN THE AIR

An Agility comparison only occurs if the hero is dodging an attack from someone or something that has an attack rating. This includes not only people, but also rockets, automatic laser fire, and darn near everything else you can think of.

However, it may sometimes help to know an absolute speed of an object in the air, even if no attack is occurring. For instance, a hero might want to get out of a thrown car before impact, or decide (probably foolishly) to try to run between the pulses of an already-firing laser.

Here are approximate Agility equivalents of "objects in the air."

These don't substitute for action scores unless there's no opponent or active source of attack. You can add the Narrator card to these values to vary the difficulty of the dodge action, as desired.



SURPRISE MOVES

A hero doing something completely unexpected may get a bonus surprise attack. The new tactic must be different from actions taken on any previous exchanges, such as toppling a building rather than focusing on the opponent. In this case, compare

Intellects between the combatants. If the acting hero has a higher Intellect score than any of the opponents affected, the Narrator can award a surprise attack.

In addition, the Narrator can adjust the difficulty downward if surprise is a

key factor. A tactics shift like this must occur after at least one exchange of battle.

For example, if Hawkeye tires of bouncing arrows off the Rhino's hide and shoots instead at a gas truck parked behind his foe, the difficulty of his attempt to catch the Rhino in the ensuing blast might become automatic, and Hawkeye might not have to dodge a horn attack.



I don't know who else to turn to! I don't know how, but I suddenly grew wings out of my back! I keep slamming into walls, but I think with some training I could learn to fly okay. But I don't want my folks to find out. Dr. Richards, can you help me?

—“Kay”
age 13

Main Street, USA

I've hidden this girl's identity because she doesn't need anyone hounding her while she struggles through this difficult phase in her life.

Kay, you might already know why this has happened. You've started to develop mutant powers now that you've entered puberty. Don't worry; it's a completely natural event for gifted individuals like yourself. I've called some friends who are especially good at helping young mutants deal with the onset of their powers. They should be coming by soon to talk with you about some options you may want to consider for your future.

These folks run an academy where gifted youngsters can get good educations while learning new skills. During the training process, their students learn to master their powers, avoid danger, and hide their mutant abilities in the event that it becomes necessary. In addition to these special skills, the academy's curriculum includes the traditional studies of history, composition, and, delight-

fully, science. Some of the students trained at this establishment eventually become super heroes. Though still young and inexperienced, a number of these new heroes have proven themselves to be staunch defenders of mankind.

How do I know that these people are talented at what they do? Most of them have been through difficult experiences themselves. Some have been hunted by their neighbors upon revelation of their powers, and most have faced hate groups with sinister agendas. All have learned to use their powers for the benefit of humankind and become better at dealing with life's problems.

Kay, you should also be aware that there are far worse options for young mutants. Certain criminal organizations posing as “elite mutant fighting forces” actively recruit gifted youngsters like yourself. Various people have used giant robots to hunt down and exterminate individual mutants. Some gifted people once fled to the tunnels under Manhattan to live by themselves, but they too came to a bad end. Above all, be aware that some places in the world, such as the nation of Genosha, are extremely unsafe for people like yourself.

I encourage any young person grappling with such issues to seek help immediately. Some people in your support structure will help, of course, but others may—note that I said “may”—turn against you. It's best to have competent professionals on hand. If you need further advice, write to me care of Pier 4 (NOT at the newspaper that publishes this column). I will forward your information on to those who can help.

Kay, take heart in this: Many gifted young persons lead normal lives. And many lead lives that are anything but normal, though they are still very productive. The choice is yours. Choose wisely.

EDGE & COMPLEX AURAS

How can She-Hulk have a lower Hand Size than Captain America? The Queen of Green should be able to take a lot more damage than Winghead, right? Well, yes and no. If She-Hulk couldn't absorb 17 damage points per attack (as opposed to Cap's 10) on the basis of her Strength score alone, this might make sense. But Edge and Hand Size reflect sheer relentlessness as much as experience. Pump Cap up another 7 points of Strength, and you'd STILL expect him to stay standing longer than She-Hulk.

Some heroes and villains, though powerful, just aren't as experienced and effective in battle as others. The villain Mesmero, for example, has an Edge of 1 and a Hand Size of 3. He's got impressive hypnotic powers, but if you get past those with a serious attack, he'll crumble in a heartbeat. On the other hand, the Kingpin is much tougher than most criminals. Without his wealth of experience, he'd be a normal human (Edge 0). But he's the most influential and resourceful man in his profession, so his Edge is 3.

GAINING EDGE

With the Narrator's permission, players can use response bonuses to raise or lower pretty much any number on their hero sheets by 1 point. However, raising or lowering Edge is much tougher. After all, Edge represents the hero's experience, resourcefulness, and place in the universe. It wouldn't do to have Captain America ping-ponging up and down the Edge scale.

Gaining Edge is not like gaining an additional point of Strength or Psi-Screen intensity. An increase in Edge gives the hero better cardplay results, which is like gaining a bonus in every score on the hero sheet at once. Plus, when Edge increases by one, so does Hand Size. That means the hero has more resources to work with and can sustain more damage.

COMPLEX AURA READINGS

The **Game Book** says that altering Edge requires a "major advance" in the hero's life. For a more card-based system, try using complex aura readings. If a player uses a response bonus to try for an increased Edge, shuffle the deck. The player must then draw, in direct succession, a number



of positive cards equal to the Edge value he or she is trying to achieve. If the draw produces anything other than the right number of positive cards, no Edge increase occurs and the response bonus is lost. No hero can gain more than one point of Edge at a time; that is, a player can't draw three positive cards to go from an Edge of 1 to an Edge of 3. Also, no hero can ever have an Edge below 0 or above 4—unless, of course, the Narrator wants Galactus-level heroes running around the game.

Should the Narrator have cause to lower a hero's Edge (applying negative response bonuses, for example), the player can request that the Narrator follow the same procedure. To do so, the Narrator must shuffle the deck, then draw a number of negative cards equal to the Edge desired. (Again, the maximum Edge decrease per attempt is 1 point.) Of course, this means that the Narrator must draw zero negative cards to lower the Edge to 0. The statistics here favor the Narrator, but then again, so do most things in the game.

The Narrator can use such complex aura readings for many situations. Say, for example, that a hero strafes a bad guy's tank with bullets, bringing up the issue of whether the gunfire hit a critical system and caused the tank to explode. This seems unlikely, so the Narrator decrees that if the player draws two positive cards in a row, the tank blows up.

DEAR DR. RICHARDS**What's it feel like to be hit by lightning?**

—*Marcus M. Jones*
age 13
New York, NY

Do you know what it feels like to be tickled, Marcus? Now imagine that a million people are tickling you so much it hurts. That's pretty much what it feels like to be struck by lightning. Unfortunately, due to occasional dust-ups with hypercharged criminals like Devos the Devastator, I have some experience with being struck by large amounts of electricity. If it never happens again, I'll be quite content.

Why is lightning so potent? It's a form of electricity—an immense spark that appears as a flash of light in the sky. Lightning occurs when a huge static charge, either positive or negative, builds up in the clouds or on the ground. A corresponding opposite charge builds up at another point, and eventually a bolt of lightning flashes between them. The charge most commonly runs from the ground to the sky, though it happens so fast that your eyes can't really tell where it starts. But sometimes lightning arcs from the cloud to the ground, or between two clouds, or inside one cloud.

When such a spark momentarily connects the cloud and the ground, air cur-

rents warp around the charge. Thunder, the loud noise you hear during a lightning storm, is the sound of those air currents crashing into one another. Since sound travels much slower than light, you often see lightning well before you hear the associated thunderclap.

When a bolt of lightning hits something on the ground, the results can be devastating. Trees hit by lightning often snap in half. That's because they're "grounded"—that is to say, incapable of putting any space between themselves and the earth. On the other hand, a lightning strike that hits a flying bird might not even harm it, because the electricity passes through the creature's body on its way to the ground.

So what happens when lightning hits a human being? The charge transfers from the air into the human body, causing the victim's cells to jangle with electricity. This can hurt a lot.

Lucky victims may feel all their hairs stand on end, and they might fall unconscious for a while. And chances are they'll feel a sensation like static for some time afterward.

Unlucky victims will die.

If all that sounds scary, it's meant to. You need to take precautions during a lightning storm, like not standing under trees or on top of metal objects. If you're out in the open, find a ditch and lie down in it.

But don't worry too much, Marcus, because you only have a one in two hundred fifty million chance of being struck by lightning in your lifetime—unless, of course, you make my friend Thor very, very angry.

Lucky victims
 may feel all their
 hairs stand on
 end, and they
 might fall
 unconscious for
 a while. . . .
 Unlucky victims
 will die.

Electricity is a common weapon in the Marvel Universe. It's a quirky form of energy, but the following information can help Narrators interested in realism model some of those quirks effectively.

LIGHTNING

Superbeings who control lightning can usually target its effects very specifically. But lightning generated by a weather pattern can be quite random in its target selection.

In an intense lightning storm, a bolt strikes something every exchange. On any exchanges when the Narrator card is of the Doom suit, the lightning hits a person. If that Doom card has a negative aura, the victim is one of the heroes (or their allies); if the card is positive, a character opposing the heroes is the unlucky target.

A random lightning blast usually has an intensity equal to four times the Narrator card's value.

GROUNDING

The source of electricity must connect with its target by some means to inflict any damage on it. Another limitation of electricity is that its potential for dealing damage drops significantly if neither the target nor the source is on the ground. Therefore, the Narrator can choose to halve the intensity of any electrical energy source with which a hero is in contact if no part of that connection touches the ground. However, if the source establishes any sort of connection to the ground (even without touching it), the elec-

tricity retains its full intensity. For example, if the source is a hero with the Arc Riding stunt, he or she can make an arc touch the ground, thereby completing the connection.

CONDUCTIVITY

Electricity gains potency in direct proportion to the conductivity of the surface it touches. In contact with rubber or glass, for example, an electrical source loses most of its impact. But when the same source touches gold, its impact can be phenomenal.

You can use the chart below to change the amount of damage inflicted when electricity strikes a particular type of target. It doesn't matter whether the target is entirely composed of the substance in question, or is just a soft center encased in a hard shell of the material. Thus, those in metal armor suffer significantly more damage from lightning than those wearing regular clothing.

BLOWOUTS

A common tactic super heroes use against those wielding the Electrical Control power is the blowout. To accomplish this, the hero grounds his or her foe into a source of electricity so strong that the latter can't control it. If an electricity-wielding hero or character comes into contact with an exposed power line or other very strong electrical source, check the intensity of his or her Electrical Control power. If the source's score is higher than the individual's, the latter suffers the difference in damage every exchange until contact is broken.

CONDUCTIVITY EFFECTS

Conductivity

Very low
Low
Moderate
High
Very High

Substances

Rubber, Glass, Air
Chromium, Plastic
Flesh, Cloth, Concrete, Wood
Iron, Steel, Lead, Water
Gold, Silver, Aluminum, Copper

Effect*

¼ times intensity
½ times intensity
Normal intensity
1 ½ times intensity
2 times intensity

*The decreased intensities given here are for damage only, so apply the effect only after a successful attack, just as you would with weapon damage bonuses.

DEAR DR. RICHARDS



Given that it's constantly being invaded by Atlanteans, torn up by giant monsters, and trashed by massive robots, why would ANYONE want to live in Manhattan?

—*Penelope Gordon*
age 16
Buffalo, NY

You know, people ask me that quite often, Penelope. I think the answer is that most of us Manhattanites wouldn't live anywhere else.

Don't get me wrong. I've been to many places on Earth, from the Arctic to Antarctica and back again. And I've been to hundreds of planets and dimensions. And no offense to all those lovely places, but New York is still the spot I call home.

Everything happens here. Every scientific discovery, every industrial revolution, every cultural explosion, and every culinary trend proves itself on this one island. And yes, everything happens TO Manhattan as well, since it seems that every super hero and super-villain needs to make an appearance on the streets of the Big Apple. This is really the heart of your question: Why would anyone RISK living in Manhattan?

As you say, it seems like every summer, aliens or Atlanteans or giant robots invade and try to lay waste to the city. Super-villains prowl the streets in

record numbers, all seeking to prey upon decent people. And having so many super heroes in town doesn't make life any easier either, since a knock-down, drag-out fight between two strong heroes can be just as devastating as a battle between heroes and mutant-hunting Sentinels.

But amazingly, New Yorkers feel safer than most other people on Earth do. That's because unlike everyone else, they know that there are super heroes just around the corner, ready to save them from catastrophe. So even with the constant threat of super-villainy looming over them, Manhattanites know that the Avengers will always be there to stop a bus crash or save people from a skyscraper's collapse.

Here in Manhattan, we recover very quickly from disaster. This hardiness stems from having to rebuild our city center every few months. Some of the best architects and engineers in the world live here, and they stay very busy building

new skyscrapers, bridges, and subway tunnels to replace those destroyed in battles between superpowered individuals. And you know what? The new buildings are usually better than the old ones were.

Manhattanites are also superlatively tolerant of their super-protectors. I've found that residents of

other cities are not nearly as willing to have flying cars and flying people cluttering up their skies. But Manhattanites welcome the new and the innovative with a zeal unmatched elsewhere in America. That's what makes our little town such a cultural and scientific hub.

Besides, the thin-crust pizza at Luigi's on Yancy Street is the best I've ever had.

Manhattanites
welcome the new
and the innovative
with a zeal
unmatched
elsewhere in
America.

EVENT DESCRIPTIONS

Like Reed says, everything does indeed happen in Manhattan. To simulate this, you can use the events on the Fate Cards to introduce a variety of surprises into your game. If you want some suggestions as to what events might occur relevant to a given card, you can use the ones listed here or make up your own.

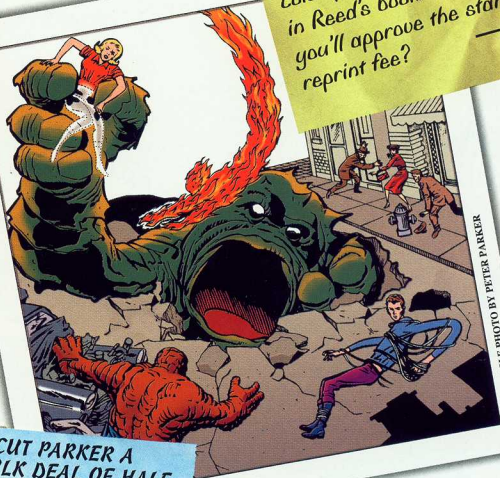
The events from the Fate Deck are listed on the next few pages in alphabetical order, with the character depicted on each card in parentheses. At the end of

the event description is the Calling associated with that event, as follows:

Event (Character): Effect of Event. (Calling)

Jonah— Here are some of the photos that Peter's taken of the Fantastic Four over the years. I thought we could use them for the color photo center spread in Reed's book. I assume you'll approve the standard reprint fee?

—Robbie



CUT PARKER A
BULK DEAL OF HALF
THE USUAL RATE.
I CAN'T BE LOSING
MY SHIRT ON THIS!
— III

DAILY EUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Accidental Revelation (Elektra): A character begins to blurt out a secret that a hero wants concealed. The hero must stop the character from telling all. (*Repentant*)

Achilles Heel (Annihilus): A flaw appears in a master plan. Interested parties have an exchange to respond before the flaw destroys the whole operation. (*World Domination*)

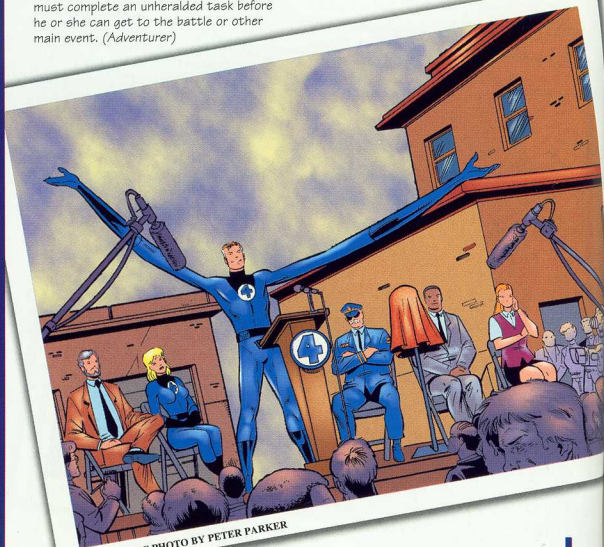
Adulation (Clea): The people clamor for the heroes to parade before them and accept their gratitude. They will turn against the heroes if their demand goes unfulfilled. (*Majesty*)

Arduous Labors (Hercules): The hero must complete an unheralded task before he or she can get to the battle or other main event. (*Adventurer*)

Armed Forces (Nick Fury): S.H.I.E.L.D., the U.S. Army, HYDRA, or some other armed organization shows up, its soldiers bristling with weapons. (*Soldier*)

Attraction of Attention (Polaris): Someone catches the action on film or via some other recording medium, potentially casting it in a negative light for the heroes. (*Outcast*)

Baptism by Fire (Cannonball): A fire or other crisis breaks out close to the youngest hero on the scene, imperiling innocents and giving that rookie a chance to shine. (*Youthful Exuberance*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Betrayal (Super-Skrull): A key character turns against a hero or villain, either attacking the individual or leaving him or her open to attack. (*Vengeance*)

Bigotry (Falcon): A gathering crowd turns against the heroes because of some real or imagined difference, such as a mutation or dissimilar appearance. (*Exemplar*)

Blind Obedience (Doctor Doom): A character with a high Willpower convinces other characters to follow, even if the consequences are dire. (*World Domination*)

Blinded by Rage (Venom): An individual responds to events by attacking violently and without quarter. (*Vengeance*)

Blow for Freedom (Black Panther): The heroes gain an advantage that helps them triumph over evil to save innocents. (*Majesty*)

Breakthrough (Beast): A hero discovers a key element in a problem that allows him or her to succeed where previous attempts have failed. (*Investigator*)

Cautious Acceptance (Hulk): Something a hero did causes characters to start losing their dislike for him or her, despite past grudges. (*Outcast*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Chance Windfall (Taskmaster): An unexpected opportunity for wealth or other enrichment presents itself, and those so inclined desire to attain it. (*Greed*)

Change of Heart (Gambit): Something happens that might make a hero with a troubled past reconsider his or her previous conversion to the side of justice. (*Repentant*)

Collateral Damage (Sabretooth): Persons uninvolved in a fight nevertheless suffer damage from the side effects of some attack, such as an energy blast or a gas cloud. (*Demolisher*)

Commanding Presence (Black Bolt): One individual rivets all attention on himself or herself because of impressive words or deeds. (*Majesty*)

Compromising Information (Black Widow): A hero discovers some hidden information that could expose a character's (or another hero's) darkest secret. (*Investigator*)

Costume Damage (Black Cat): A costume or piece of equipment becomes damaged, leading to embarrassment or even serious danger for a hero involved. (*Thrill-Seeker*)

Crisis of Faith (Professor X): Something a hero has believed to be true loses its merit in his or her eyes. This can distract combatants or even shift loyalties. (*Idealist*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Cry for Help (Iceman): A previously unnoticed character begs for assistance. The hero must address this request, even though it could prove a distraction from the business at hand. (*Responsibility of Power*)

Cunning Scheme (Green Goblin): A villainous character comes up with a dastardly new plan that could reverse all the heroes' accomplishments. (*Vengeance*)

Dismissiveness (Cyclops): Despite earnest efforts on the heroes' parts, no one believes they are right. Doubt clouds their heroic reputations. (*Idealist*)

Dramatic Entrance (Nightcrawler): A hero or character (perhaps one not previously involved) makes an appearance that surprises everyone. (*Adventurer*)

Emergency (Thing): Something threatens to fall, explode, catch fire, or erupt, requiring the heroes to save property or innocents. (*Responsibility of Power*)

Emotional Growth (Kymaera): The Narrator questions any activity he or she deems reckless, giving heroes a chance to rethink their actions before resolution. (*Youthful Exuberance*)

Endangered Innocents (Shadowcat): An individual's actions surprisingly threaten innocents with death, allowing an exchange for a rescue. (*Protector*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Energy Flux (Vision): Power fluctuates in the area, dimming the lights and possibly disrupting the power source of a robot, vehicle, or superweapon. (*Vestige of Humanity*)

Explosion (Meltdown): An individual's attack punctures a transformer, gas tank, or similar object, causing a huge explosion. (*Youthful Exuberance*)

Flight of Fancy (Wasp): Something (such as the arrival of faeries or sorcerers) happens to make the situation more magical or fanciful. (*Adventurer*)

Fractured Reality (Moon Knight): The situation abruptly shifts, either in reality or in the heroes' minds. The heroes must

quickly master their new situation. (*Peace of Mind*)

Glimmer of Compassion (Tigra): Those enraged or thirsty for blood suddenly come to grips with their passions, allowing their victims to go free. (*Animal Nature*)

Goons (Hawkeye): Thugs, either normal or dramatically abnormal, crash the party with homicidal intent. (*Adventurer*)

Hazmat Leak (Absorbing Man): An accident or crime unleashes a lethal gas or other hazardous material. The heroes have one exchange to act before those in the area feel the substance's full effects. (*Demolisher*)



EVENT DESCRIPTIONS

Help From Above (Archangel): The heroes notice endangered persons below, or are joined by airborne allies, such as flying heroes, the S.H.I.E.L.D. helicopter, or the like. (Protector)

Hero Worship (Thor): Someone decides to emulate a hero or heroes with enthusiasm far exceeding any reasonable assumption of safety. (Exemplar)

Hostage Situation (Colossus): The bad guys take prisoners, leaving no obvious method available for freeing the captives. (Protector)

Humanity Loss (Wolverine): Consequences from some action result in an individual's savage side coming to the fore. (Animal Nature)

Ignored (Wonder Man): No one notices or cares about heroic activity. This occurs even if the consequences of such ignorance are grim. (Gloryhound)

Inexplicable Disappearance (Giant-Man): Something or someone (probably a villain) disappears without a trace at a critical moment. (Explorer)

Lack of Support (Silver Sable): Expected help fails to arrive, leaving heroes in bad positions at a disastrously bad time. (Soldier)

DAILY BUGLE PHOTO BY PETER PARKER

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EVENT DESCRIPTIONS

Like-Minded Alignment (Sabra):

Apparently hostile characters suddenly find reasons to agree with the hero's position. (*Idealist*)

Link to the Past (Black Knight):

An event from a hero's past recurs with a modern twist—for example, a child of an old foe takes up the mantle of his or her parent. (*Exemplar*)

Manipulation (Shang-Chi):

Something happens to reveal the machinations of certain shadowy figures (perhaps from among the hero's allies) who have been controlling events to harm or exploit the heroes. (*Peace of Mind*)

Mass Panic (Leader): The crowd goes wild, and it's up to the heroes to control the panic—or escape during it. (*World Domination*)

Mastery (Scarlet Witch): Known difficulties or limits disappear for the moment, allowing one exchange of complete control. (*Uncontrolled Power*)

Misguided Soul (Agatha Harkness): A trusted ally follows some very bad advice to the detriment of the heroes or their associates. (*Mentor*)

Mistaken Identity (Nate Grey): The heroes discover that they have mistaken one person for another, or others mistake a hero for someone else. (*Outcast*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Natural Disaster (Storm): A typhoon, earthquake, lightning storm, or tornado occurs, imperiling everyone. (Protector)

Negative Influence (White Queen): Someone a hero is guiding takes his or her advice in the wrong way and comes out the worse for it. (Mentor)

Never Say Die (Captain America): An individual who might otherwise black out or give up finds an inner reserve that enables him or her to persevere. (Idealist)

New Disciples (Stick): A group of converts to the cause arrive, hoping to help the heroes or characters conquer the challenges facing them. (Mentor)

New Discovery (Mister Fantastic): Something heretofore unimagined appears after an investigation, beckoning those nearby to explore it. (Explorer)

No Restrictions (Sersi): Some crucial laws of man or nature are surprisingly suspended, allowing complete freedom. (Thrill-Seeker)

Out of Control (Havok): An individual's power goes awry, exceeding both its normal capacity and the hero's ability to control it. (Uncontrolled Power)



EVENT DESCRIPTIONS

Overload (Rogue): Someone or something absorbs a great deal of power and cannot control it, creating imminent danger of widespread damage. (*Uncontrolled Power*)

Personal Tragedy (Phoenix): Some type of disaster (anything from a rogue energy blast to the loss of a loved one) strikes a person close to a hero's heart. (*Guardian*)

Police Sirens (Electro): The police arrive on the scene, bringing with them any assumptions they have made based on potentially inaccurate reports. (*Greed*)

Power Surge (Machine Man): A power conduit (either an object or an individual)

taps into a source of energy, jacking up its output tremendously. (*Vestige of Humanity*)

Premature Exposure (Luke Cage): Whatever a hero expects will bring personal glory fails to do so, trapping him or her in an embarrassing situation. (*Gloryhound*)

Public Accolades (She-Hulk): The people recognize and laud a hero's actions. (*Gloryhound*)

Pyrrhic Victory (Magneto): Whatever seemed like a victory comes with a high cost, such as an unexpected serious injury or loss of face. (*World Domination*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Reckless Leap (Psylocke): A hero's action appears to succeed, but turns out to have surprisingly dangerous consequences. For example, the hero may have unknowingly triggered a trap or activated a secret defense system.

(Thrill-Seeker)

Redemption (Ant-Man): An event reveals that past crimes have been forgiven, either in the eyes of the law or in the hero's heart.

(Repentant)

Refusal of Authority (Sub-Mariner):

Counter to expectations of allegiance, an individual's subjects or underlings rebel.

(Majesty)

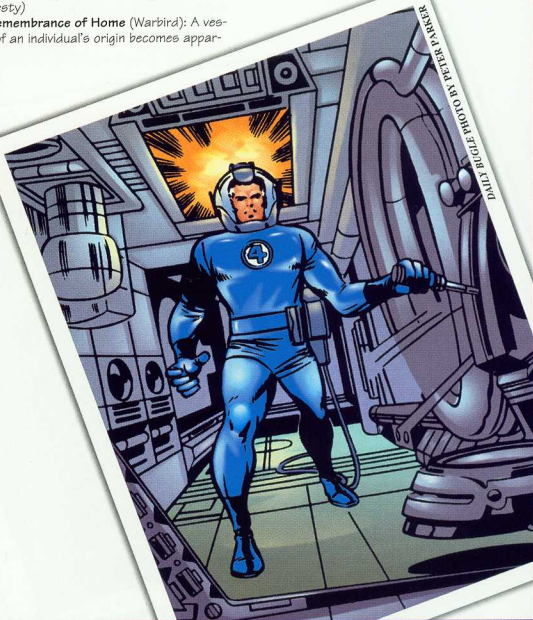
Remembrance of Home (Warbird): A vestige of an individual's origin becomes appar-

ent, bringing with it reminders of earlier days. (Vestige of Humanity)

Rescue (Daredevil): Some outsider rescues a hero or character despite personal peril. That individual may then join the rescued person's side. (Guardian)

Retributive Strike (Loki): An individual gets a boost on any attack against his or her most hated enemy, or against someone or something that enemy values. (Vengeance)

Rift (Moondragon): A real or figurative rift opens in the environment, allowing or blocking access. (Explorer)



EVENT DESCRIPTIONS

Rookie Mistake (Jubilee): An inexperienced individual's action seems an obvious mistake to those more experienced, but their warnings come too late. (*Youthful Exuberance*)

Sacrifice (Adam Warlock): A chance for victory presents itself, but only if a hero is willing to suffer tremendous damage or endure some other major disaster. (*Vestige of Humanity*)

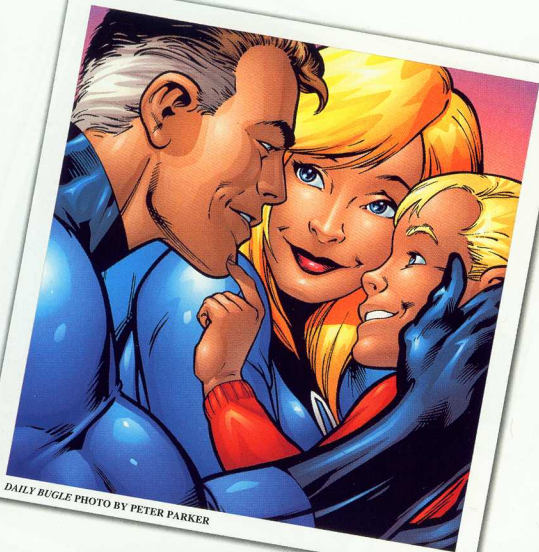
Safe Haven (Doctor Strange): A hero finds an area safe from danger that provides either an escape route or a temporary shield from attacks. (*Guardian*)

Scent of Prey (Werewolf): A hero finds a clue to the location of a pursued subject. Alternatively, the hero's action may betray his or her own location. (*Animal Nature*)

Setback (Forge): Where success seemed imminent, a new problem appears. It threatens to undo all the individual's accomplishments to date. (*Investigator*)

Significant Other (Invisible Woman): A loved one arrives, almost certainly right in the path of danger. (*Guardian*)

Something in the Sewers (Morbis): A boon or threat comes from beneath the ground; perhaps a hero's action reveals either a monster or an escape route. (*Animal Nature*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Soul Searching (Silver Surfer): Something in the hero's thoughts provides the key to the current dilemma, prompting a new interpretation of old memories. (Repentant)

Strong Evidence (Doc Samson): A hero discovers a lead that, if followed, should bring him or her to the answers sought. (Investigator)

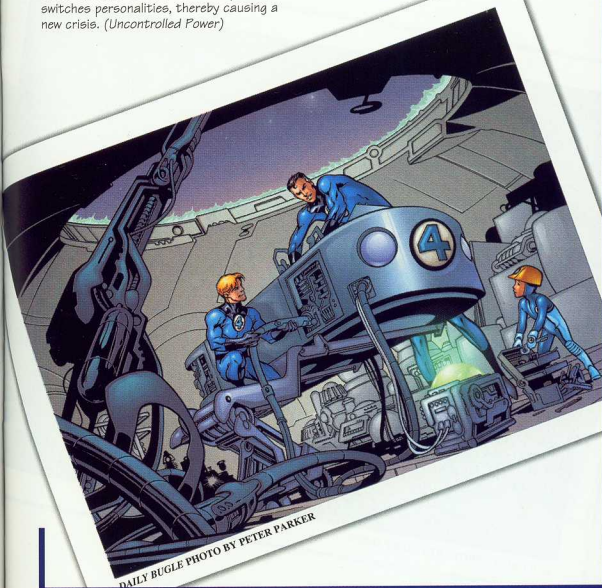
Structural Collapse (Juggernaut): A big, heavy object (such as a building or a bus) crashes in upon itself, damaging those caught inside or underneath. (Demolisher)

Sudden Transformation (Franklin Richards): Without warning, a hero or character changes form, reveals new powers, or switches personalities, thereby causing a new crisis. (Uncontrolled Power)

Target of Opportunity (Bishop): The heroes get one chance to strike directly at the source of the problem, but this window will close on the next exchange. (Soldier)

Team Unity (Banshee): A single decision by one team member benefits everyone. Such a decision might be to direct all attacks at a ringleader instead of at his goons, for example. (Mentor)

The Press Arrives (Human Torch): Journalists appear on the scene seeking hot stories, regardless of whether the heroes want them there. (Gloryhound)



EVENT DESCRIPTIONS

Time to Reflect (Wolfsbane): A hero gains extra time to think through a complicated situation and come up with the best choice of action. (*Peace of Mind*)

Too Many Crises (Iron Man): More dangerous events occur than there are heroes present, so the latter must make some tough choices. (*Responsibility of Power*)

Transcendence (Iron Fist): An individual overcomes a hindrance or limit for one exchange, showing hidden reserves of confidence. (*Peace of Mind*)

Uncharted Waters (Stingray): A hero discovers a previously unexplored area and realizes that his or her knowledge may not apply in this new space. (*Explorer*)

Unprotected Valuables (Kingpin): Someone has left valuable items unguarded—apparently easy pickings for those inclined to steal. (*Greed*)

Unstable Ground (Super-Adaptoid): The earth threatens to collapse during the exchange, knocking some or all of the combatants off their feet. (*Demolisher*)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Validation (Captain Britain): A hero finds support from officials and backing from the law for his or her cause. (Exemplar)

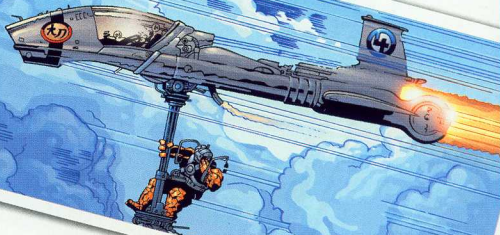
Warning of Danger (Spider-Man): The heroes anticipate a threat (such as a villain's attack or a gas main springing a leak) before it occurs. (Responsibility of Power)

Weapons Cache (Cable): Some activity reveals a heretofore unseen supply of weapons or ammunition that might turn the tide. (Soldier)

Wild Ride (Nova): A vehicle suddenly lurches forward as if impelled by its own demons. Alternatively, an avalanche or storm propels the heroes into danger. (Thrill-Seeker)

Worthlessness (Rhino): Nothing attempted is successful unless the hero first faces his or her own fears. (Greed)

Xenophobic Hysteria (Quicksilver): The mob turns ugly and becomes bent on persecuting someone who does not conform. (Outcast)



DAILY BUGLE PHOTO BY PETER PARKER

EVENT DESCRIPTIONS

Four special promotional cards accompanied the MARVEL game's release. If you are using those cards, you may wish to incorporate these somewhat wild events as well:

Aliens Exposed (Lockheed): An event reveals someone in the area to be a Skrull, Dire Wraith, or other alien life form, possibly with hostile intent. (*Guardian*)

Eternal Torment (Ghost Rider): Demons attack a hero and attempt to control him

or her, or at least to force abandonment of moral limitations. (*Vengeance*)

The Impossible Occurs (Impossible Man): Whatever could not happen under normal circumstances does, and with the greatest possible fanfare. (*Thrill-Seeker*)

Unlikely Heroism (Deadpool): A villain or a reluctant hero suddenly gains confidence and the moral imperative to fight for what is right. (*Repentant*)



EVENTS FROM THE PLAYERS

In the MARVEL game, the heroes are not merely reactive machines. The players participate in the storytelling right along with the Narrator. In fact, if the Narrator so desires, he or she can let the players take a more active role in story creation by allowing card substitution. To incorporate this rule into play, the Narrator should declare and explain it at the start of the game.

In one exchange per game session, each player can respond to the Narrator's draw with card substitution. That is, when the Narrator draws a card from the top of the deck at the beginning of the exchange, a player can place a card from his or her hand on top of that one. The new card becomes the Narrator card for the exchange. Each player selects the exchange when this occurs independently of the others, but multiple players can exercise this option on the same exchange if desired. Any player may negate other players' substitutions by playing additional cards in the same exchange, but the number of substitutions any one player makes may not exceed his or her hero's Edge score. No player may substitute cards during more than one exchange per game. Players redraw all substituted cards as if they had been played for actions.

Such cardplay may change events, at the Narrator's discretion, by introducing some version of the event listed on the substituted card. Players seeking reaction bonuses can use this to great advantage. For example, a player could play a card with his or her hero's calling on it, thereby steering the story in a direction that makes that particular hero look awfully good. To a certain extent, this is a one-shot chance for everyone at the table to use Reality Warping. When a player does this, the Narrator still gets to decide whether the new event is appropriate. If so, he or she incorporates it into the story and play continues. The player does not get to make up the actual event, however. He or she can make a suggestion as to how it might occur, but the Narrator can always choose another path if desired.

Among the other aspects of the Narrator card that can change by this means are: who recovers cards that exchange, the value of the opposition bonus characters receive, and Doom card availability. (The Narrator places any Doom card used for card substitution into the Doom Bank at the end of the exchange.)

More than one player can substitute a card on the same exchange, as long as none of them have previously used card substitution in that game session. In other words, if one player substitutes a card for the Narrator's draw, another player can immediately substitute a different card. Any other player can also play a card for the same effect. Note that a player who has already substituted one card may do so again in the same exchange to alter what another player has done, but no player may perform more card substitutions than his or her hero's Edge score. When the "bidding war" is over, the last card played becomes the Narrator's draw for the exchange, and play continues.

Regardless of what happens, no player can substitute cards in more than one exchange per game session. After each card substitution, the player redraws as if he or she had attempted an action.

Suppose a player of Mister Fantastic is having a hard time dealing with Annihilus's latest incursion from the Negative Zone. Awash in mindless minions of Annihilus, Reed punches a gizmotron. At the start of the next exchange, his player lays down the card featuring Moondragon with the event called "Rift." The Narrator weighs the plausibility of this player-driven event, then decides to have the player make a desperate Intellect action to see whether Reed thought to include a dimensional gateway in his newest invention. The player succeeds, and the gizmotron draws the minions flapping and croaking back to the Negative Zone. Since the event triggers Mister Fantastic's Explorer calling, the player gets a response bonus, which he or she can use as desired. Most likely, Reed'll pick the new gadget option.



DEAR DR. RICHARDS

When we play basketball, we have to hit the showers afterward. But you don't seem to sweat at all, and you stand right next to a fireball! Why don't you sweat?

—*Shauwan Gale*
age 15
New York, NY

Well, I do, Shauwan. Fighting supervillains is quite tiring, and we superheroes work up quite a sweat. But you're right—no one ever seems to notice. We don't appear to perspire because of two words: unstable molecules.

I can't claim credit for much in this world, but I am particularly proud of this discovery. To understand what it means, you first have to know that a molecule is the smallest unit of any compound, and that a compound is the chemical union of atoms of one or more elements. For example, a molecule of water consists of two hydrogen atoms joined to one oxygen atom. That H_2O molecule is stable; that is, it can't change into anything else on its own.

An unstable molecule is one that can adapt to its surroundings. Essentially, I teach a molecule to conquer something called the Heisenberg Uncertainty Principle (the explanation of which I'll save for another column) and change into what it needs to be. This change

occurs within a certain set of boundaries corresponding to the conditions I anticipate.

A costume made of unstable molecules adapts to the wearer's superpowers. The molecules in my brother-in-law's costume can handle him coating himself in flame because of this. The molecules in Sue's costume can turn invisible, and the ones in mine can stretch with me. The unstable molecules in our outfits are chameleonic; that means they can adapt to changing conditions faster than you can perceive that the conditions have changed.

A few nice side effects of this chameleonic nature have evinced themselves. First, the fabric is a little harder to tear than normal clothing of the same weight. Second, it makes nice, form-

fitting costumes and enhances physical characteristics through increased support. (This makes a codger like me less embarrassed about going out in public wearing tights.) And third, it makes us look like we don't perspire. The fabric achieves this mirac-

ulous feat by absorbing perspiration into—you guessed it—its unstable molecules. The fibers contain this perspiration as miniscule droplets, eventually forcing it either out through the front of the outfit (where it can evaporate) or in through the underside (where the tiny droplets reintegrate into the wearer's body). The latter option leaves us slightly better hydrated than we would be without the fabric. And believe me, after you've gone fifteen rounds with Terrax the Tamer, you can use all the water you can get.

So that, in a nutshell, is why you never see us sweat.

**We don't appear
to perspire
because of two
words: unstable
molecules.**

In most fights, players don't need to worry about hero exhaustion except in the sense of running out of cards. Combats don't usually last long enough for anyone to care about fatigue. But every now and then, there's a battle in which the combatants are so evenly matched that it looks like it will go on forever. (Try pitting Sabretooth against Wolverine and you'll understand the concept.)

In those cases, the Narrator may want to bring exhaustion into play. Just about the time the players are getting tired of the fight, the heroes probably will too. A good rule of thumb might be that exhaustion begins after 10 exchanges of combat, but that's up to the Narrator.

When the Narrator decides to invoke the exhaustion rule, everyone involved in the battle must make a *daunting Willpower action to avoid fatigue*. (Characters add their Willpower scores to the value of the Narrator card.) Those who fail are exhausted; that is, their Willpower scores become the maximum possible values for any pre-cardplay action score or opposition score they generate thereafter. So an exhausted combatant with Strength 15 just can't make full use of it anymore without some rest. Powers are limited in the same fashion; an overtaxed hero with Fire Control 18 and Willpower 8 finds his or her flames running at less than half their usual power. (Of course, if Willpower happens to be the individual's highest score, he or she won't even notice fatigue setting in.) Note that this rule applies only to action or opposition scores, so it won't affect defense, Health, aura checks, or anything else that doesn't involve actually generating such a score.

If the battle still goes on too long after the Narrator invokes the exhaustion rule, he or she can require another exhaustion check for everyone, but this time it's a *desperate Willpower action*. The next one is superhuman, then unfathomable . . . eventually someone has to drop as more combatants fail the check.

COSTUME DAMAGE

People aren't the only things that wear out in battle. Serious damage can also ruin costumes.

If an individual suffers massive damage from an invasive source—Wolverine's claws, perhaps, or the Human Torch's fire—his or

her clothes may be in danger too. The Narrator may ignore this effect any time it doesn't matter, but damage of 25 points or better is usually enough to take out a hero's costume or street clothes in addition to the effects it has on his or her body. No amount of damage is going to strip a hero bare—you should be running a game that the Comics Code Authority would approve, after all—but his or her costume may be shredded, scorched, or otherwise ruined.

Costumes made of unstable molecules are another matter—quite literally, in fact. Fabric made of unstable molecules is so adaptable that costume fatigue doesn't occur unless the wearer suffers at least 35 damage points. Quite often, such a costume is much more durable than its wearer.

This, of course, begs the question of who wears unstable molecules. They're not cheap, after all. In some sense, it comes down to whether a hero knows Reed Richards or can afford to buy from him. Members of the Fantastic Four, Alpha Flight, the X-Men, or the Avengers are probably going to end up in costumes made of unstable molecules, whether or not they want to (just ask Firestar). But some well-known heroes (Spider-Man among them) don't wear such outfits. The wall-crawler doesn't really need a special costume, so he doesn't spend the money for one. Nevertheless, if a player wants his or her hero to have unstable molecules, the Narrator should be generous. Individuals who risk their lives to guard humanity should be able to wear whatever they please.





Here's one for you: Which falls faster, a ton of lead or a ton of feathers?

*—Doug Lock
age 16
Muir Island, Scotland*

That's clever even for someone with a unique brain like yours, Doug. I hate to tell you, but that's an old joke—even among us humor-challenged scientists.

The answer is: It depends on whether the feathers are bound together. Feathers act exactly like lead when condensed into a compact size and shape. So a one-ton block of tightly compressed feathers will fall about as fast as a ton of lead, or a ton of almost anything else.

As you undoubtedly know, Doug, all objects fall toward Earth with pretty much the same acceleration. We've known this for a long time; Galileo Galilei proved it in the 1500s. Any object falls toward the ground with an acceleration of 32 feet per second per second; that is, its speed increases as it falls. So that ton of lead is going to drop at 32 feet per second in the first second, at 64 feet per second the next second, at 96 feet per second the third, and so on, picking up speed at a measured rate as it falls to Earth. So does the ton of feathers.

But it's not quite that simple. Air resistance causes friction on objects falling through the atmosphere, which tends to slow them down, counteracting the acceleration of gravity. Depending on the distance fallen and the object's mass and

volume, the two effects may counterbalance one another at some point during the fall, resulting in a constant speed called terminal velocity. Different-sized objects reach different terminal velocities at different times.

Another factor is air currents, which can have a major effect on small, light objects. That's why it matters whether the feathers are packed together. If they aren't, even the lightest of winds will push against the only-slightly-heavier-than-air feathers, blowing them up, down, and around. So individual feathers won't reach the ground until well after the block of lead does.

Many other factors also affect how feathers fall, including tumbling, the "parachute" effect (which comes into play for loosely bagged falling items), and prevailing winds. This last, of course, assumes that the winds are incapable of affecting the lead block. This is a reasonable assumption unless superpowers are involved. The god Thor and the X-Man Storm can both whip up winds that could lift a ton of lead—or just about anything else.

Finally, we're assuming that the objects are falling toward the Earth. If they're falling toward the sun, which has a gravity some twenty-eight times that of Earth, they'll fall a lot faster (assuming they don't instantly fry into their component atoms). And if they're falling toward our Moon, they'll fall slower, since the Moon's gravity is one-sixth that of Earth. If the individual feathers and the lead are floating in space by themselves, the less massive feathers will fall toward the block of lead, since it's the highest-mass object around.

So I hope that answers your question, Doug. Of course, I'm guessing you knew all that and were just testing the old man. I owe you one.

FALLING OBJECTS

Falling causes no damage. Landing, on the other hand, can kill.

For each story (10 feet) an individual falls, he or she suffers 10 damage points upon landing, assuming something like concrete is what finally breaks the fall.

Otherwise, the damage per 10 feet fallen is equal to the Material Strength of the object landed upon. So landing on leather (say, a cow) causes 4 damage points per 10 feet fallen, since leather is a Material Strength 4 substance. Landing in water (Material Strength 0), on the other hand, doesn't hurt at all. (Okay, it probably hurts a lot, but it doesn't cause damage unless the Narrator just can't stand that level of disbelief. In that case, the hero suffers 1 damage point per 10 feet fallen.)

Regardless of what the hero lands on, he or she can make an unfathomable Strength action to avoid damage altogether. (This means that a hero with Strength 28+ never suffers damage from a fall, but there aren't many of those.)

For each five stories fallen (rounding up),

the individual has one action in which to try to prevent the impending crash. (Technically that's about a second per action, but we'll assume the hero can remain supremely focused while falling.) Nearly any means of superpowered locomotion (such as Flight, Lightning Speed, Teleportation, or the like) can stop a crash, as may certain other powers like Air Control and Kinetic Control. And of course, a flying person can always catch the falling individual with no damage to either party, since this is a comic book universe.

Terminal velocity being—well, terminal—if a hero's cards (or a character's Health) drop to zero from a long fall, he or she suffers serious injury (see "Serious Injury" in the **Game Book** and "Critical Injuries and Death" in this book).

A very heavy falling object (such as a plane or a building) absorbs a like amount of damage, depending on the distance fallen: 10 damage points per story for concrete, or the object's Material Strength in damage per story for any other material. Should the

object fall on a person, the victim suffers the same damage as did the object, unless he or she dodges—an easy Agility (Material Strength) action. Generally, such an event is a firing distance attack, though if the ceiling overhead crumbles as a result of a building collapsing, that could be a striking distance attack.

Someone falling toward a planet with a different gravitational force than Earth's may suffer more or less damage than the norm. On a planet with a significantly higher gravity, double the damage; on one with a much lower gravity, there may be no damage from falling at all. In the latter case, the Narrator could also grant everyone the Leaping power at an intensity equal to his or her Strength score.

Of course, heroes who can fly ignore most of this (see "Flight").





Editor's note: Dr. Richards is off the planet this week. In his absence, we turn to Dr. Henry McCoy, a heralded biochemist and sometime Avenger who works under the codename of Beast. Dr. McCoy was asked this question at the recent MIT Symposium on Genetic Anomalies, and we present his verbatim answer.

How can Archangel fly? I've spent hours trying to simulate his flight with my 3-D rendering program, but it just doesn't seem possible that he could fly with wings that size. Can you help?

—Yen Loo
age 16 (and a senior at MIT)
Cambridge, MA



Your proficient and meticulous inquiries on matters of aerobatics are to be lauded, young man. I too have gawped at my perennial confrère Warren with befuddlement, conjecturing as to how he could mantle his pennaceous extremities and ambulate into the atmosphere. I have alighted on some meritorious inferences, but to assimilate them, you first need to apprehend how avians aviate.

Most members of the Linnaean class Aves locomote through application of their pennons. Ornithological cogitation

has determined that sinews affix the birds' paramount locomotive feathers to the os of the outer forelimb, as supporting feathers attach to the upper forelimb. Each feather has its own musculature, providing independent motility. The more puissant muscles that propel the wings are anchored to the sternum.

This sturdy aggregation of muscles allows the avicular organism to shear its feathers up and down in an expeditious oscillation. When up, the plumules allow air to transmigrate through them, but when down, they forestall the air from passing. Consequently, the bird impels itself into the firmament.

For this ambulation to succeed, the bird must be quite lissome and compact. So the ossa of the cranium, cauda, pennons, and legs are vacuous. This hollowness allows the animal's locomobility to upbear it above *terra firma*.

As for my compadre Archangel, his bones are also alveolate. But I'm sure the young querier's mass calculations reveal that Archangel could only aviambulate if he weighed less than 15 kilograms. And though he is far less ponderous than he'd be with normal bones, Archangel is most prodigiously no 28-pound weakling.

Once when Warren underwent invasive surgery, we ascertained that his ossicles contained millions of diminutive air sacs adjoined to his lungs, much like the alveoli at the termini of his bronchioles. We speculate that when he flies, these sacs inflate and ventilate his marrow conduits. This hyperdistention elasticizes his ossicles, thus counterbalancing the massivity of his skeletomuscular frame.

So that's Warren in a nutshell: light in the bones, light in the feathers, light in the head. (Sorry Warren—I couldn't resist!)

Aerial fights have the advantage of being far from the madding crowd, except in the all-too-frequent case of flying people shooting at each other among the rooftops. They have the disadvantage of that long drop at the end. An unconscious aerial combatant falls to the ground, unless something stops him or her from reaching it (see "Falling Objects").

Aerial combats have many dimensions, most of which give the edge to those with skill at flying. **Any individual with skill in Aerial Combat or Piloting may use it to modify the difficulty of any physical action that takes place in the air.** (The Piloting skill, of course, comes into play only when the individual is in a plane.)

Anyone with the Flight or Wings power can use the power's intensity in place of either Agility or Strength for the purpose of generating action scores in the air—assuming, of course, that the person isn't confined to a small area of airspace.

Occasionally, a novice gains the power to fly through strapping on a jetpack or some other such means. Individuals unused to flying suffer a penalty of one difficulty level (4 points) to any physical action that takes place while airborne.

Bad weather adds one level of difficulty to any action or counteraction in the air. Those with the Weather Control power can ignore this penalty.



(intensity 10) with his downy wings. Still, no one would question his 14 maneuverability. So how do you distinguish between flying speed and maneuverability?

If desired, you can give each flying hero a Flight code, which is much like an ability code, to represent maneuverability. A hero with an A code can do loop-the-loops, dodge around missiles, and perform other such tricky maneuvers. A hero with an X code probably can only hover and fly in a straight line. If one hero is trying to avoid another in the air, the one with the higher code will usually prevail.

With this rule in play, the Flight intensity of some heroes drops, because that score now reflects only airspeed. Some examples of heroes with these revised scores plus codes are given on the table below.

FLIGHT INTENSITIES AND CODES

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>X</u>
1-2	Wasp	Sub-Mariner	Machine Man	Invisible Woman	Vision
3-4	Lockheed	Green Goblin	Banshee	Techno	Fin Fang Foom
5-6		Sauron	Wonder Man	Mojo	Absorbing Man
7-8	Falcon	Storm	Rogue	Grim Reaper	Red Ronin
9-10	Archangel	Human Torch		Sentinels	Galactus
11-12			Dr. Strange	Polaris	
13-14		Dr. Doom	MACH-1	Electro	Super-Skrull
15-16		Iron Man	Magneto	Cannonball	
17-20		Quasar	Annihilus	Thor	Graviton
21-30	Silver Surfer	Northstar			

DEAR DR. RICHARDS



I have a question about Batroc's Brigade. If one of its members is named Zaran the Weaponsmaster, why does the group need another guy named Machete? You figure that a Weaponsmaster knows how to use a machete, am I right?

—Hallie Takahama
age 15
New York, NY?
(posted from Colorado)

Wow. You certainly know your super-villain trivia, Hallie. You could hardly know more if you associated with a bunch of super-villains yourself.

For the benefit of our other readers, Batroc's Brigade is a volatile assortment of villains led by the agile Georges Batroc. One longtime member of the Brigade is Machete, a man who wields a wide-bladed sword. Another member is Zaran the Weaponsmaster, a man who knows how to use all weapons.

Hallie's question suggests that the Weaponsmaster's skill with all weapons obviates the need for someone who can use only a machete. Though this might seem plausible, economic theory suggests otherwise. Here's why.

Imagine that you and I are nations, Hallie. Imagine that we both manufacture the only two commodities that exist, shoes and socks. I make shoes much cheaper than you do, and you make socks cheaper than I do. It behooves us to trade,

since if you make only socks, you can then devote your precious resources to manufacturing more of them. The same goes for me and shoes. Got that?

Okay, now imagine that you're more efficient than I am at making BOTH shoes and socks. Should you still trade with me? The answer, surprisingly, is yes. Let's assume shoes have a higher profit margin (that is, you make more money per shoe manufactured) than socks. Therefore, if you devote all your resources to making shoes and let me worry about the lower-margin socks, you'll make more money than you would if you make both and don't buy any socks from me.

This is why some nations specialize in high-tech manufactured items—planes, microchips, weapons—that sort of thing. They can make more money for the effort invested than they would if they tried to do it all. Instead of choosing to be self-sufficient, they decide to import some low-cost items and export some high-priced items.

All right, back to the super-villains. Picture Zaran the Weaponsmaster as I described you in the shoes-and-socks example. Let's presume he's better than Machete at everything, including the use of a machete. Then think about a machete. It's a simple hacking tool that requires little finesse or talent to use. Let's say Zaran wants to use a high-power composite laser crossbow. Does that mean he wants to use the machete at the same time? Of course not. While Zaran's using the laser crossbow to cover his escape, Machete can be hacking his way through a door. Zaran benefits from having both activities happen rather than having to choose between them. That, I presume, is why he keeps Machete around.

The "Skills" list in the **Game Book** includes one that's unique: Scientific Genius. This skill allows a hero to have many science skills, but no others. Its description is as follows:

Scientific Genius: This dedication to science over all other pursuits applies only if the hero has an Intellect score of 8 or more, an Intellect code of A, and an X code in all other abilities. With Scientific Genius, the hero starts with up to eight Intellect skills, all of which must have the italicized word *science* in their descriptions. There is no limit to the number of skills a Scientific Genius can acquire, as long as all are sciences.

If you wish, you may add the following three optional Genius skills to the list. All of these parallel Scientific Genius.

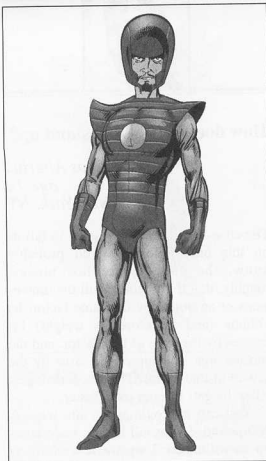
Acrobatic Genius: This dedication to quickness over all other pursuits applies only if the hero has an Agility score of 8 or better, an Agility code of A, and an X code in all other abilities. Such a hero can start with up to eight Agility skills. There is no limit to the number of skills an Acrobatic Genius can acquire, as long as all are Agility-based.

Creative Genius: This dedication to art and communication applies only if the hero has a Willpower score of 8 or better, a Willpower code of A, and an X code in all other abilities. Such a hero can start with up to eight Willpower skills. There is no limit to the number of skills a Creative Genius can acquire, as long as all are Willpower-based.

Gladiatorial Genius: This dedication to hand-to-hand combat over all other pursuits applies only if the hero has a Strength score of 8 or higher, a Strength code of A, and an X code in all other abilities. Such a hero can start with up to eight Strength skills. There is no limit to the number of skills a Gladiatorial Genius can acquire, as long as all are Strength-based.

You may also want to consider including skill package options for heroes whose genius spans more than one ability. To qualify for one of these skill packages, the hero cannot have any powers other than those granted by equipment. In that case, a player can add these skills to the options available:

Renaissance Man (or Woman): This dedication to expression over all other pursuits applies only if the hero has both Intellect and Willpower scores of 8 or better (both with A codes), plus X codes in Strength and Agility. Such a hero can start with eight Intellect



and/or Willpower skills. There is no limit to the number of skills a Renaissance man or woman can acquire, as long as all of them are Intellect- and/or Willpower-based.

Weaponsmaster: This dedication to weapon use over all other pursuits applies only if the hero has both Strength and Agility scores of 8 or better (both with A codes), plus X codes in Intellect and Willpower. Such a hero can start with eight skills from this list: Archery, Artillery, Axes, Boomerangs, Clubs, Contingent Attack, Flinging, Garrotes, Hammers, Knives, Marksmanship, Martial Arts Weapons, Ricochet, Shields, Slings, Spears, Swords, Whips. There is no limit to the number of skills a Weaponsmaster can accumulate, as long as all of them are on this list or seem related to this list. (For example, the Juggling skill from the **Avengers Roster Book** would be included.)

Skillmaster: The hero is good at everything terrestrial. He or she must have a minimum score of 8 in all four abilities and A codes in all of them. There is no limit to a Skillmaster's acquisition of skills.



How does Giant-Man stand up?

—*Palos Alterius*
age 14
New York, NY

The cube-square law does seem to fail us on this one, Palos. As you probably know, the cube-square law means, roughly, that if you change all the dimensions of an object by the same factor, its volume (and therefore its weight) increases by the cube of that factor, and the surface area it occupies increases by the square of that factor. Thus, as a man gets taller, he gets heavier even faster.

You can approximate it this way: A 200-pound, 6-foot-tall human male takes up an estimated 2 square feet of floor-space when standing up. That works out to 100 pounds of force per square foot. Now triple that person's dimensions to get an 18-foot giant. Suddenly you have someone who's thrice as tall, thrice as wide, and thrice as deep. That's 27 times the weight, for a total of 5,400 pounds (200 pounds times 3 cubed). He now stands on 18 square feet of floor-space (2 square feet times 3 squared), since he's taking up a space thrice as wide and thrice as deep as the original 2 square feet. But 5,400 divided by 18 comes to 300 pounds per square foot. Imagine carrying three times your own weight all the time, and how much that would hurt your knees.

And that's only for a height of 18 feet. People like Giant-Man and Atlas and the Growing Man can sometimes reach 60 feet or more! That would amount to a 6-

foot man growing to ten times his regular height. He would weigh a colossal 200,000 pounds and occupy floorspace of 200 square feet, which means he'd be carrying half a ton per square foot! The normal human body just can't stand that much strain.

Some bodies can, of course. Certain oversized creatures fully obey the cube-square law. For example, the mole monsters and the dragon Fin Fang Foom take up much more square footage upon the ground than does Giant-Man. They also have proportionally thicker limbs than those of smaller creatures. And some have wings or other buoyant body parts to counteract some of the weight.

But Giant-Man manages to stand upright without these advantages. To understand why, you should consider that people like Giant-Man just aren't normal—not in the sense of size. They can't possibly weigh 100 tons, or the pavement below them would shatter. That's where Pym Particles come in.

Pym Particles (named for their discoverer, Dr. Henry Pym, a.k.a. Giant-Man) are subatomic particles that enable objects to change size. When these particles permeate an object and make it grow, they absorb some of its mass. Hence, some of Giant-Man's mass is dispersed on a subatomic level.

It also works the other way. When Pym Particles shrink an object, they imbue it with additional mass. So the Wasp's weight increases slightly relative to what it should be for the size she achieves. This is just enough to keep her from blowing away in a strong breeze. The extra mass also allows her to hit with a fair amount of force.

So there you have it, Palos. Giant-Man can stand up because the universe is designed to keep him standing. Why this is the case is a question for the ages.

Giant monsters and giant men stride through Marvel Earth on a regular basis. They are problematic in several ways, but you can use some of these rules to make them more playable. Generally, if it's taller than 20 feet or older than 200 years, give it a break out of deference.

GIANT HINDRANCES

If the Narrator desires, everyone over 20 feet tall automatically suffers the **Monstrous hindrance**, since people tend to run from giants. People like Giant-Man, who make a public business of being really tall, may get to pass on this hindrance, but heroes must earn such exemptions. If you want trust from the people, get down to their level. (On a similar note, it's hard for tiny people to convince anyone of anything, so dropping a small hero's Willpower to 0 for purposes of persuasion makes some sense.)

An especially mean Narrator can also inflict the Bruiser hindrance on a super-sized individual attacking someone man-sized or smaller. For a hero with Size Alteration, this size-based Bruiser hindrance should mandate use of the individual's original Agility rather than the size-adjusted value for determining action scores in physical combat.

HEALTH OF GIANT MONSTERS

Published adventures and roster books often show giant monsters and really big animals with Health ratings greater than 10, even though they do not have the Edge scores that would normally correspond to such values. For example, the mole monster from the adventure "Shakedown" in the *Game Book* has a Health rating of 30 and an Edge of 0. A high Health is reasonable here because the creature's increased mass can absorb a lot of damage. However, a mole monster is no Wolverine when it comes to experience. It's barely got a brain in its head. So there's no reason to give it a 3 Edge to match that 30 Health (the equivalent of a 5 Hand Size). The Narrator can always zero out an unintelligent monster's Edge score and still leave its Health rating high. Intelligent monsters like Fin Fang Foom, however, should retain the Edge scores (3, in his case) that go with their Health ratings.



SIZE AND PILE-ONS

One of the coolest rules in the MARVEL game is the pile-on. By jumping on an opponent together, several heroes can take down a foe tougher than any one of them. Each attacker gives +1 to all the attackers' action scores, so five heroes piling on a bad guy each get a +5 attack bonus. The downside of this is that the bad guy can direct a single attack at everyone who is pounding him, though at a -1 penalty per attacker.

However, it strains credibility to have a hundred soldiers attacking a single monster, each gaining +100 to his or her attack. To prevent such lapses of reality, you may use the target's size to limit the number of attackers who can pile on an individual. This limit assumes that all attackers can reach the target, so fewer landbound heroes might actually be able to attack a standing Sentinel than the chart indicates.

Maximum Attackers in a Pile-On	
Size of Target	
Wasp (1 foot)	1
Lockheed (3 feet)	3
Captain America (6 feet)	6
Sasquatch (10 feet)	10
Sentinel (20 feet)	15
Red Ronin (100 feet)	20

DEAR DR. RICHARDS

Let me get this straight: Thor is a GOD?

—Donny Warren
age 10
LaCrosse, WI

I can't tell whether you want the answer to be yes or no, Donny. But it's yes—by at least some definitions, my friend Thor is a god.

The Avenger you know as Thor is one of the Asgardians—once the superpowered patrons of an ancient people called the Vikings. They believed that Thor, God of Thunder, caused the storms that blew their longboats across the North Sea. I'm not sure whether Thor himself ever believed that, but he certainly had the power to bend thunder and lightning to his will. To the ancient Vikings, this was clear evidence of divinity, as were the unimaginable power and near-immortality of all the Asgardians. So they worshipped Thor and his kinsmen in the Aesir of Asgard.

Eventually, a symbiotic relationship developed between the Asgardians and the Vikings. As long as the latter believed their patrons were gods, the residents of Asgard grew in power. (At least, that's the present-day theory. Thor doesn't talk about this much, and there aren't a lot of ancient Vikings around to interview.)

The worship of the Asgardians has fallen off in the last millennium, though there are still some believers. In fact,

there are probably a lot more now that Thor and others of his race have returned to Earth. The Asgardians may have embraced some of our customs, but it's clear to me that Thor doesn't believe in a higher power than his father, Odin.

All this points to the amazing power of faith. Maybe the Asgardians' amazing longevity is a direct result of the divinity that the long-dead Vikings ascribed to them. We'll probably never be able to prove this one way or another, because that's what faith is all about.

The Asgardians weren't the only ones who benefited from these manifestations of faith. The ancient Greeks worshipped the Avenger named Hercules like a god (or more accurately, like a "demigod"—or half a god—since he had an immortal father and a mortal mother).

The Avenger you know as Thor is one of the Asgardians.

This brings up the question of whether anyone who gains fervent believers can become a god, complete with divine powers. The answer seems to be emphatically no. But that doesn't mean people can't

worship other people as gods anyway.

Such a belief can be harmless and even benevolent, as in the case of the X-Man called Storm. She follows a non-Christian African faith, and certain natives of the Serengeti once worshipped her as a goddess. No one suffered because of this situation.

But there are also very dangerous manifestations of such beliefs. Some of the mutant Acolytes believed that Magneto was divine—a claim the totalitarian mutant rejected out of hand. Even worse, the alien Thanos believes in sacrificing lives to Death, which is a terrifying proposition.

So choose the objects of your worship carefully, Donny. Even Thor, God of Thunder, would tell you that.

The MARVEL game allows players to play gods, or at least individuals whom others call gods. Some people so honored, such as Storm and Magneto, clearly aren't divine. But the Olympians and Asgardians sure can make claims to deity status.

The basic **Roster Book** gives minimum statistics for Asgardians, Olympians, Heliopolitans, and Eternals, all of whom might be considered gods. To create gods of a different pantheon, set the minimum statistics for their race. The minimum Strength must always be more than 10, and the minimum power set should include Immortality (unless, like the Asgardians, the beings aren't immortal).

Each god in a pantheon specializes in some aspect of life. One may be a god of strength, another of weather, and a third of darkness. When creating a god, the player should choose his or her specialty, which is often called a sphere. All powers chosen in addition to the racial basics (such as Immortality) must relate to that sphere, at least enough to convince the Narrator of their validity. So the player of a god of death could choose Life Drain and Affliction without fear of contradiction, but might have to argue for Light Control.

THE POWER OF FAITH

Perhaps contrary to some players' desires, strong beliefs don't usually equate to superpowers in the Marvel Universe. Heroes with firm convictions don't get rewards for them, since that's what faith is about—belief without immediate benefit. If you knew that something gave you powers, you wouldn't need to believe in it.

You can make the claim that some divine beings just don't want to reward their followers with powers. Certainly this is the case with most mainstream belief systems. You can also make the case that some divine beings can't reward followers even if they want to, which explains why Olympians don't grant powers to their priests.

But in a few cases, belief and deep study do lead to superior abilities in the Marvel Universe. Among those whose powers come from faith are Brother Voodoo (a Haitian priest), Alpha Flight's Shaman (a harnesser of Inuit spirits), Master Pandemonium (a demon summoner), and the cultists of Selene (the Black Priestess of the Hellfire Club).



Almost always, such superpowered faithful gain manifestations of particular power stunts, most commonly Animation's Necromancy and/or Teleportation's Summoning. These stunts usually apply to the manipulation of spirits, demons, corpses, or other nonhuman entities. To summon or animate a divine being usually requires an average power action opposed by the Willpower of the being in question plus the Narrator card. This stricture applies even if the being wants to be summoned.

If the Narrator approves, however, a hero can choose to tie either of these stunts to faith. This means that the hero can link with any other adherents of his or her faith who have the same powers to attempt one of these stunts. For such a group stunt, add the power intensities of all participants together to generate a group action score. For example, there's no way your average Norse priest could summon Odin (Willpower 18). The difficulty would be $8 + 18 +$ the Narrator card, for a typical difficulty of about 31. However, multiple priests working together would have a much better chance of making this happen.

If the Narrator approves, the hero can tie other powers (such as Healing and Waterwalking) to faith as well. But if the Narrator decides that this is getting out of hand, all those collect calls to Heaven might just have some trouble getting through.

DEAR DR. RICHARDS



This boy at school—they call him Tomato Nose. He says I have to give him my lunch money, and if I don't he sends his sixth-grade friends to beat me up! What should I do?

*—Bobby Duff
age 8
Oak Park, IL*

Bobby, you've done the first thing already: You've told an adult. Generally, I recommend telling someone closer to you than a newspaper columnist—perhaps a parent, or a school counselor, or someone else you see every day: Sometimes that works, sometimes not. Regardless, you have to use your head to avoid bullies.

It might surprise you to learn that people once picked on me too. This boy "Tomato Nose" sounds like someone I knew when I was your age. He had his own little gang of goons who ran roughshod over the entire neighborhood. I stopped him from picking on me by using my head. I designed a crude, high-power siren that I could trigger whenever this boy bothered me. He took off running the first time I used it.

So if you can outthink your harassers, you can probably get rid of them. Try not to be alone in the schoolyard, always play outside the principal's window, choose new routes to school, and call over any adult within earshot if there's trouble. Try to bring Tomato Nose's activities to the attention of some authority he can re-

spect, such as a school official, or even the police. (You'd be surprised how willing neighborhood cops are to help kids with problems like this.)

Of course, if there are lots of super heroes in your neighborhood, you can always enlist the aid of a nearby Human Torch or Spider-Man. Even if Tomato Nose doesn't respect your school principal, you can bet he'll respect the Thing.

This last point suggests a very regrettable concept, however. Sometimes the only thing violent people respect is greater violence. This bully may not actually stop his petty tyranny until someone stronger bops him right in his Tomato Nose. I hope he mends his ways before it comes to that, because I abhor violence.

But in my time as a super hero, I've learned a few things. After serving with Ben Grimm as a member of the Fantastic Four, however, I've discovered that we

all have to bear our share of responsibility in the conflict against evil. So when someone has to confront Blastaar or Dreadface and save the world, I'm just as ready to do my part as Ben Grimm is to do his.

Now, obviously Tomato Nose is no Blastaar.

He doesn't threaten the universe with his violence. But he does threaten YOUR universe, just as surely as any criminal menaces society. And if someone doesn't take action to stop him, then he'll learn it's okay to hurt people who are weaker than he is. That might lead him to join a street gang when he's older, or even become a super-villain like Blastaar. (Well, maybe not exactly like Blastaar, but you get the idea.) Ignoring the problem will not make it go away.

Good luck, Bobby. I hope you can teach Tomato Nose a lesson or two.

DAILY

As noted in the basic set's **Roster Book**, goons usually have the following statistics: Strength 5D, Agility 4D, Intellect 2X, Willpower 2X, Edge 0, Health 10, Knives [S]; Marksmanship [A]. However, most villains want to customize their underlings.

To attract goons of typical quality, the villain must succeed in an average Willpower action. Above-average goons come at a greater difficulty. For each additional skill or point of ability beyond those of the standard henchman detailed above, add 1 to the difficulty of the villain's Willpower action. (Villains can lower one ability and raise another by the same amount for no cost, however.) Goons can never have Edge scores above 1, and they can't have any ability score below 2 or above 10.

For example, let's say a villain with an Edge of 2 wants goons with these statistics: Strength 5B, Agility 5C, Intellect 2X, Willpower 4D. He also wants them to have Boxing, Clubs, Knives [S]; Driving, Marksmanship [A]; and Intimidation [W]. That's +7 (3 points of increase in abilities and four skills), so the difficulty of the villain's Willpower action is 15.

Once the villain has goons, he or she must work to keep them. If the master villain fails to commit a crime demanded by a villainous resources check (see "Villainous Resources" in the **Game Book**), all above-average goons leave at once.

FIGHTING GOONS

Heroes frequently have to mow through a dozen-plus goons to get to the villain on the other side. The following three rules can apply to any characters with Edge 0, including soldiers, cops, and even herds of animals. But they're most fun when applied to goons.

Move-Through: At the Narrator's discretion, heroes with Edge scores of 1 or more can use this special maneuver. A move-through lets a hero attack several goons at once. The hero can divide his or her pre-cardplay score among any number of goons, then do the exchange's cardplay normally, adding the card value to ALL the attacks. This allows Captain America to clean up a roomful of goons on his own. Heroes cannot do move-throughs against opponents with Edge scores of 1 or higher.



Pile-On: Goons can't usually knock out heroes unless they surprise or overwhelm them. The pile-on rule from the **Game Book** is especially useful here. It states that all attackers get a bonus to their action or counteraction scores equal to the total number of attackers involved. So if six mooks leap on Hawkeye, he might be seeing stars. It takes a lot more mooks to knock out Hawk's buddy Thor, though. And Thor (or any other hero who becomes the victim of a pile-on) can counterattack all the attackers at once, though at an action penalty equal to the number of attackers.

Trashcan-Head Inversion Rule: It is a cliché of comics that if a horde of goons blasts away at a hero, their target always emerges unscathed. This rule, named after the yellow bucketheads of A.I.M., duplicates that effect for game purposes. When a group of henchgoons fires weapons at one hero, each mook suffers an Agility penalty equal to the total number of attackers. (This rule never drops a goon below Agility 0, however.) So if ten A.I.M. drones fire laser pistols at a hero, all their Agility scores drop by 10 points for the purpose of that attack (but not below 0). Note that this penalty applies only if all the attackers have Edge scores of 0, and the hero has an Edge score of at least 1. Even one individual with an Edge of 1 or greater in the attacking group negates the penalty.

DEAR DR. RICHARDS



Everywhere I go, some granola freak is whining about pollution. Well, I've lived here all my life, and I'm fine! Can't you super-people shut these idiots up?

*—Paulie Mandeloro
age 14
New York, NY*

Paulie, I could give you a technical explanation about pollution. It would use precise terms like polychlorinated biphenyls and fluorocarbon drift. I'd try to explain that in just a few decades, we've changed the climate so much that it rains more on the weekends than it does on weekdays. I'm guessing that wouldn't convince you.

But it's important to address this subject, so I've turned to a surrogate member of my family named Crystal. She's worked with the Fantastic Four and the Avengers, but most importantly, she's an Inhuman. Her people come from a place that doesn't have the kind of pollution you're used to, Paulie. Maybe she can help. Crystal?



**Crystal
Inhuman**

Thank you, Reed. I've read your correspondent's letter, and I have only one thing to say to him: What are you, crazy?! This is some sort of joke, right? You do not think pollution is a problem? Do you have any idea what you are saying?

You humans do not understand what you're doing to the Earth. You dump your waste into the wild with hardly a thought, use oil and poison gas as weapons of war, and turn your lush forests into parking lots!

Oh, I have been to your New York, Mister Paulie. I nearly died the first few minutes I was in town. Your city's air tastes like—well, praise Randac, air is not supposed to taste like anything! I breathed in toxins that nearly ripped my lungs to ribbons, but thankfully Reed invented a medicine I could take to avoid death at the hands of your industrialists. That enabled me to save people like you from yourselves.

Maybe you do not want to hear this, young one. Maybe you are coughing so hard that you cannot hear it. But you need to hear it. The planet is nearing a reckoning, in which every poison your people have spilled and every species they have killed off will come back to haunt us.

There are many other planets in the universe. Humans can always move on after they have destroyed this world. But you can only hide from yourselves so long. Save this planet while you still have time!

XXXXOO — Crystal

Thank you, Crystal. I know this is an emotional subject for you.

Paulie, Crystal knows wherefrom she speaks. You should do whatever you can to save the environment—recycle cans, ride the bus, use butane-powered hair-spray. And you should tell your friends to do the same.

We "granola freaks" need your help, Paulie. Every person working against us cancels out the efforts of someone working with us. So if you're on our side, we have a good chance of keeping us all alive.

HARSH CONDITIONS

All the fighting rules in the MARVEL game assume that combat is taking place under average conditions, and that all those involved can see and reach whatever they need. If that's not the case, the Narrator can rule that the fight is occurring under harsh conditions.

Harsh conditions—pollution, bad weather, darkness, and the like—have two significant effects on combat. First, they raise the difficulty of all actions that such conditions could affect, usually by one level (4 points), though more is possible. Second, they often reduce effective distances considerably. In some situations, firing distance can max out at just beyond striking distance, and visual distance can equal striking distance, particularly in conditions such as absolute darkness. Here are some detailed descriptions of certain harsh conditions.

Bad Weather: Precipitation can be troublesome in battle. Super heroes get colds only when it suits a storyline, but the frigidity of snow and rain isn't what causes the jump in action difficulty—it's the slickness. When knockback (see the "Knockback" rule in this book) or fast movement occurs, the Narrator can require heroes to make challenging Agility actions to remain standing. Failure can deprive the victim of an action or a counter-action while he or she stands up again.

Darkness: Without light, many heroes have a tougher time hitting their foes. In complete darkness, difficulty can increase by as much as three levels for some actions, while others (such as reading) are flat-out impossible. Even a small amount of light eliminates these penalties, though anyone who knows the play of shadows in a dark area can still make surprise attacks pretty easily. On the other hand, bright light can be just as harsh a condition as complete darkness.

Different Gravity: Gravity that exceeds what a hero is accustomed to penalizes his or her Strength and Agility actions. Also, as noted in the "Falling Objects" section, falling damage doubles in areas of high gravity. In



areas of low gravity, falling damage isn't usually a problem. If the Narrator allows it, everyone in a low-gravity area may gain the Leaping power at the intensity of his or her Strength.

Fog: Dense fog usually just obscures vision, but this effect can be quite extreme. Only striking distance exists under such conditions; anything that functions only at visual or firing distance is either useless or unreliable in the fog.

Noise: Loud noises can be irritating, but they usually cause difficulty increases only for actions requiring concentration. The Narrator can make anyone trying to concentrate on an action (such as maintaining an Illusion during multiple exchanges) attempt a daunting Willpower action to continue. Communication between heroes may be difficult, so the Narrator can restrict any table talk between players that pertains to actions in the game.

Pollution: Serious air pollution can both obscure vision and act like a Poison at the pollution's intensity. Choking and shortness of breath are what cause the difficulty increase in this case. High winds can eliminate air pollution if they bring clearer air. Thin air can also produce a difficulty increase, though it doesn't typically affect vision. Water pollution, such as an oil slick, has an effect similar to that of air pollution.

For information on high and low temperature conditions, see the next section.



**Is Captain America really like
eighty or something?**

*—Zack Jackson
age 12
New York, NY*

Captain America is probably not any older physically than your mom or dad, Zack. But he isn't the Living Legend of World War II just because he watched war movies. He actually fought in that war when he was in his early twenties.

We don't know all the details, but we do know that in the 1940s, Captain America gained the peak of physical perfection through the application of Professor Reinstein's so-called "Super-Soldier Serum." Cap crashed into the German war machine with a fury no other soldier could match, crusading alongside Allied men of war to end Hitler's march. He wasn't bullet-proof, he didn't have super-strength, and he couldn't shoot fire from his hands. But he could fight along with the best of them, bearing as his only weapon a most spectacular star-spangled shield.

Near the end of the war, an airplane explosion killed Cap's partner, Bucky. The world thought Captain America had died in that incident as well—but that wasn't the case. In fact, the blast threw him into the frigid waters of the North Atlantic, where a most amazing thing happened.

**Captain America
sprang to life
again to lead the
battle against evil.**

Scientifically, it's not terribly clear how something like this could occur. At normal temperatures, the molecules that make up our bodies move at high speeds. When it gets colder, they slow down, and if we freeze solid, they stop moving altogether. In the process, our brain patterns and heart activity cease. Then, because our cells get no oxygen, we die—most of the time. But in 1945, as Captain America hit that super-cold ocean and flash-froze, the Super-Soldier Serum interacted with the freezing water to suspend him in stasis. Though such an ordeal should have killed him, the Serum apparently maintained just enough molecules in motion to keep him alive—though he was nowhere near conscious.

He floated for decades, until the Avengers found him and thawed him out. This process also should have killed him, since a rapid increase in molecular motion

is brutal on systemic integrity. (That's why frozen peas taste different than fresh ones.) But the Super-Soldier Serum again adapted to the temperature change, protecting his cells from the destructive thawing.

So Captain America sprang to life again to lead the battle against evil. Only this time his enemies were not soldiers. This time, he would fight costumed super-villains who threatened life as we knew it. Though the world had become far more complicated than the one he had left behind, it still wanted his idealism. He leads the Avengers to this day.

So, Zack, in a sense Captain America IS something like eighty years old. He formed his ideals in a time when we fought wars because it was the right thing to do. I'm proud to join him in his current battle for justice.

If you've ever tried to shovel snow when it's 40 below or wash the car when it's 115 in the shade, you know how serious extreme temperatures can be. People can function normally in these conditions, but not for long. Though no one in a super hero game ever stops a battle for lemonade or an extra coat, you can simulate the effects of high and low temperatures with a few simple rules.

Normal people have a comfort zone between roughly 20 and 100 degrees Fahrenheit. When the temperature is not within that range, you can apply a penalty of at least one difficulty level (4 points) to all physical actions. In addition, extreme temperatures are murder on recovery. Under these conditions, recovery of cards and Health occurs only on a Narrator draw of the appropriate aura with a value below 6. In really extreme conditions, the Narrator can say that recovery doesn't occur at all.

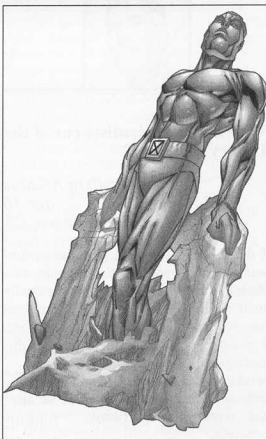
Even a point of Resistance to Heat or Cold (whichever is appropriate) negates this effect for an individual hero or character. Those with certain Control powers (such as Fire Control) can use them to counteract these penalties as well. Beings with Willpower scores above 10 can also ignore the penalties at the Narrator's discretion.

The exact temperature doesn't matter much when it's extreme. If the temperature's below -50 degrees or above 120 degrees, heroes and characters actually suffer damage each exchange. The intensity varies depending on the effect, but here's a quick rule: **Extreme cold or heat is intensity 10, plus 1 point per 10 degrees below -50 or above 120 degrees.**

Bombarding someone with intense cold may flash-freeze the victim at the Narrator's discretion. The intensity of such cold must be enough to reduce that being to no cards or Health 0, in which case he or she is under the effects of Paralysis until thawed.

FIRE

Fire complicates a combat with more than just its heat. An open flame is almost always above 120 degrees, so not only does it have the heat effects listed above, it ignites (and probably destroys) any object of Material Strength 2 or less that it touches. Flesh is about the only Material Strength 2 substance that can survive in fire for even a few



exchanges, and that's only because people tend to move out of the way quickly or put out flames on their persons.

Smoke reduces visibility so that striking distance is the only category available to combatants within it. Anything not directly adjacent to an attacker is at beyond-visual distance. Smoke also inflicts its intensity (without cardplay) in damage to everyone within it each exchange, except for those with Invulnerability to Gases.

Finally, fire blocks pathways and weakens structures. On any exchange, the Narrator can draw a card. If its aura is negative (or even neutral, in the case of raging infernos), flames block the hero's path, or the floor collapses into a fiery area. The hero must go through the fire, suffering its heat intensity plus the Narrator card in damage. (Though in our universe it makes sense to cover oneself in a blanket before running through fire, in the world of super heroes it's always best for people to see one's face. So if a hero covers up before running through a fire, he or she gains no additional resistance. Sorry, but that's the way it seems to be.)



Why haven't scientists cured the Legacy Virus yet?

—*Maylissa Arkness*
age 16
San Francisco, CA

I don't know, Maylissa. I'm not an immunologist (a specialist in fighting diseases), but I have helped occasionally with finding ways to treat specialized cancers and other horrible conditions. I've set my mind to finding a cure for this contagion as well, but after working with dozens of scientists on the problem, I can report no significant progress.

For readers who don't understand Maylissa's question, the Legacy Virus is a mutagenic contagion that attacks the immune systems of mutants. Some people don't like mutants, but I'd caution all of them to consider that at least one non-mutant has already contracted the disease as well. So even if you think it's justice that mutants are vulnerable to this disease—a horrible thought—please realize that it could affect anyone.

As far as I know, the origins of the Legacy Virus rest with a super-terrorist named Stryfe, who was once the leader of a frightening organization called the Mutant Liberation Front. Before he died, Stryfe released this virus onto the world. Faster than any plague, it spread among Earth's mutants. The virus hasn't yet

killed many people, but in some respects its effects are just as frightening as if it were a devastating plague. It seems to be transmitted through the air, though not as quickly as influenza. Once it infects someone, it incubates for some time before its victim shows any symptoms. And then it mutates, so that each person's virus is a new strain.

So far, the Legacy Virus has exhibited a terrifying lethality. No one has ever gotten better from it, and many have died. I knew one young girl about your age who died from the disease, and her brother Peter misses her very much.

Probably the most promising work on this disease has been that of Dr. Moira MacTaggart, the Nobel Prize-winning geneticist and author of the world-renowned paper, "Advances in Laser Therapy and

I've set my mind to
finding a cure for
this contagion . . .
but after working
. . . on the problem,
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LVRC (Legacy Virus-Related Complex)." Sadly, MacTaggart is also the only non-mutant known to have contracted the Legacy Virus. She recently emerged from self-imposed quarantine with fewer fears of transmission, but no cure. The medical community owes it to Moira to make progress on a cure

before the disease claims one of the world's leading scientific lights. But funding to fight the killer is hard to come by. Governments, already strapped for money, have not perceived a disease that kills mostly mutants as a threat. Some undoubtedly see it as a blessing.

We can only hope that the virus's progress slows down, at least enough to match our anemic progress on conquering it. Unfortunately, I don't see that happening. Maylissa—and everyone else out there—can help by persuading politicians and scientists to fight this disease before it spreads any farther than it has already.

HINDRANCES REDUX

The **Game Book** contains a long list of hindrances, but there's always room for more pain. Here are a few more ways to bedevil the denizens of your universe.

Burnout: Using powers burns out your hero's body, draining 1 point of Strength permanently each hour until death occurs (at Strength 0). Most of those who possess this hindrance (such as Proteus) can switch bodies.

Frail: Your hero cannot take a punch. Regardless of Hand Size, he or she falls unconscious when you have a number of cards equal to or less than the hero's Edge score in your hand at the end of an exchange. The hero awakens only when the number of cards in your hand rises above his or her Edge. Characters with this hindrance collapse when their Health scores drop to single digits.

Grounded: Your hero is stuck for good somewhere other than the game's normal setting. He or she can only be away from this place for a few hours at a time; thereafter either the place itself calls the hero back or someone performing a fairly common action triggers the recall. Captain Britain has this hindrance.

Inaccurate: Your hero cannot aim—at least not as well as most people can. When attacking, you cannot play cards until after your hero has succeeded in an attack. Thus, cardplay is treated like a variable damage bonus, but does not count toward generating the action score for an attack. (This can replace the Bruiser hindrance at the Narrator's discretion.)

Overprotective: Your hero values life too much to uncork his or her full powers and therefore cannot kill without gaining the Guilt-Ridden hindrance. For purposes of attacking, his or her relevant ability score or intensity cannot be higher than the target's highest ability score or intensity. Only a hero with a score of 15+ in either an ability or a power can possess this hindrance.

Physically Disabled—Legacy Virus: Your hero has a mutagenic disease that ravages his or her immune system. During its incubation period, the disease causes no ill effects, but anyone with full-blown Legacy Virus is often in pain. Each day, draw a card. If the aura is negative, the virus flares, dropping the hero to half his or her normal Strength and Agility. Every hour of the day in which the

virus has flared, draw another card; if the aura is negative, the hero lashes out with his or her powers at full intensity. This hindrance usually targets only mutants (such as Pyro), though one human (Moirra MacTaggart) has contracted it also.

Physically Disabled—Weak Heart:

Physical exertion poses a grave risk to your hero. If he or she attempts a Strength action with a difficulty more than 4 points above his or her Strength score, draw a card and check its value. For that number of exchanges thereafter, attempting any further actions or counteractions precipitates a major heart attack, requiring emergency hospitalization. D-Man has this hindrance.

Programmable: Your hero can be reprogrammed easily (probably remotely). Reprogramming changes the hero's calling to Soldier and deprives him or her of the ability to act independently. If a programming change occurs, the Narrator can choose to direct the hero in play. You still perform the actions and choose cards to play, but if the Narrator thinks you are not following directions appropriately, he or she can substitute the Narrator card for your cardplay.

Uncreative: Your hero cannot come up with strategies in fights (that is, he or she has Intellect 0 in combat). In addition, the hero always responds to combat situations with the simplest and most apparently logical action, regardless of consequences. The Narrator can direct your hero's actions if he or she believes you're considering the consequences of your decisions too closely. The Super-Adaptoid has this hindrance.



DEAR DR. RICHARDS

My history class is studying King Arthur. Arthur's son was named either Mordred or Modred, depending on which book you read. But then I see on the news that not one, but two guys from the sixth-century British Isles are alive today—one named Mordred and the other named Modred! Are they both King Arthur's son?

—Gwyneth Barry
age 16
Hackensack, NJ

I too was confused by this similarity when I first learned of it. As far as I can tell, this is no less a coincidence than two women named Jean Grey living in our time. But it sure seems odd when you consider that both Modred and Mordred came from the same time and place, both are powerful evil sorcerers, and both have run afoul of Captain America and Doctor Strange. Here are their two very similar biographies.

Subject One: Modred the Mystic. Modred was born in the Orkney Islands north of Scotland in the sixth century. He studied the Darkhold, a book of powerful magic written by the demon Chthon. He hoped to use the magics within it for good, but reading the book corrupted him and caused him to fall

into a coma for fourteen hundred years. He woke again in the twentieth century, still under the power of Chthon's book, and tried to take over the Scarlet Witch's body. The Avengers prevented this scary outcome and handed off the Darkhold to Doctor Strange, Earth's Sorcerer Supreme, for safekeeping. Modred then traveled to England and traded blows with Captains America and Britain. After this bout, Arthur's wizard Merlin locked Modred away in another dimension for safekeeping.

Subject Two: Mordred the Evil. Mordred was born in sixth-century England near Cornwall. His parents were the legendary King Arthur and the sorceress Morgan Le Fay. Mordred studied magic to power his evil deeds, and he wielded the mystical Ebony Dagger, a weapon as powerful as King Arthur's Excalibur. Over the centuries, Mordred fought various Black Knights, including the current Hero for Hire of that name. In the fourteenth century, he battled Doctor Strange and the Defenders, whose efforts kept him bottled up until the twentieth century. Eventually his mother Morgan (who, like Merlin, had somehow survived to the present day) freed Mordred, and he fought at her side against the Avengers in an epic conflict.

With all these Arthurians still living fourteen centuries later, it's all too easy to confuse the very Arthurian Mordred with the less Arthurian Modred. But despite the similarities, only one of them—Mordred—is King Arthur's son.

Thankfully, for ease of reference, only one Excalibur has existed recently. It was a team of super heroes based in Scotland. Go figure.

... only one of
them—Mordred—
is King Arthur's
son.

What's in a name? A lot, as it turns out. Given that most heroes are known only by their codenames and costumes, changing those recognizable features can change the world's perception of them. Captain America retained the same statistics when he became the Captain, but people who would gladly have followed the legendary Cap into a burning building hesitated to give their all for the Captain.

Some heroes are pretty much the same in costume and out. Reed Richards is a prime example of this. But others split their personalities between two identities, usually trying to make them as different as possible. While Spider-Man and Captain America are two of the most publicly confident people in the world, Peter Parker and Steve Rogers are not. Though you would probably stand in awe of either super hero, you might not give Parker or Rogers the time of day.

When a hero with a secret identity is out of costume (or changes codename and costume), the Narrator may justifiably halve the individual's Willpower for actions involving persuasion. This is a temporary situation, of course, but the hero cannot just cast off the traits of the secret identity without arousing suspicion. Thus, an attempt on the hero's part to use his or her full Willpower for persuasion while not in costume can arouse suspicions in anyone present. Those who succeed in a daunting Intellect action realize that the individual has a hidden side. Whether or not this leads to the revelation of the hero's identity is usually a matter of circumstance. If the hero has run out on a date and then crashed through a plate glass window in costume, the date may begin to theorize about the face behind the mask.

Of course, in the Marvel Universe, no one ever uses visual or vocal clues to figure out someone's secret identity. The fact that Matt Murdock is blind is much more persuasive than the fact that he and Daredevil are the same height. Using clues like this requires a superhuman Willpower action. Don't ques-



tion it; it's what holds the world of super heroes together.

UNFAMILIAR RESOURCES

Quite often, a hero loses or puts aside previous powers or equipment and picks up something new. Think War Machine's Eidolon armor, or Captain America's energy shield, or Wolverine's bone claws. While the individual gets used to the new things, he or she must struggle toward comfort.

During the first game session after a hero gains new powers or equipment, the Narrator can reduce his or her Edge to 0 when the new features are in use. Then, at the end of the game session, the hero can try a daunting Intellect action to cast off this temporary hindrance. If this is unsuccessful, the hero's Edge remains 0 for actions involving the new features in the next game. At the end of that session, the hero can try a challenging Intellect action to cast off the hindrance. If he or she is still unsuccessful, the action becomes average after the next game, then easy, then automatic. The Narrator can raise these difficulties if the new resources are especially hard to master.



What does it feel like to be hit by the ever-lovin', blue-eyed Thing?

—*Luis Belden Reyes*
age 13
Dallas, TX

Luis, you'll be happy to know that Ben autographed your collector's-edition photo chase card, and it's winging its way back to you as I write this.

In answer to your query, Ben and I are close friends—and, as Sue frequently points out, we're guys—so he's slugged me on more than one occasion. It hurts a lot. It feels like a Mack truck has backed over me three or four times.

Actually, that's not quite right—it hurts even more than that. That's because not only is there pain from Ben hitting me, there's more pain from whatever Ben has hit me INTO. Ben has a lot of muscle power in those silicate-enhanced arms, and he delivers it with an amazing amount of speed for someone that big. The force of his blow catapults its unfortunate recipient backward, usually into something hard and unyielding.

This seems like a good time to talk about velocity, at least in somewhat oversimplified terms. Velocity is the rate of change in an object's position over time—essentially the speed at which something travels. The Thing imparts ve-

locity to his fist over the time it takes him to hit you. His fist then slams into you with lots of momentum, which is equal to some portion of Ben's mass multiplied by the velocity of his punch. When his fist decelerates abruptly by contacting your body, you'll pick up some of that momentum, which may cause you to fly through the air if the punch is strong enough (which it probably is). You can try to resist this, of course, but Ben's probably stronger than you. Physics tells us that momentum is conserved in a collision between you and Ben's fist; that is, Ben's mass-times-velocity must be roughly equal to your mass-times-velocity. So if you're significantly lighter than the Thing, you'll go flying far faster than his fist hit you.

Finally, you have to worry about what YOU hit at the end of your flight. You

will impart your momentum to whatever you strike, meaning that if you slam into your best friend, he or she will probably go down too. You don't impart all the momentum of the original punch because you absorbed some of it when your face deformed after Ben hit you. So your friend doesn't

have as much pain as you do, but you suffer the impact of hitting him as well.

This isn't exactly what occurs, of course; real-world physics is rarely this clean. You must factor in air resistance and elasticity and friction and a bunch of other scientific concepts. But the basic rule still holds: Get hit by the Thing, and you'd better have twenty dollars in your pocket for the cab ride back to where you started.

Sound fun, Luis? No? Well, don't worry—the Thing reserves all his punches for the likes of Dr. Doom, as you well know.

It hurts a lot. It feels like a Mack truck has backed over me three or four times.

KNOCKBACK

In super hero fights, the participants tend to destroy private property. One way they cause such damage is by hitting their opponents hard enough to send them flying away from their starting points—often through intervening walls, floors, and so on. If the Narrator wishes, physical attacks and most blasts can cause something called knockback.

The Narrator can check for knockback any time a combatant loses cards or Health from an appropriate attack. Any hero or character who has to lose more points in cards or Health than he or she has points of Strength (base) flies from striking distance to firing distance, or from firing distance to visual distance. This happens as a contingent action.

If combat is occurring in a relatively open area, the Narrator should draw a card. On a negative aura, the knocked-back combatant hits a physical object or another person (Narrator's choice). In a crowded environment, the displaced person always hits someone or something (see "Crowded Spaces").

A combatant knocked into something must make a contingent challenging Agility action to avoid landing poorly and suffering additional damage (equal to the Material Strength of the object hit plus the value of the Narrator card). This is considered a new source of damage, so the player should subtract the hero's defense from it separately, rather than combining this damage with that of the original blow. The object or person hit

sustains damage equal to the knocked-back combatant's Strength. If the impact destroys the object, the hero continues through and the Narrator checks again to see if he or she hits something else.

Anyone knocked back can get up during the "Fight or Flight?" portion of the Closing Moves in the exchange. That person cannot flee, however.

Picture the Thing battling Rogue. Ben gets in a good right hook, with a colossal 33 action score! Rogue subtracts her 16 Strength and suffers 17 points in wounds. This is more than her 16 Strength, so after resolution of all the attacks, Rogue is knocked back to firing distance. The Narrator draws a card and it comes up negative, so Rogue hits something. She gets a chance at a challenging Agility action to avoid crashing, but muffs it.

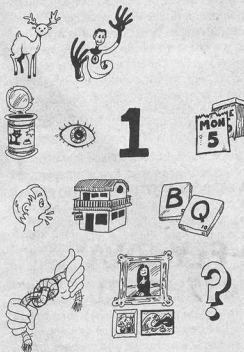
Since the fight takes place in a street, the Narrator rules that Rogue hit a brick wall, which has a Material Strength of 10. This plus the Narrator card (which has a value of 8) adds up to 18 damage points. Rogue again subtracts her Strength from this value, suffering a total of 2 points of extra damage. Since Rogue's Strength exceeds that of the wall, she goes through it. The Narrator draws again and gets a positive result, so Rogue stops crashing into things. If she has any cards left, she can get up at the end of the exchange and prepare for the next blow.



DEAR DR. RICHARDS



Editor's note: This letter is presented exactly as it came to the *Daily Bugle*.



This is Artie, right? The quiet little boy who plays with my son Franklin? If so, hello again.

If I interpret your pictographs correctly, your question reads: "Dear Dr. Richards, can I one day talk in words and not pictures?"

Artie, I'm not a doctor (at least not that kind), so I can't be sure what causes your inability to speak. I would need further research to give you a solid answer, but I can address three possibilities.

The first is that a physical difference in your vocal apparatus causes your muteness. Inside the human larynx (the "voice

box") are sixteen muscles, two arytenoid cartilages, and an array of vocal cords, each of which vibrates at up to a thousand times per second. Add to this the movement of the tongue and the resonant spaces of the head and throat, and you have a complex acoustic arrangement. If anything were off in this small portion of your body, you could lose the power to speak. But the good news is that in this case, surgery might conceivably cure your condition.

A second possibility is that your muteness is psychological. Some traumatic events in your past—family issues, perhaps—could well have caused your brain to "turn off" its speech centers. The human brain is quite complicated, so finding the right psychological trigger to reverse this could be very difficult. But again, the good news is that sometimes psychiatric analysis can bring about a breakthrough in such cases.

A third and perhaps more troubling possibility is that your amazing mutant power to speak in pictures has also somehow caused your muteness. Whatever genetic alteration gave you this stunning power may well have overcompensated by removing your ability to vocalize. Superhuman physiology being what it is, I'm unclear as to the best course of action if this is the cause.

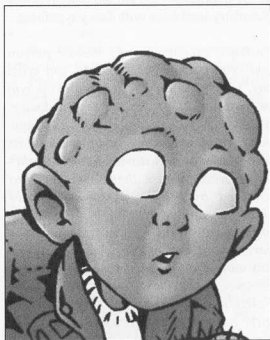
In this case—and for that matter, in any case—you can take pride in just how gifted you are, Artie. Ask your friends, and I'm sure they'll tell you. You have the ability to summon forth visual images from mere thought and bring them into reality—a fantastic power that many would envy.

Everybody has the ability to communicate, Artie. Your method is different, but no less valuable, than those of others. I know Franklin thinks so, and deep in your heart, I'm guessing you do too.

For the most part, the MARVEL game doesn't address the issue of how heroes choose to communicate. The presumption is that most people in your game speak the same language, assuming they can speak at all. Where bilingualism comes into play, it usually consists of nothing more than a few oaths and endearments. ("Mon dieu! We've got to get out of here, cher!")

Individual languages are not listed as skills because they do not usually play a pivotal role in game situations. (Serbo-Croatian is just not going to be as universally useful as Martial Arts.) For the most part, you can assume that a hero knows both the native tongue of his or her birthplace and the dominant language spoken in the game setting. For most heroes, those will be the same, but if you're playing a U.N.-sponsored superteam, for example, then bilingual heroes may be the norm.

Those with the Hyperlinguistics power have little trouble learning to speak other human languages. Some heroes—notably many current and former X-Men trained by Professor X—have the aftereffects of Hyperlinguistics, but not the power itself. It's appropriate to give those heroes the benefit of the doubt when they are dealing with major languages like Hebrew and Chinese.



UNDERSTANDING UNFAMILIAR LANGUAGES

At the Narrator's discretion, heroes without linguistic advantages may not be able to understand people who speak different tongues. Still, everybody knows a few words of most major languages. We've all learned bits of French, Italian, and Japanese from restaurant menus, opera, and VCR instruction cards, among thousands of other sources. Those can sometimes provide a foothold into the unfamiliar tongue and allow a hero partial comprehension.

When someone speaks to one of your heroes in an unfamiliar tongue, he or she can attempt a *challenging Intellect action* to understand the basics of what's just been said. A hero who succeeds in a *daunting Intellect* action has enough command of the language to reply in at least halting speech. If the hero succeeds in a *desperate Intellect* action, his or her speech is fluent enough to enable nearly complete communication.

In all these cases, however, the Narrator can choose to draw a card and keep the result a secret. If the card is of the Doom suit, one or both parties has misunderstood some crucial piece of information. Needless to say, such misunderstandings frequently fuel Marvel-style action.

In the case of an alien tongue or the language of some other intelligent nonhuman race, the difficulty is much greater. Getting the gist of what's been said requires a *desperate Intellect* action, halting speech demands a *superhuman Intellect* action, and establishing full communication is an *unfathomable Intellect* action. The Doom suit draw applies here as well.

Written languages are often a little easier to understand than speech, assuming that the language in question uses an alphabet familiar to the reader. If this is the case, lower the difficulty of the action by one level (4 points).

For heroes trying to decipher coded messages, raise any appropriate action's difficulty by two levels (8 points), but lower the resultant difficulty by one level if the hero has the Cryptography skill.

Note that the Linguistics skill lowers the difficulty of all the above actions by one level.

DEAR DR. RICHARDS

Is magic a science? If so, can I study it?

—Chelsea Balk
age 14
Warwick, NJ

Absolutely. Occultology is just like any other science—in fact, today's scientific advancements would look like magic to the people who lived five hundred years ago. You can learn to cast spells just like you can learn to test photonic emissions. It's just a matter of applying yourself.

Of course, this is one science I've never been able to master. But I know people who have, and I'm sure they'll agree with me. To support my case, I'll let the dictaphone run as I talk to Agatha Harkness, my son's governess. Agatha?



Agatha Harkness
Governess

Oh, Reed. You're a clever young man, but some things are still beyond your grasp. What you call "occultology" represents a lifetime investment—one just as consuming as your beloved science. But unlike science, you can't

devote just a small part of your brain to its study. You must devote your heart to magic, or it will spurn you.

"Spurn" you? Agatha, you can't mean that. The occult is no more alive than a test tube. It's the amount of effort you put into reading about it that matters, right?

I don't think you understand, dear. That would be like reading the Cliff's Notes on a chemistry textbook and calling yourself a biochemist. You cannot read about magic and understand it. You must internalize the magic and make it a part of you. That's the only route to mastery.

Think of magic as an energy, much like your cosmic radiation. Think about how you and your wife made yourselves one with the radiation and thereby evinced amazing—some would say magical—powers. Through this process, the radiation entered your very essence—your genetic makeup, as you would call it—and changed it. Think of the magic altering your psychical makeup, allowing you to explore new parts of your own psyche and the dimensions around you.

Hmmm. That's interesting, Agatha, but it doesn't get to the heart of the question. At some point, magicians like Doctor Doom and the Scarlet Witch must train, and that involves the acquisition and digestion of magical tomes, which are basically just like chemistry textbooks with fancy typefaces.

Perhaps, except that any literate person can read a chemistry text. As you often say, we live in an age when anyone can be anything he or she desires—a doctor, a lawyer, or even a king. But magic comes from a less forgiving age, and its forces are not accustomed to mortals dictating who can use them. Only persons touched by magic—those who have shown an aptitude for controlling its energies—can wield it successfully. So I'm sorry, Reed, but magic is not a science, any more than science is magic.

Fascinating. I'm sure all the boys and girls have enjoyed this discussion. And I'm sure that many will seek the answers to this complex question on their own.

MAGICAL OBJECTS

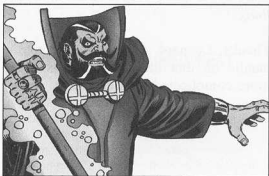
Magical objects are common in Marvel comics, but it's often not too clear what they do. Perhaps one of magic's greatest appeals is that one can never pin it down.

The only guaranteed commonality of magical objects is their Willpower trump suit. Heroes can make them using the rules in the "Super-Science" section of this book, with attention to the notes on magical items. Here are a few common categories of magical objects.

Magical Armor and Weapons: Implements of war, like the Black Knight's sword and armor, add their bonuses to damage or defense, as do their nonmagical equivalents. Even simple magical weapons have a Willpower trump suit. This doesn't change the normal trump suit of an attack with or against them, as their bonuses are post-cardplay additions. But Willpower IS the trump suit of any supportive powers the item may have, and this designation also determines whether a hero with the Susceptible to Magic hindrance has a defense of zero with respect to blows from a particular weapon.

Magical Books: Librams, scrolls, and tomes often increase the reader's Magic intensity, typically by adding the book's bonus to that value. Such volumes can raise the reader's Magic score above his or her Willpower score, at least temporarily. In addition, they often teach spells that are not otherwise available, such as a ward to dispel a particular demon.

Magical Potions, Dusts, Flowers, and Other One-Shot Items: Ingesting, inhaling, or otherwise expending a one-shot magical item imbues the user with one or more powers or ability boosts for a period of time. For example, the rare herbs in the Wakandan mountains gave the Black Panther enhanced Strength and Agility.



Magical Wands, Rings, Cloaks, Talismans, and Other Accessories: These devices bestow their effects on anyone who wears or holds them. For instance, the Wand of Watoomb is forever falling into the wrong hands.

Magical Wards: A ward is a protective spell written on an item or bound to a place. Once triggered (usually by touch), it remains in effect until nullified. An example is the ward on the boundary to the land of the Mindless Ones, which serves to keep them in and others out.

DEFENSIVE MAGICAL EQUIPMENT POWERS

Some items have defensive equipment powers that guard them against manhandling. Some of these are:

Anti-Nullification: Anyone attempting to use Nullification or Magic to negate the object's power must make the required action at desperate difficulty to succeed.

Cursed: The use of a cursed magical object might cause a disastrous effect. The Black Knight's Ebony Blade, for example, caused bloodthirst in its user whenever it took a life.

Spell-Triggered: Sometimes a spoken enchantment is necessary to activate these devices. Bungling the magic words can lead to a dozen flavors of trouble.

Worthiness: The worthiness equipment power listed in the **Game Book** applies under a certain set of conditions. For example, only those of Strength 15+ and noble demeanor can wield Thor's magical hammer.

As an example of all this, consider the Darkhold, which has Anti-Nullification, Cursed*, Power Amplification 24 (Magic; using the book's ambient magic doubles the user's Magic intensity [up to a maximum of 24] while contact is maintained; extensive reading grants +1 to the user's Magic intensity permanently [up to a maximum bonus of the user's Edge]), Spell-Triggered.

*The user must make a Magic draw based on his or her normal Magic score when using the book; if the drawn card's value exceeds the user's Magic score, he or she gains a powerful Affliction based on the passage read. If the Magic draw is a Doom card and the caster's calling is not already villainous, his or her calling becomes that listed on the card.



Why do criminals commit crimes?

—Steven Scarlotti
age 13
New York, NY

That's a deep question, Steven. I can certainly give you the prevailing hard-science theories, which center around chemical imbalances in the brain. But I'm guessing that wouldn't quite satisfy you, and honestly, it doesn't satisfy me either.

Here's why. As most of my readers know, the Latverian autocrat known as Victor von Doom is a very dangerous man. He has committed murders and thefts and even possessed human minds to quench his dark desires. He blames his criminal activities on me.

Now, after that description, I couldn't be content with an explanation that revolves around brain chemistry. So I've asked a longtime friend and noted green-haired psychiatrist, Doctor Leonard Samson, to help answer your question. His clients include the X-Men and the Hulk, among others often accused of crimes. Leonard?



Dr. Samson
Psychiatrist

I've only three hundred words in which to explain what could fill a thousand scientific papers in my field, so I will try to be as clear as possible. Kids, here's a quick sketch of the human psyche, and a facile explanation of why I think criminals do what they do.

A fellow named Freud outlined three parts of the mind that don't quite correspond neatly to areas of the brain. I'm guessing this is where Reed's explanations might take us. Freud talked about the "ego" (the part of the psyche that defines the self's reactions to the outside world), the "id" (a primitive center that deals with emotional responses), and the "superego" (an area that some call the conscience).

Everybody's got all three of those functions going on at different intensities; that is, some people have "more" of one than another. If the ego is strongest, the person may seem cold and indifferent to others. If the superego is strongest, it may drive the person to acts of good, which is why heroes tend to have highly developed superegos. But if the id is strongest—specifically if it is stronger than the superego—hooboy, are you in for some trouble. See, an uncontrolled id leads people to believe that nothing matters but their own fulfillment. Really hungry people can get this way, and so can people in great amounts of pain, and so can amoral killers. Without the checks of the superego and the ego, the id runs wild, and anybody who gets in the way is in for a world of hurt.

Now, the definition of crimes is another matter entirely. Breaking the law is its own reward for some people. I'd like to elaborate, but Reed's word limit is pretty unforgiving. So watch out, kids, and trust in good people to do the right thing.

Thanks, Leonard. I knew you'd have a handle on that dilemma. Life is a lot more complicated than chemistry sometimes.

OUT-OF-CHARACTER ACTIONS

In some sense, players of the MARVEL game can direct their heroes to do just about anything they please. But in just as important a sense, there are certain things that their heroes simply wouldn't do, because it's not in their natures. The game leaves these decisions up to role-playing for the most part.

Narrators who want a slightly more mechanical approach to directing hero activities can require *Willpower* actions of heroes attempting to do things that seem to violate their callings. Generally, a hero needs a *desperate Willpower* action to go through with an act the individual would find reprehensible. So for an Exemplar, ignoring an act of bigotry might require such a *Willpower* action—ditto for a Mentor who sees a student in turmoil and chooses to ignore the situation.

Heroes can certainly change callings in the game, but not for this reason. If the hero has had a new calling for only a short time, the Narrator is perfectly justified in holding him or her to the requirements of the old one. (A hero who suddenly picks up the Vengeance calling may be an exception to this rule, but it had better be for a very good reason.)

A hero with a villainous calling usually finds it very hard to shake, as the lure of being bad is quite strong. The Narrator can demand that a hero who gives up a villainous calling succeed in a *daunting Willpower* action every month or drift back to his or her previous ways.

CRIME AND SELF-PUNISHMENT

Crimes account for a huge category of activities generally considered anathema to heroes. As noted in the *Game Book*, the villainous callings—Demolisher, Greed, Vengeance, and World Domination—essentially constitute freedom from moral responsibility. Only individuals with these mindsets



can commit major crimes—murder, theft, torture, and the like—without serious self-evaluation. The Narrator can require anyone with a nonvillainous calling who considers committing a major crime to succeed in a *desperate Willpower* action first. Failure indicates that he or she fails to go through with the act.

Sometimes circumstances just seem to demand criminal actions, even if the individual can't normally handle it. Perhaps the hero is on the run and just has to steal a car to get away, for example. In those cases, the Narrator can consider lowering the difficulty of the *Willpower* action to *daunting*.

In any case, however, the hero risks gaining the Guilt-Ridden hindrance for any action that's way out of character, especially a major crime. If the hero succeeds in doing something he or she finds offensive, the Narrator can draw a card. If it's a Doom card, the hero gains the Guilt-Ridden hindrance—and, like all hindrances, this one will be hard to ditch.

As a side note, jail is a fairly common route to such a hindrance. If a hero with a nonvillainous calling is caught in his or her criminal action, the Narrator can draw a card for every month the hero is in prison. If any such draw is a Doom card, the Narrator can mete out the Guilt-Ridden hindrance as above. (On the plus side, feeling guilt over one's actions is often a prerequisite for parole.)

DEAR DR. RICHARDS

If I stand next to an exposed nuclear reactor core, will I grow wings?

—Jimmy Ward
age 10
Lake Geneva, WI

Probably not, Jimmy. Chances are, you'll get very, very sick.

The news programs always show the "advantages" of exposure to megadoses of radiation, and in truth, I gained my super-elasticity from cosmic rays. But my own household also demonstrates the dark side of radiation: Cosmic rays gave super strength to my best friend Ben Grimm, but robbed him of the appearance of humanity. He called himself The Thing because he no longer felt he was a human being.

To help me explain, I've turned to a colleague who, though we disagree on most issues, nonetheless speaks with authority on the dangers of uncontrolled radiation. Jimmy, I'd like you to meet Dr. Otto Octavius, whom you may know as the criminal Doctor Octopus.



Thank you, Dr. Richards. I am pleased that you have finally acknowledged my supereminence in the field of radiology. After all, that fool Banner stands as a living monument to carelessness with radiation, yet the mainstream

scientific community dares to deem him the expert!

In any case, Dr. Richards is correct in saying that radiation is not to be toyed with by one such as you, Jimmy. Some radiation is helpful, but some is deadly. To oversimplify, radiation is the emission of energy, most often in the form of invisible waves. The precise kind of energy depends on the distance between the individual waves, which is called the wavelength. If the wavelength is large, the radiation may be beneficial. In this category are waves of visible light, TV signals, microwaves, and the sun's infrared rays that warm your skin.

As the waves get shorter, they get more dangerous. X-rays, gamma rays, and cosmic rays—the very ones that turned Mr. Grimm into a monster—all can damage the body in high doses. At best, exposure to them will turn your skin green and cause your friends to despise you—witness the Hulk, Radioactive Man, the Abomination, and so many others. At worst, it will give you a horrible disease. That idiot Doctor Demonius, who is stuck in a containment suit because he trifled with radiation, is a prime example of this result.

So what's the answer, boy? One word: shielding. I am the world's foremost designer of radiation shielding, and let me tell you, it is the most important invention of our age. It's best not to be around high levels of radiation unless you have as many advanced degrees as I do, but if you must, get proper shielding.

Thank you, Dr. Octavius. I'm glad your parole committee saw fit to let you answer Jimmy's intelligent question.

So there you have it, Jimmy. Overexposure to radiation may bless a lucky few, but it is a cruel, cruel curse to most.

Radiation is the force that impels Marvel Earth. Nearly every super hero or villain owes at least some debt to the abundance of radiation the Atomic Age brought with it. Many superbeings are mutants—humans born with superpowers because of the background radiation that has infected humanity's gene pool. Wolverine, the Scarlet Witch, and many more fit this description. Quite a few other superbeings are mutates, who acquired their powers through postnatal exposure to radiation. These include Spider-Man, She-Hulk, and Reed Richards himself.

Players may toss radiation around like candy in your game, as the Radiation Control power is quite common in the Marvel Universe. Other related powers, such as Light Control, Sonic Control, and Cosmic Energy Control, produce some of the same effects as radiation. But use of these powers usually results in doses of radiation that are too small to cause crippling or mutating effects—unless, of course, the Narrator wants some effect to occur. **Any time a hero or character is subjected to a burst of harmful radiation that requires an action score of 20 or higher to resist, the Narrator can choose to draw a card and check the aura.** If it's positive, the individual gains a positive effect based on its value (see the chart below). Ignore any result that doesn't make sense. If it's neutral, the player



must discard cards from his or her hand equal to the value of the card drawn. If it's negative, the individual suffers a negative effect based on the card's value (see the chart below). Again, ignore any result that doesn't make sense.

The Narrator makes any choices in contention, such as which powers the incident affects. However, an individual with the Radiology skill who intentionally directs radiation at someone can attempt a daunting *Intellect* action to dictate the results of any positive draw.

RADIATION EFFECTS

Value	Positive Aura	Negative Aura
1	Redraw to a full hand of cards	Skin color changes
2	Add a random card's value to a power's intensity	Subtract a random card's value from a power's intensity
3	Draw five new cards, but do not replenish till below normal Hand Size	Gain Toxic limit to power (see Radiation Control limits)
4	Remove a power limit	Gain Uncontrolled limit to power
5	Remove negative radiation effect	Gain Monstrous hindrance
6	Gain a new power at an intensity equal to the value of a random card	Lose one power entirely
7	Gain a new power at an intensity equal to the sum of two cards' values	Gain Susceptible hindrance
8	Draw a card and add that card's value to its corresponding ability (none if it's of the Doom suit)	Draw a card and subtract its value from its corresponding ability score (two cards if the first is of the Doom suit)
9	Double one power intensity	Gain Transformative hindrance
10	Temporarily become the most powerful being on Earth	—



Why does a mutant get one mutation and not another?

—*Cordelia Lear*
age 15
Los Angeles, CA

The shrouds of mystery that once concealed the human genome are falling away before our eyes. A genome is the complete genetic structure of a species.

The nucleus of each microscopic human cell contains twenty-six pairs of chromosomes, each made up of individual genes. These genes, the basic units of heredity, are linear sequences of what we call nucleotides, which are even smaller building blocks of genetic data. To map the human genome, we need to know where on the chain every nucleotide is and what it does. We're most of the way there. What we've learned so far is that one set of genes controls each physical trait.

Since the specific genetic code of an individual is some combination of his or her parents' codes, children often "inherit" certain physical characteristics (such as hair color) from one parent or the other. However, humans do not usually manifest all the genetic information contained in their individual genes, so a child might inherit a trait that neither parent demonstrates. This can happen when both parents have the code for that trait "hidden" within their own genetic structures, which they in turn "inherited" from their ancestors. For example, two black-haired parents can have a red-headed child, but the odds favor them having a black-haired one. (This assumes

that black hair is a more dominant trait than red hair, which it usually is.)

When something happens to change an individual's inherited genetic code, we call it a mutation. A few decades ago, such things as webbed toes and pink eyes were dramatic mutations. But in recent years, mutation has manifested much more impressive anomalies. Now, people are born with the ability to shoot laser beams from their eyes or speak to fish. Even more amazing is the fact that so many people develop mutational powers after birth, becoming mutants after exposure to radiation and other genetic stimulants.

Sometimes the mutational match between parent and child is quite close. For example, Unus the Untouchable, a mutant wrestler who could generate a personal force field, had a daughter named Unuscione who could also generate a force field. But in other cases, the differences can be staggering. There is nothing obviously connecting the powers of Magneto, the master of magnetism, with those of his children, the speedster Quicksilver and the reality-warping Scarlet Witch.

This seeming randomness affects everyone, not just humans. Inhumans exposed to the mutagenic Terrigen Mists can't possibly predict what they'll become. Deviants manifest powers far different from those of their parents. Even the powerful, starfaring Shi'ar Empire can't control whether its citizens will grow wings.

Of course, this question is an issue in my household too. As you know, I have the power to stretch my body, and my wife can control fields of force and turn invisible. But nothing could have prepared us for a son who could create his own worlds. Obviously, no matter how close we get to decoding the human genome, some mysteries will remain beyond our grasp.

RANDOM HERO CREATION

If you want to create a hero without making many decisions, you can always let the cards do your work for you. Just follow these simple steps. At any time, you may redraw if you don't like the result—assuming the Narrator says it's okay.

Name: Use the Random Monikers table in the *Game Book* if you really, really don't want to think of a hero name yourself.

Ability Scores: For each ability, draw a card and add 2 to its value. If it's of the suit corresponding to that ability, draw another card and add its value to the total you have already. Continue this process until either you draw a card that isn't of the appropriate suit or the total reaches 20.

Edge/Hand Size: Your hero starts with Edge 1 and Hand Size 3. Draw a card; if its aura is positive, add 1 point to Edge and 1 point to Hand Size. Repeat until you draw a neutral or negative card, or until the Edge score reaches 3.

Calling: Draw a card and use the calling listed on it. Redraw if it's a villainous calling, unless the Narrator specifically approves this choice.

Hindrances: Draw a card. If it doesn't feature one of the characters on the list below, your hero has no hindrances. If it does, your hero gains the hindrance indicated. Redraw and continue applying hindrances

HINDRANCES

Doctor Doom	Overconfident
Human Torch	Triggered-Powerless
Franklin Richards	Kid
Juggernaut	Bruiser
Loki	Lightweight
Magneto	Obsessive
Morbius	Fatally Vulnerable
Professor X	Physically Disabled
Rhino	Panicky
Rogue	Guilt-Ridden
Silver Surfer	Naive
Spider-Man	Unlucky
Storm	Phobic
Sub-Mariner	Susceptible
Super-Skrull	Hateful
Thing	Monstrous
Vision	Non-Corporeal
Warbird	Addicted
Werewolf	Transformative
Wolverine	Frenzied

until you get a card that doesn't feature one of the characters on the list.

Skills: Draw a card. Its value is the number of skills your hero has. (Treat a Doom card as a 1 regardless of its actual value.) To determine each skill, draw a card and compare it with the "Random Skills Table." If the table lists two skills, choose one. Skill draws in excess of four for a single ability are lost.

Ability Codes: Assign a code to each ability. Use an X code if the hero has no skills based on that ability, a D for one corresponding skill, a C for two, a B for three, and an A for four.

Powers: Draw a card. Its value is the number of powers your hero has. (Treat a Doom card as a 1 regardless of its actual value.) To determine each power, draw a card and compare it with the "Random Powers Table." If the table lists two powers, choose one.

Intensities: For each power, draw a card; its value is the intensity of the power. If the card is of the power's trump suit, draw a new card and add its value to your total. Continue this process until you draw a card that isn't of the power's trump suit.

Power Limits: Draw a card for each power. If it's a Doom card, assign a limit to the power, from either the power listing or the list of common limits in the *Game Book*.

Power Stunts: Draw a card. Your hero has that many stunts divided among all his or her powers. (Treat a Doom card as a zero regardless of actual value.) Choose stunts from the power listings.

Personality and History: These you have to do yourself. If you want help deciding where your hero got his or her powers, look in the "Power Sources" section of the *Game Book*. If you decide to use these categories, draw a card and compare it to the table below to determine the source.

POWER SOURCES

1 or 2	Learning
3	Heredity
4	Equipment
5	Mutation
6	Radiation
7	Racial
8	Power Transfer
9 or 10	Possession

RANDOM HERO CREATION

RANDOM SKILLS

If you want to give a hero or character a random skill, you can draw a card and com-

pare it with the table below. (This table allows the use of the promotional cards released for the game.) If two skills are listed for your card, choose one.

RANDOM SKILLS TABLE

Absorbing Man	Construction	Luke Cage	Intimidation
Adam Warlock	Dimensional Geography	Machine Man	Computers
Agatha Harkness	Mesmerism	Magneto	Energy Control
Annihilus	Weapon Systems	Meltdown	Flinging
Ant-Man	Repair	Mister Fantastic	Scientific Genius
Archangel	Aerial Combat	Moon Knight	Boomerangs
Banshee	Criminology	Moondragon	Assessment
Beast	Biochemistry	Morbius	Super-Physiology
Bishop	Law Enforcement	Nate Grey	Mental Control
Black Bolt	Sociology	Nick Fury	Military
Black Cat	Thievery	Nightcrawler	Swords
Black Knight	Equestrian	Nova	Spacecraft
Black Panther	History	Phoenix	Trance
Black Widow	Espionage	Polaris	Geology
Cable	Marksanship	Professor X	Genetics
Cannonball	Demolitions	Psylocke	Martial Arts Weapons
Captain America	Shields	Quicksilver	Fast Exit
Captain Britain	Physics	Rhino	Brawling
Clea	Sleight of Hand	Rogue	Piloting
Colossus	Wrestling	Sabra	Linguistics
Cyclops	Ricochet	Sabretooth	Natural Weapons
Daredevil	Clubs	Scarlet Witch	Occult
Deadpool	Taunting	Sersi	Archaeology/Architecture
Doc Samson	Psychiatry	Shadowcat	Cryptography
Doctor Doom	Time Machinery	Shang-Chi	Martial Arts
Doctor Strange	Medicine	She-Hulk	Law
Electro	Electronics	Silver Sable	Garrotes
Elektra	Contingent Attack	Silver Surfer	Surfing/Skating
Falcon	Animal Handling	Spider-Man	Photography
Forge	Mechanics	Stick	Teaching
Franklin Richards	Observation	Stingray	Oceanography/Boating
Gambit	Knives	Storm	Escape Artistry
Ghost Rider	Slings	Sub-Mariner	Politics
Giant-Man	Bionics	Super-Adaptoid	Disguise
Green Goblin	Chemistry	Super-Skrull	Aeronautics
Havok	Boxing	Taskmaster	Axes
Hawkeye	Archery	Thing	Hyper-Breath
Hercules	Mythology	Thor	Hammers
Hulk	Radiology	Tigra	Biology
Human Torch	Driving	Venom	Journalism/Writing
Iceman	Finance	Vision	Robotics
Impossible Man	Trivia	Warbird	Astronomy
Invisible Woman	Leadership	Wasp	Art
Iron Fist	Meditation	Werewolf	Climbing
Iron Man	Gadgetry	White Queen	Whips
Jubilee	Acrobatics	Wolfsbane	Tracking
Juggernaut	Sonic Slam	Wolverine	Skiing/Survival
Kingpin	Manipulation	Wonder Man	Performing
Kymaera	Spears		
Leader	Photographic Memory		
Lockheed	Artillery		
Loki	Lore		

RANDOM HERO CREATION

RANDOM POWERS

If you want to give a hero or character a random power, you can draw a card and com-

pare it with the table below. (This table allows the use of the promotional cards released for the game.) If two powers are listed for your card, choose one.

RANDOM POWERS TABLE

Absorbing Man	Object Duplication	Luke Cage	Regeneration
Adam Warlock	Additional Sensor(s)	Machine Man	Elongation
Agatha Harkness	Alchemy	Magneto	Magnetic Control
Annihilus	Animation	Meltdown	Energy Conversion
Ant-Man	Computer Link	Mister Fantastic	Plasticity
Archangel	Wings	Moon Knight	Imitation
Banshee	Sonar/Sonic Control	Moondragon	Telepathy
Beast	Prehensile Hair/Limb	Morbius	Life Drain
Bishop	Energy Reflection	Nate Grey	Postcognition/ Precognition
Black Bolt	Disintegration	Nick Fury	Stun Blast
Black Cat	Luck Control	Nightcrawler	Teleportation
Black Knight	Darkforce Control	Nova	Space Flight
Black Panther	Enhanced Senses	Phoenix	Psi-Screen
Black Widow	Wall-Crawling	Polaris	Detection
Cable	Telekinesis	Professor X	ESP/Hyperlinguistics
Cannonball	Kinetic Control	Psylocke	Psychic Blast
Captain America	Body Armor	Quicksilver	Lightning Speed
Captain Britain	Force Field	Rhino	Horn(s)
Clea	Astral Projection	Rogue	Power Theft
Colossus	Body Transformation	Sabra	Quills
Cyclops	Energy Blast	Sabretooth	Teeth
Daredevil	Radar Sense	Scarlet Witch	Reality Warping
Deadpool	Corrosion	Sersi	Transmutation
Doc Samson	Radiation Control	Shadowcat	Phasing
Doctor Doom	Time Control/Time Travel	Shang-Chi	Chi
Doctor Strange	Magic	She-Hulk	Leaping
Electro	Electrical Control	Silver Sable	Ensnarement
Elektra	Poison	Silver Surfer	Cosmic Awareness
Falcon	Animal Control	Spider-Man	Web-Slinging
Forge	Nullification	Stick	Empathy
Franklin Richards	Dimensional Travel	Stingray	Adaptation/Life Support
Gambit	Emotion Control	Storm	Weather Control
Ghost Rider	Gestalt	Sub-Mariner	Waterbreathing
Giant-Man	Size Alteration	Super-Adaptoid	Power Duplication
Green Goblin	Blinding	Super-Skrull	Shapeshifting
Havok	Cosmic Energy Control	Taskmaster	Danger Sense
Hawkeye	Absorption	Thing	Earth Control/ Earthquake
Hercules	Immortality	Thor	Air Control
Hulk	Resistance	Tigra	Pheromones
Human Torch	Fire Control	Venom	Blending
Iceman	Cold Control	Vision	Density Control
Impossible Man	Duplication	Warbird	Energy Sheath
Invisible Woman	Invisibility	Wasp	Flight
Iron Fist	Ability Boost	Werewolf	Affliction
Iron Man	Protected Senses	White Queen	Illusion/Image Summoning
Jubilee	Light/Shadow Control	Wolfsbane	Animal Form
Juggernaut	Gravity Control	Wolverine	Claws/Digging
Kingpin	Paralysis	Wonder Man	Invulnerability
Kymaera	Water/Plant Control		
Leader	Mind Control/Hypnosis		
Lockheed	Additional Limb(s)		
Loki	Power Amplification		



Why does my dog chase his tail?

—Gerrit Payne
age 7
Boca Raton, FL

That's quite an interesting question, Gerrit. I'm afraid I don't have a definitive answer, because there are a few problems that come up in this field of inquiry.

First, dogs can't talk to us. Or rather, we can't talk to them (as we can't insist that they learn our language before we learn theirs). I only know one dog that understands human speech fluently, and Lockjaw doesn't talk much. Truth be told, I'm not even sure he's a dog, despite the fact that he looks like an oversized pug.

Second, dogs evolved along a different path than we did, so our brains are very different from those of our favorite pets. (I've been trying to get some answers from an odd little puppy that literally just appeared in our home recently, but since I can't think like him, I haven't gotten very far.)

Finally, evolution is a long process. Finding answers to questions of "why?" come down to studying a pattern of behavior over time. We simply haven't been observing dogs long enough to understand how their behavior has changed over the millennia.

With all that said, we can address some possible reasons why your dog might chase his tail. Most animal behav-

iors come about because they're useful; if the animal doesn't benefit from doing something, it probably won't do it. If the activity is really important to the animal's survival, it may become a species trait—that is, the animal's descendants will do it too. Even if a certain type of species behavior becomes unnecessary at some point, animals of that type continue to do it. So housedogs bury bones because their undomesticated ancestors needed to store food—they didn't have people to feed them on a daily basis, after all. Likewise, their ancestors had to pack down leaves to make their beds, so your dog might circle his bed three times before settling down to sleep.

What benefit did dogs ever gain from chasing their tails? I didn't get much of an answer when I asked Lockjaw; he seemed genuinely surprised when I held up a mirror and showed him that he even HAD a stubby little tail. So I'll rely on theories.

Most of us have seen a cat pounce on its tail, bite into it, and yelp up a storm. From this, I can only conclude that the cat did not associate the tail with its own body, even though it actually caused the motion that eventually attracted its predatory pouncing.

Most dogs seem smarter than cats, so maybe they know their tails are attached to them. This doesn't seem to prevent them from wanting to catch the things, though. When he's standing up, your dog can't do much to catch his tail in his mouth. He makes a motion to bite the pesky thing, which moves it farther away, which leads to more biting, and so on. Soon you've got a full-fledged canine cyclone.

Of course, the dog could just be having fun.

Most animal
behaviors [are]
useful; if the animal
doesn't benefit . . .
it probably won't
do it.

REDIRECTING LOST HEROES

Let's say your players' heroes are investigating deepest Atlantis, but the plot you've carefully orchestrated demands that they be on the Starcore orbital platform. How do you steer them away from the distractions they've found and into the main plot? Here are ten ways you can get the plot back on track.

1. Tell the players their heroes are off-track. It seems too simple, but saying "Hey guys, you're barking up the wrong tree" can do wonders. The players may well ask you where they should be, and then you can lead them there without much fuss.

2. Change your plot. MARVEL adventures should be flexible. Think about whether you could advance the plot from where the players are rather than trying to get them to move in the direction you planned.

3. Drop a hint like a cannonball. You can always give the players a subtle hint, but usually an uns subtle one is more effective. When the heroes beat up an Atlantean and discover a Starcore card in his possession, they'll probably be on the next shuttle out.

4. Send the heroes a message. Have a character—one from the adventure, a new character you make up, or a random one drawn from the Fate Deck—send the heroes a distress call or summons. No hero can resist such a plot hook.

5. Teleport the heroes to where you want them to be. Have them walk through a portal, meet a powerful sorcerer, trigger a strange device, or tick off a super-villain who sends them away—conveniently back into your plot.

6. Cause a disaster. Smack the orbital platform with a meteor, or cause some other convenient disaster to lure the heroes to the scene. The news feeds should show whatever element of the plot will bring your heroes running.

7. Taunt the heroes. Have your main super-villain dare them to leave their current plans behind and come to where he or she is. Something about flying around in a cape makes heroes supersensitive about being teased.

8. Take a break. Give the players a time-out and let them think about what they've done. It's entirely possible that while they're scarfing pizza, they'll figure out what they did wrong, especially if you help them reach that conclusion.

9. Have someone else handle the problem. If the heroes hear that another superteam is going through their adventure, they'll whip to the scene pronto. No heroes like to see someone else get their glory.

10. Start a new adventure. If the heroes are in the thick of it in the wrong place, start a new plot right there. Maybe an adventure in Atlantis wouldn't be so bad, and you can always get back to your main plot some other time.

If all this fails, you can always retcon. (See the "Retconning" section that follows.)





My dad says you can probably help me understand this. Every day, he walks by Maria Stark Park on his way to work. One morning, he passed Avengers Headquarters, a big gray building. Then the next day, he walked by and it was the old Avengers Mansion! Is my dad loopy, or is something really whacked going on?

—Celandra Turner
age 15
New York, NY

Celandra, it depends on how “whacked” you think time travel and alternate universes are. Assuming you think those are really whacked, then yes, something really whacked was going on.

The Stark family built the structure your father knows as the Avengers Mansion quite a few years ago. Then the Masters of Evil devastated it in a brutal attack, and the superteam decided to build a new home on the site of the destroyed mansion. At that time, the Avengers had several bases, including an underwater one, which they occupied while construction continued on the new Avengers Headquarters. When it was finished, they moved in and lived there for some time.

Then a superbeing called the Praetorian arrived. For reasons best known to him alone, he sought out people who were fated to die and plucked them out of

time. His activities apparently resulted in a time loop that brought forth evil versions of the Avengers from another universe. The Avengers defeated the Praetorian in an effort to stop their own destruction and replacement by the evil Avenger-duplicates. In the wake of this being’s defeat, the time loop sorted itself back into our timeline—for the most part.

A few things didn’t quite right themselves, however. The synthezoid known as the Vision got his old green body back after spending some time as a ghost-white being. And an intact and pristine Avengers Mansion appeared on the site where the Avengers Headquarters had previously stood. In the aftermath of the Praetorian affair, no one could quite figure out why the mansion was out of time—and believe me, we all tried. Since then, the Avengers have lived in the mansion of old, putting the odd incident behind them.

I’d like to reassure you that this kind of time distortion is a once-in-a-blue-moon occurrence. I’d like to, but I can’t. The city of Manhattan, like various other cities (and even the entire world now and then), keeps getting caught in reality-altering effects. Your friendly neighborhood super heroes stand fast to set all alterations of reality aright, but we don’t catch everything.

For now, though, you can take comfort in the fact that our planet is pretty much on track, as far as reality goes. Time evidently has a mind of its own, but it seems to prefer to stay on course as much as possible.

So don’t worry about it too much, Celandra. Reality is a lot tougher than we think. And if a mansion or two slips out of time every now and then, it’s noteworthy, but at least we don’t have anything bigger to worry about—for the time being, that is.

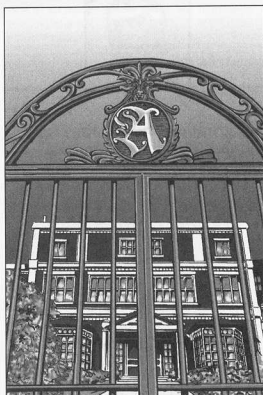
The replacement of the Avengers Headquarters with the old mansion is an example of "retconning," which is shorthand for "retroactive continuity." Retconning occurs when the authors and editors of a comic decide that what the public believes has gone before is not in fact the truth. You can probably think of many examples, such as Jean Grey's incarceration in a cocoon on the bottom of the Hudson River, or the revelation that the children of the Vision and the Scarlet Witch were just cruel illusions.

The MARVEL game is ripe for retconning because the participants are weaving a story together. If the players and the Narrator agree that it would be better if something different had occurred in a game session, the Narrator can simply change what happened. The players must, however, come up with a plausible explanation of what REALLY happened, or the Narrator probably won't agree to restore the status quo. (This is what Narrators refer to as the "No-Prize Clause"!)

For example, say the player of Captain America gets really unlucky and that star-spangled shield of his falls into the Marianas Trench. If neither the Narrator nor the players want to see how a shieldless Cap holds together, the Narrator can just wave the magic continuity wand, and presto! Cap has his shield back.

If only the players want something to change, however, they may find it difficult to persuade the Narrator to alter the game for their benefit. Pleading might work, but bribery's usually a surer bet. Sometimes, the best the players can hope for is to play out a "What If?" adventure in which the problematic event didn't happen. (See "Nonlinear Story Hooks" in the **Game Book**.) Then the Narrator will bring them back to the normal chain of events—unless, of course, he or she liked the alternate version better.

If only the Narrator wants to retcon the events, he or she has some tough decisions to make. Players don't always like to see their hard-won continuity eradicated frivolously, much as comic readers don't like to see their favorite characters go through changes without compelling reasons. So if the Narrator plans to retcon the past, he or she had better have some very good rea-



sons—or at the very least, a plan for a whiz-bang time-travel/alternate-reality epic. After all, the cool interdimensional dynamics of the Praetorian saga helped to mollify fans of the Avengers Headquarters when it vanished.

So in your game, the Narrator can subtly make the changes he or she wants by spinning a series of adventures that play havoc with the timestream, the dimensional alignment, or the psychological underpinnings of the heroes' lives. The retconned change need not be the centerpiece of the epic, just as the return of the Avengers Mansion was only a side effect of the major doings.

Of course, the Narrator doesn't always need to explain everything. After all, a villain who seemingly died in a cataclysmic explosion three games earlier can certainly reappear without a complete explanation. Still, spinning the convoluted tale of why the explosion didn't rend the dastard into fragments is often half the fun. ("Then, I felt myself plucked backward in time to the moment of my birth, and the great god Googlimoogli spoke to me from the void and said, 'Your time on Earth is not yet past. . . .'"



My grandpa told me the Human Torch has a sidekick named Toro. I've followed Johnny Storm's entire career, and I say he's wrong. Who's right?

*—Michelle Garroway
age 14
Staten Island, NY*

You're both right, in a sense. The Human Torch did have a sidekick named Toro, but Johnny Storm has never had a sidekick.

You see, Johnny was not the first Human Torch. During World War II, Professor Phineas T. Horton created the world's first android—a "synthetic man," as he called his creation. But something went wrong with his figuring. Every time this "Human Torch" contacted oxygen, he burst into flame! Horton tried to bury his creation, but the Human Torch, in contact with air, spread terror in the city, where everything he touched turned into an inferno!

Confused and misunderstood at first, the incendiary android unintentionally fell in with criminal arsonists, but he soon turned against them and became America's first super hero. His early battles were against the mighty Sub-Mariner, who would eventually become his ally.

The Torch established another identity for himself, that of policeman Jim Hammond, and soon—here's what you were

looking for, Michelle—he took on a human sidekick named Toro. This boy had powers identical to those of the Human Torch, though he was human through and through. The two heroes fought for justice at home and for patriotism abroad, joining the Sub-Mariner, Captain America, and Cap's sidekick Bucky in battles against the Axis forces.

At the end of the war, Bucky died, Captain America disappeared, and the Sub-Mariner returned to the sea. The Torch and Toro joined the All-Winners Squad, but their time as hero and sidekick would be short-lived. In 1949, criminals imprisoned the Torch and Toro in the Nevada desert, thinking the android dead. In 1953, an atomic bomb test reactivated the Torch, but his return to action was also short-lived. A few years later, he expended all of his energy and deactivated.

When my hot-headed brother-in-law took on the fallen android's mantle, we assumed we'd never meet the original Human Torch. Happily, we were wrong, though the circumstances of our encounter were less than auspicious. The villainous Mad Thinker had revived the Torch to fight against us. Though the android seemed to die in that battle, he returned again to join the West Coast

Avengers, and later, Heroes For Hire.

The valiant Toro also resurfaced in the Mad Thinker's plot to destroy the Fantastic Four, and he apparently died in that incident. But perhaps he survived and is living a life of anonymity, content to let the past rest. I hope so, for in reality it is he—a boy whose body could erupt into flame—who is Johnny's spiritual forefather. If you read this, Toro, the Fantastic Four thank you for your inspiration.

**The Human Torch
did have a sidekick
named Toro, but
Johnny Storm has
never had a
sidekick.**

Captain America and Bucky, Shadowcat and Lockheed, Doctor Strange and Wong, the Falcon and Redwing—all these pairings involve unequal balances of power, and that's the way the participants like it. One individual in each pair is the hero; the other is the sidekick.

The regular hero creation rules work fine for developing sidekicks, though the latter are always considered inexperienced (see the "Hero Creation Sequence" section in the **Game Book**). The hero's Edge must exceed the sidekick's, which can never be more than 2. But it's best if the hero's Edge is at least 2 points higher than that of the sidekick (see below).

Unless played by another player, a hero's sidekick is always a character. The Narrator, however, may cede control of his or her actions to the hero's player if desired. This allows the hero to direct the sidekick's actions, which results in several changes to the combat sequence:

- The character obeys the hero's directions, assuming that the two can communicate freely. Thus, the player announces actions for both the hero and the sidekick when heroes declare their actions for an exchange.
- The player makes two actions, one for the hero and one for the sidekick, when his or her turn comes. Each action is resolved normally, with cardplay from the player's hand plus any applicable Edge and trump bonuses contributing independently to the two action scores. The player doesn't redraw cards until all actions are over.
- If the hero attempts a team stunt (see the "Teamwork" section of this book) with the sidekick, the hero's Edge increases by 1 for that action.
- Only the hero's wounds require the player to discard cards from his or her hand. The sidekick suffers damage as a normal character. If the player's hand drops to zero cards, only the hero loses consciousness, but the sidekick cannot play cards again until the hero is back on his or her feet.

When a hero leads a team of sidekicks (such as Silver Sable and her Wild Pack), the Narrator can allow the hero to direct the actions of the whole group. However, since the player does not redraw until after resolu-

tion of all actions, this limits the number of actions the player can augment with cards. Large teams are unmanageable for most heroes, which is the main reason that small teams are the norm.

Note that the Narrator can always reassert control over any character.

LOYALTY

Anyone with an Edge score lower than 3 can be a sidekick. However, a sidekick by definition must always have an Edge score lower than that of the hero with whom he or she associates. Should that situation change for any reason, the younger hero must leave the nest. If the sidekick's Edge is only one point lower than the hero's, problems in leadership may well occur. If the hero makes a decision that gets the sidekick hurt, the Narrator can force the former to make an average Willpower (Willpower) action or lose the sidekick's loyalty. This helps explain why Jim Rhodes left Tony Stark, for example.

A loss of loyalty removes all the sidekick bonuses. Thereafter, the Narrator may play the former sidekick as a normal character.



DEAR DR. RICHARDS

A story I read in the paper said that someone called the Impossible Man had made an entire planet of people just like himself. Is this true?

—*Lisa Ann Bartlett*
age 16
Piscataway, NJ

Yes. Well, no. You see, it's kind of complicated.

The Impossible Man (or "Impy," as my son calls him) is a native of the planet Poppup. He's bright green and has a conical forehead, at least most of the time. He can do just about anything, except find some way to entertain himself that doesn't involve bothering me and my family. Oh well. In a universe that spawns such threats as Terrax the Tamer and Ultron, I suppose I can live with a little green man from outer space.

Impy always seemed to get special delight out of teasing Ben, though pretty much anything would entertain him. The only time I've known him to be disheartened was when he discovered that he could change his shape to become anything green—but nothing else. Color change is apparently beyond his considerable abilities.

Anyhow, we discovered that the Impossible Man could clone exact versions of himself. He even made at least one somewhat inexact version—an Impossible Woman. As far as we could tell, he had previously spawned the

entire planet of Poppup by himself. And furthermore, as far as we could tell, all those Poppupians were really one being — which ex-

plained why they acted in concert so much more effectively than any normal allies could. Just when you thought you only had one Poppupian to deal with, you'd be drowning in them. And then when you thought they'd stay forever, there'd just be one Impy. So when Galactus ate Poppup not long ago, he didn't seem to kill anyone in the process—at least as far we could tell.

Of course, this didn't stop Impy from pestering us at every turn. In fact, I fear writing about him, because at any moment he could run himself through the *Daily Bugle's* printing press and transform this column into

As far as we could tell, he had previously spawned the entire planet of Poppup by himself.

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Oh darn. I'll bet he's done it again, hasn't he?

SIMULTANEOUS ACTIONS

In most cases, each hero gets one action and one counteraction per exchange. Some skills and powers—Contingent Attack, Boxing, Lightning Speed, and so on—allow division of some or all of the action score among multiple attacks. Damage is assessed separately for each attack, so a few small hits can pack a lot of punch.

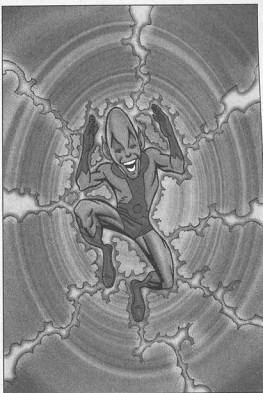
If several attacks on the same hero happen simultaneously, he or she can always try to dodge them all at once, generating a single dodge score to compare against all the various opposition totals. If the Narrator chooses, all dodges can increase one level in difficulty for each attack the hero makes beyond the first.

Any time he or she chooses, the Narrator may allow a hero two actions in an exchange. In this case, the player uses the lowest action ability or power as the score and trump suit for all the simultaneous actions, then divides the resulting score among the number of actions. The Narrator is free to raise the difficulty of any action to reflect the situation. If one action clearly follows another, the second is contingent.

Say Rena tries Leaping (an Agility-linked action) to catch and dismantle a bomb (an Intellect action) in one exchange. She has Leaping 14 and Intellect 9. For this dual action, she uses her 9 Intellect as the action ability and plays a 6 of Intellect, drawing a 6 of Agility as the trump card. This does not get her another draw, since Intellect (the suit of the lowest score) is the trump suit for both actions. This gets her a total action score of 17, which she divides by two actions, resulting in an 8 for each. The Narrator rules that the leap was average difficulty, but the near-simultaneous dismantling was challenging. So she makes the leap but doesn't dismantle the bomb, which goes off in her face. Nice try.

DUPLICATES

The power of Duplication allows a player to have multiple heroes, all with same talents. In non-combat situations, the hero can be in two or more places at the same time, which is quite useful when a team splits up. In combat situations, multiple copies make



tactics such as piling on considerably more effective. So handling many duplicates of the same hero may be problematic for both the player and the Narrator. Some limits might help.

Whenever multiple duplicates participate in the same fight, the player must indicate which copy is active for any given action. All the others then provide combat bonuses to the "current copy" or to another hero by adding +1 to the latter's action score, in the same manner as a Pile-On. Multiple actions work as above, though the extra actions incur no penalties.

Only the original version of the hero suffers damage from the player's hand. All others are treated as characters, and the Narrator tracks the 10 Health points of each duplicate with a Health monitoring card. If the player's hand goes to zero cards, the original hero is out cold. The remaining copies cannot play cards on any actions.

Duplicates also have the Duplication power, but the original's maximum number of duplicates applies to the total number generated, regardless of who makes them.



Why is Saturn the only planet with rings?

—*Anna Carson*
age 15
New York, NY

Actually, Saturn is not the only planet in our solar system with rings. Recent exploration has revealed that Jupiter has at least one ring, Uranus has at least nine, and Neptune has at least three.

But back to Saturn. Depending on where it is in its orbit around the sun, this mysterious planet may be as much as a billion miles away from Earth (that's illion with a B, not an M). I've been to Saturn on a number of occasions—most often to visit with my friends the Eternals, who live on the Saturnian moon called Titan. Once I went there to bury a friend, the Kree captain named Mar-Vell.

On a happier visit, while Susan took in the Royal Gardens of Titan, I spent some time studying the beautiful rings that circle the gigantic planet. The ring system begins about 7,000 miles above the surface of Saturn and extends out to beyond 35,000 miles from its surface. This makes the diameter of the ring system something like 170,000 miles. But amazingly, the rings are no more than 10 miles thick. So if

you were to stand sufficiently above Saturn, the rings would look like a colorful and colossal compact disc or phonograph record (if those still exist).

Essentially, the rings are made of icy particles, most of which are about a meter wide. It's very cold around Saturn—the mean temperature on the planet's surface is about -300 degrees Fahrenheit—so the ice particles are in no danger of melting. The varying colors result from different parts of the light spectrum reflecting off the individual rings. (Not that the rings are actually separate from each other, of course. It just seems that way to us.)

As a side note, while analyzing the rings, I came across a spaceship that belonged to an alien race of silicate beings known as the Stone Men of Saturn. I managed to avoid detection

and monitor their communications for a while. Apparently, the Stone Men use the rings as outposts, but their home is on the dense center of the planet. It may seem odd that they're essentially living inside the planet, but they probably think they live on the surface. You see, what we know as Saturn is predominantly composed of atmosphere and water.

The real planetoid at the center of all that might be no bigger than Earth.

Saturn also has at least twenty moons, one of which is home to the aforementioned Titanian Eternals. They're benevolent beings who look pretty much like us, though they often have some fantastic powers. On second thought, that makes them just like us.

Recent
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least three.

There is no oxygen in space, so most heroes must wear space suits to function there. Some heroes, however, have helmets that serve as entire space suits by regulating the internal functions of the wearers' bodies.

SURVIVING IN SPACE

Anyone without a space suit or specialized protective helmet must make a *desperate Strength* action each exchange or suffer 50 damage points from suffocation. Those with the Life Support power can make a *daunting Life Support* action to avoid this damage. (This means that anyone with Life Support 16+ can always ignore damage from airlessness.) This action does not interfere with any other actions the individual attempts during the exchange.

It's also quite cold in space. Even if they can breathe, individuals without resistance

to or protection from extreme temperatures suffer 15 damage points from cold every exchange. Those with Strength 15+ can pretty much ignore this damage, of course.

MOVEMENT AND COMBAT

In space, gravity's pull isn't a factor in personal movement, and this can be highly disconcerting. On board a ship with artificial gravity, fighting occurs normally. Without it, all difficulty ratings go up one level (4 points) for all combatants not accustomed to zero-G. Anything fired in space—an energy bolt, an arrow, whatever—continues in motion at the same rate until it hits something, so the source of an attack never limits its range. Likewise, knockback (see the "Knockback" section of this book) is essentially perpetual motion; any movement in a direction continues at the same rate until the individual contacts something.

Those used to fighting in space can take advantage of these anomalies, though it's pretty dishonorable to do so. An aimed shot at a person's space suit ruptures it if the damage exceeds the suit's Material Strength. (NASA-style spacesuits tend to be about Material Strength 8.) Someone in a ruptured space suit has one exchange to make a *challenging Willpower* action to clamp the leak shut; otherwise, he or she suffers 50 damage points. If the hero can effect repairs on the suit, he or she can again use it to function normally in space.

Of course, in reality, someone who dies of environmental causes in space simply implodes. But this is a comic book game. If the Narrator is being charitable, a hero or character who drops to zero cards or Health from the airlessness and cold of deep space might just freeze solid. If so, someone could certainly thaw the victim later.





Where do you get such cool stuff?

—*Mikey Pine*
age 12
San Bernardino, CA

For the most part, I make it myself. You might be able to invent "cool stuff" too, Mikey, if you apply yourself and study very hard.

Invention is the unification of creativity and science. The left side of your brain helps you analyze; the right side helps you imagine. But you have to develop both halves of your brain if you want to invent.

When you're trying to make something new, it's important that you use the principles of the scientific method to plan your project.

First you start with an idea. I sometimes get my ideas from dreams, or reading, or even chance comments my friends have made. Quite often my family and I need to accomplish things that we don't yet have the means to do, so I have to build a device with the required functions. Invention is the child of necessity, after all.

Once you know what you want to build, you'll need to figure out how to build it. That's where the years of scientific training come in. I can design a handheld transneutronic atomizer/reatomizer because I went to school and studied physics. If you study physics, I'll bet you can make one too.

Next, you have to build a working prototype of your design. I usually try to do this quickly, since I need to get the idea out of my head before I'm distracted by some other device I want to build.

Finally, you have to test your new gadget. This is when you get to show your invention to your friends! My buddy Ben is my primary tester, and he's always ready to jump in the cockpit of any new piece of equipment I've cobbled together. (Of course, it's good to have a friend who's made out of solid rock in case your new invention explodes. But I suppose that's not really an option for you, is it, Mikey?)

To give you an idea of how this version of the scientific method can work for you, I've decided to invent a device right here in this column. The one I have in mind is a mini-microchip that publishers

could embed in every newspaper they print, so that readers could see back in time to when the news story of the day happened.

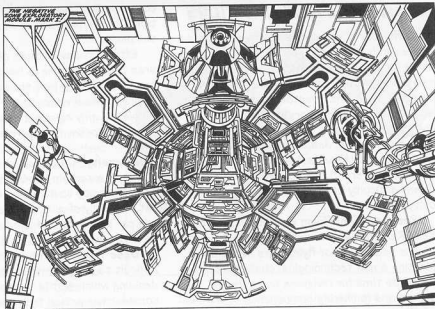
To make such a device, I first must extrapolate on the theory that Dr. Flaan Øortosk of the University

of Reykjavik propounded on transchronological window miniaturization. Dr. Øortosk postulates that the timestream can be winnowed through a portal no bigger than a quark, specifically one in the up position. Marrying this to the work of Dr. Shanta Pranarasthutrassam of the Hawaii Metrochronic Institute—who has maintained cross-parallel slipstream reversal transferred over multiple objects for more than half a microsecond—gets us a unified theory of . . .

Oh shucks, I'm out of space. Well, Mikey, that's how you get such cool stuff.

**Invention is the
unification of
creativity and
science.**

In the Marvel Universe, technological breakthroughs happen constantly. The **Game Book** gives a simple method of managing equipment creation in the game: make an *Intellect* action at a difficulty level equal to the desired power intensity for the item plus one point for each power beyond the first. But if you really like super-science, here's a more involved research system.



Research enables denizens of the Marvel Universe to create amazing devices of all types, from flying cars to magical wands. Indeed, few of the wonders of the superheroic age would be distinguishable from sorcery to an Alpha Primitive.

An inventor starts by visualizing the functions of the device he or she wishes to create. Through the application of relevant scientific principles, he or she can then develop a machine with the desired powers. This assumes that the necessary resources are available, though a Gadgeteer can always disassemble one device and scavenge its parts to create something new. If some vital component is missing, the Narrator may require the hero to fetch it before proceeding, which can serve as the hook for an adventure.

A scientifically-minded hero can always spend a response bonus to design a new gizmo, but the action to make it must still succeed. If it doesn't, the response bonus is lost.

DESIGN DIFFICULTY

To create a gizmo, the hero must work against a difficulty that the Narrator sets after listening to the player's plans. The would-be inventor describes the desired device—what it does, how far it can project its effects, and so on—and the Narrator

sets the difficulty according to the properties on the Invention Chart. The player then makes an *Intellect* action, modified by a maximum of one science skill (–4 points of difficulty). If the resulting action score equals or exceeds the Narrator's difficulty rating, the invention is a success.

Those who underestimate the difficulty of research are prone to disastrous errors. Young Victor von Doom discovered this when a rushed college experiment exploded, scarring his face and his psyche forever. Similarly, if an inventor's new device is a failure (that is, the player did not generate a high enough action score), the Narrator draws a card from the Fate Deck. If it is of the Doom suit, the device malfunctions or explodes, causing the item's intended intensity in damage to everyone within firing distance.

The Invention Chart allows for the creation of devices in amazingly short time-spans. However, a device developed in less than a day is inherently unstable. Check the Narrator card for each exchange of use; if a Doom card appears, the device malfunctions or explodes. (Either result destroys it utterly.)

You can use this system to create magical devices as well as technological ones. In this case, use the hero's Magic intensity or Willpower score (whichever is lower) rather than his or her Intellect score to create the device. The inventor must have the Occult skill to create magical items.

SUPER-SCIENCE

RESEARCH DIFFICULTY FACTORS

The difficulty of inventing something depends on research time, intended effect, and many other factors. The Narrator and player can use the Invention Chart to set a difficulty based on what the inventor wants to create and how much time he or she is willing to invest in the project; other considerations such as pressure, deadlines, and poverty may also apply. All these factors are additive. If different powers of the device generate different difficulty levels, use the highest difficulty possible.

Research Time: Even men as brilliant as Reed Richards and Tony Stark usually don't create supersuits or flying cars overnight. Meeting a new technological challenge always demands time for reviewing the works of others and gathering components.

Distance: The closer the device is to its user or target, the easier it is to build. Items intended to function at very long ranges are much more prone to failure. For example, creating a machine that delivers a shock to anyone who touches it is much less difficult than creating one that can blast a target with lightning at visual distance.

Duration: A device with an instantaneous effect can be built faster than one intended to hold its energies for long periods. For example, it's easier to inscribe a seal that can bind a demon for a minute than one that must hold it back forever. Permanent effects (for example, traveling back in time, even if it only takes an instant to make the actual journey) have the "forever" duration. When

the Invention Chart mentions "concentration," it means the user's concentration, not the device's.

Effect: A device that affects a large area or many people is harder to make than one that affects just the user or target. Approximate if necessary. A room, for example, roughly equals a small group, while a crowd of hockey fans covers about a city block.

Intensity: If a device must duplicate a power at a certain maximum intensity, add that intensity to its difficulty. Use the highest intensity of all the device's powers, plus one per power beyond the first. This value can go all the way up to 30.

Base Trump: Some powers are far more difficult to simulate than others. When you're deciding which suit is trump for the item, consider the actual trump suits of the powers selected and choose the one that adds the most difficulty points to the construction. For example, Body Armor that also allows Fire Control uses Intellect instead of Strength to calculate difficulty.

Limits: Putting significant limits on the device can lower the difficulty of creating it by 2 points per limit imposed. Similarly, a device that imposes a hindrance on its user would be 2 points less difficult to create.

Other Requirements: The Narrator can always add some other aspect of difficulty to the Intellect action required to invent the gizmo. For example, he or she could modify the difficulty for construction of a time platform according to how far back or forward it allows the user to travel. Also, the Narrator

INVENTION CHART

Difficulty	Research	Distance	Duration	Effect	Intensity	Base Trump
0 points	Lifetime	User Only	Instant	User Only	0	Strength
1 point	1 Year	—	Concentration	1 Individual	1	—
2 points	1 Month	Striking	Aura Duration*	2 Individuals	2	Agility
3 points	1 Week	—	Up to an Hour	Small Group	3	—
4 points	1 Day	Firing	Up to a Day	Large Group	4	Intellect
5 points	1 Hour	—	Up to a Month	Building	5	—
6 points	1 Minute	Visual	Up to a Year	City Block	6	Willpower
7 points	1 Exchange	Beyond-Visual	Many Years	City	7	—
8 points	1 Instant	Beyond Earth	Forever	Planet	8**	—

*Aura duration, as noted in the **Game Book**, requires a draw every exchange the device is active. If the aura on the card drawn is negative, the device ceases to function.

**One point of difficulty per intensity point of the device's highest-intensity power.

can impose monetary cost and components at his or her discretion, possibly leading to some major investment or crime that could in turn trigger an adventure.

Assistance: When super-scientists get together, they can create amazing things—just ask the lunkeads in A.I.M. In such a group effort, the scientist with the highest Intellect score attempts the action, but each additional participating scientist with an appropriate skill lowers the difficulty by one level (4 points).

A simple example might be a Cold Blaster (Intellect-based, 4 points) with instant duration (0) that can affect one individual (1) at firing distance (4) with intensity 10 Cold Control (10). The inventor has a month of research time to invest (2). This totals to a difficulty of $4 + 4 + 0 + 1 + 4 + 10 + 2 = 21$.

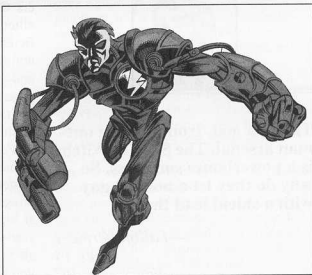
A more complex example would be a one-day rush project to build a helmet that grants its user invisibility 8, Mind Control 14, Telepathy 9, and Teleportation 12. Here, the difficulty components are a day for research (4), visual distance effects (6), a duration of hours (4), a small group of targets (3), a maximum intensity of 14 (+3 for the other three powers), and a Willpower base trump (6, the highest of the possible options). The creator imposes a limit on the object, namely that it doesn't work in daylight (-2 difficulty). This makes the total difficulty $4 + 6 + 4 + 3 + 14 + 3 + 6 - 2 =$ a whopping 38 difficulty! Even with a 4-point deduction for an appropriate science skill (such as Bionics), this helmet is going to be a killer to make.

RESEARCH AND ADVENTURES

Of course, sitting around the lab all day doesn't always make for exciting adventures. But it sure can lead to some, if you're a bit inventive.

First, there's the **missing part** adventure. At a critical juncture, the super-scientist reexamines his or her blueprints and discovers that the device will function only if it is oiled with a viscous fluid that flows in the canals of Mars. Suddenly, the inventor must make a trip to Mars, and who knows what the Martians will think of people stealing their precious oils?

Second, you can always bring in the **competition**. If your heroes are on the verge of a



technological breakthrough, somebody will want to beat them to the punch, or at least beat them to a pulp. This competition could turn into a race, a battle to wrest the technology away, or even sabotage.

Third, no one ever wants a powerful device to fall into the **wrong hands**. Some criminals and terrorists prefer to wait until a device is finished before attempting to steal it. So while the hero is up to his or her neck in frame-ups, the bad guys are kidnapping his or her beloved pet and preparing their ransom demands. You guessed it, they'll trade the dog for the device.

Fourth, you can bring in a **mysterious patron**. Someone sinister could be backing the research. This could be a faceless and unscrupulous corporation like Roxxon or the Cord Conglomerate, or a disguised supervillain like Doctor Doom or Ultron. In this scenario, the hero has unwittingly helped the forces of evil and now must rectify the error by retrieving or destroying his or her own creation.

And finally (this one's a classic), there's always the **disastrous mistake**. If the device fails (or even if it succeeds), it can explode, gain evil sentience, unleash a powerful demon, open a portal to a dangerous dimension, and/or teleport the scientist into an extraplanar prison. The science-obsessed hero then learns a valuable lesson: Technology, bringer of much that is good in our lives, can just as easily bring misery.

Of course, this knowledge won't stop the hero from trying again.

DEAR DR. RICHARDS



Thor's a god. Iron Man's a one-man arsenal. The Scarlet Witch is a powerhouse sorceress. So why do they let a normal guy with a shield lead them?

—Fallon Vermeer
age 14
Vancouver, BC

That may be a guy with a shield, Fallon, but he's certainly not normal. He's Captain America, and he's the best at what he does. North of the border, you have an equivalent of Captain America in Alpha Flight—Guardian, right?

Anyway, Captain America doesn't lead the Avengers because he has a nifty shield, or because he can run the 100-yard dash in nine seconds. He leads them because he's the greatest leader of super heroes in our time.

Though I'm no slouch at managing a group, I sometimes have trouble coordinating the actions of a quartet. Captain America, the Living Legend of World War II, can strategize for a group consisting of DOZENS of heroes, as he did when he reunited most of the past and present Avengers to defeat the Arthurian sorceress Morgan Le Fay. (I'm sorry to say that Sue, Ben, and I couldn't join our onetime teammates in that adventure, as we had our own difficulties at the time.)

When this man blueprints a battle tactic, it's a wonder to behold. He consid-

ers the strengths and weaknesses of his allies, then implements a creative and efficient plan to optimize the use of their abilities—all within a few seconds. Time and again, the Avengers face threats that dwarf their combined powers, but the brain of Captain America somehow gets them through.

Fallon, imagine you are Thor, God of Thunder. Now imagine that you face the Super-Adaptoid, who can copy your powers. Would you throw your hammer at him? You might be tempted, because you've relied upon the might of Mjolnir all your life. But you can't. So what do you do?

You ask Captain America what you should do. He tells you to throw a boat at the Adaptoid. As the bad guy uses Quicksilver's speed to dodge the boat, Captain America directs Giant-Man to

blast the android with Pym Particles, forcing him to use Giant-Man's powers to counter the shrinking. Finally, Cap has Hawkeye lay down a pattern of adhesive arrows to make the Adaptoid use the Vision's density control to phase through the webbing.

Presto! The Super-Adaptoid blacks out, having overloaded its circuitry by using three powers simultaneously.

Now ask yourself, would you have thought of that on your own, Fallon? I probably wouldn't have. Note that in my example, Captain America didn't do anything but talk. He couldn't throw his unbreakable shield at the android, he couldn't kickbox it into a coma, and he couldn't drive his motorcycle around it. But he could tell others what they needed to do to win, and they'd all do it without question. Why? Because he's Captain America.

Heroes working together are often far more effective than any of them would be alone, as the Fantastic Four have proven again and again. Heroes in your games can work together by developing team stunts.

Team stunts occur when two or more heroes cooperate on the same action. More precisely, they all focus their energies on the same activity, though often in different ways. For example, the Human Torch burns out the circuits of a bomb as Reed uses his understanding of computers to show him the right spots.

When longtime allies try a team stunt, they can select one individual to make an action. The acting hero makes his or her action normally, but each player whose hero is participating in the team stunt can play a card, adding its value to his or her teammate's action score. Only the acting hero can get trump or play Edge cards. (If the Narrator believes that team stunts might get out of hand, he or she can rule that only a hero with the Leadership skill can be the acting hero in a team stunt.)

This can lead to some amazing numbers, so the Narrator should be careful to allow this only when longtime teammates are working together on the same action. This is not quite the same as a hero getting a contingent action because of another hero's action, such as the famed Wolverine-Colossus "fastball special." Nor does a team stunt work like a Pile-On, since the heroes in the latter case are all attacking different weak spots.

ENCOURAGING TEAMWORK

Super hero teams like the Avengers and the X-Men are famous for their cleverly coordinated maneuvers and the fact that they always seem to have plans for dealing with their opponents. The best villainous teams also work together—witness the Marauders and the Masters of Evil. So how do Narrators encourage these sorts of tactics in their own games?

The easiest way to get heroes to use teamwork and create some preplanned maneuvers is to have a group of opponents use teamwork against them and demonstrate how effective it can be. The heroes might fight a well-trained team of villains, or an even better-trained group of heroes might have occasion to trounce yours. Another good option for encouraging teamwork is to intro-

duce a powerful menace requiring cooperation, teamwork, and a little advance planning to defeat. Such challenges might involve powerful villainous minions like the Growing Man, or the Mole Man's subterranean monsters.

Good team tactics include focusing on handling the biggest threats, using powers and abilities that compliment each other, and maintaining communication while keeping opponents in the dark about the group's plans. For example, a team could develop code words and phrases to warn teammates about particular maneuvers so that they can react accordingly. When Cyclops or Storm calls out "Fastball Special!" for example, the other X-Men know just what to do. The players can have fun creating similar special moves and codes for their heroes.

Another option is to allow heroes with the Leadership skill to make up plans during combat and then, with a challenging Willpower action, explain them to the other players during a short time-out. The leader simply says something like "Avengers, Maneuver Seven!" and you can assume that the heroes have already worked out the plan in a training session. Just be sure that planning and tactics don't slow down the fights too much. If they do, encourage the players to come up with their special maneuvers in advance.



DEAR DR. RICHARDS**Why am I afraid of the dark?**

—*Collin Garrison*
age 7
White Plains, NY

Being afraid of the dark is nothing to be ashamed of, Collin. Plenty of children are afraid of the dark—my son Franklin, for example.

To answer your question, you're afraid of the dark because you have an imagination. With the lights on, you can see what

is in the room, so you don't have to imagine it. With the lights off, you can't see anything, so you imagine what could be there. And what you imagine is scary.

Maybe you imagine that your parents go away when the light goes off. They don't. The truth is that your folks are right down the hall. That's why they come running when you call out in the night.

Maybe you imagine that there are monsters in your closet or under your bed. There aren't. I know, because I've met lots of monsters—monsters with big teeth, monsters with leathery wings, and monsters with scaly hides. And the one thing they have in common is that they're big—so big that they could never fit in your whole room, let alone in your closet or under the bed.

Maybe you imagine that the supervillains on the news are going to break

through your window, snatch you into the night, and demand a million dollars for your return. They won't. They're too busy hatching evil schemes to seize control of the universe and plotting revenge on super heroes to worry about you.

Maybe you imagine any number of other scary things, but the important fact to remember is that they're all products of your imagination. Simply by assuring yourself that they aren't real, you can make the night terrors vanish.

It will probably assuage your fears if I tell you what's happening in your body at times like these. When the lights go off and your imagination runs wild (triggering nyctophobia, a fear of darkness), there's a very real physical response. As you envision vampires and werewolves

Maybe you
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coming out of your dresser, your adrenal glands secrete epinephrine and norepinephrine to raise your heart rate, causing your sweat glands to go into overdrive. And as your imagination tells you that the monsters are slithering around the headboard of your bed, your nervous system sends out impulse after frantic impulse. That's why you quake in bed, hoping the goblins

won't come to take you away.

Did that help? I hope so. It sure comforts me.

Just because your mind and your body tell you something is worth running from doesn't mean it is. My wife Susan always tells my son that he doesn't need to fear what he can't see. Then Franklin points out that she can turn invisible, and that usually buys him another bedtime story. Clever kid.

Some players short-shift their heroes on Willpower because they figure it'll only come into play if there are psychics around. But a low Willpower can fail you when you need it most. If the Narrator wishes, he or she can use terror as a motivator.

At the Narrator's discretion, a hero can attempt to frighten another combatant by making some sort of threat. This can be anything you'd expect would fit in a comic book panel. The player must make the announcement aloud. **If the Narrator thinks the hero's threat would frighten his or her opponent, the player can attempt an easy Willpower (Willpower) action to make the target's action contingent.** The Intimidation skill lowers the difficulty of this action by one level (4 points). If the Narrator doesn't think the announcement is scary enough to generate a reaction in the opponent, the hero may not attempt the Willpower action based on that threat.

Magical or power-based fear is generally an effect of the Emotion Control power. Usually, a hero can avoid the effects of fear by making an easy Willpower (Emotion Control) action. Failure indicates that the hero can only cower or flee until he or she succeeds in such an action. The victim can try to resist the effect every exchange, but cannot take any actions until the exchange after he or she conquers the fear.

FLINCHING

The Narrator can use "flinch" actions to test the heroes' resolve. **When a player has only one card at the start of an exchange, the Narrator can compare its value to the hero's Willpower.** If the card's value is the higher of the two, the Narrator checks the situation's "Willpower" on the chart at right. If the situation has a higher Willpower score than the hero does, the latter can only flee or cower until the player gets more than one card.

This rule can also apply to a character reduced below 10 Health. If the value of the Narrator card drawn for this exchange is greater than the character's Willpower, he or she may only flee or cower until restored to a double-digit Health score. Of course, any hero or character with Willpower 10+ can ignore these flinch checks.

TERROR SITUATIONS

<u>Willpower</u>	<u>Fear-Inducing Situations With This Willpower Score</u>
0	All is quiet
1-2	Hero hears a loud noise
3-4	Hero is facing an armed foe
5-6	Hero is hit hard
7-8	Hero is in an earthquake
9-10	Hero is surrounded by fire
11-12	Hero is on fire
13-14	Hero is close to death
15-16	Hero commits an act against his or her calling
17-18	Close friends die
19-20	Close relatives die
21-22	Hundreds die
23-24	Thousands die
25-26	Millions die
27-28	Billions die
29-30	The universe dies





If I travel back in time, can I prevent my birth?

—Darrell Hollander
age 15
Chattanooga, TN

Darrell, your question has perplexed chronologists for decades. Ever since Doctor Doom invented the first time machine. . . . Well, technically Rama-Tut invented a time machine in ancient Egypt, but he came from the thirtieth century, so chronologically speaking. . . . Hmmm, it doesn't matter. Time machines exist, and they're capable of wreaking havoc on the timestream.

But they don't. At least, we don't think they do. If everything changed, how would we know? And exactly who would we be?

Many people have tried to change the past, but only a few have succeeded in making even minor modifications. Most of the time, some force intervenes to prevent major changes. Sometimes huge alterations seem to occur, but when the tamperer goes home, nothing has changed at all. Why is a subject of contention among the smartest scientists in the world, and I wouldn't dream of trying to settle the issue in this column.

Here are a few of the likely theories as to why time isn't as fragile as it seems.

Theory One: "A Universe of Infinite Possibilities." According to this theory,

Many people have tried to change the past, but only a few have succeeded in making even minor modifications.

there is an infinite number of universes, and ours is but one possibility. When people go back in time, there is a high likelihood that they will arrive in an alternate past. They can fiddle with that world's history to their hearts' content without affecting their own. A few travelers manage to hit the past of their own timeline dead-on, but most don't.

Theory Two: "Space Expands to Fill Time." Like a gas, time adapts to changes in its environment. When someone goes back in time, a different world forms on the spot, allowing the traveler to muck about in that timeline without fear of wrecking his or her own.

Theory Three: "Time Heals All Wounds." A divine hand or a conscious timestream prevents cosmic changes from occurring in the timeflow. When

someone tries to manipulate the past, subsequent events warp so that for the most part, the important details remain as they were meant to be.

Theory Four: "Change is a Constant." Interfering travelers change time constantly, but we just don't notice it. The timestream is so efficient at reflowing itself that alterations leave no noticeable seams. Every change has an effect, but we merely see what's left after all the time-shifting plays out.

All of these theories leave unpleasant aftertastes. I can debunk each on a theoretical level, but that's not really the point. We simply don't have enough raw data to know how time really works.

Thankfully, in the absence of perfect clarity, everybody seems to realize that messing around with history is a bad plan. As long as we stand in the way of those who would steal our past, our future is probably safe.

Time travel is an inexact science. As stated in the Time Travel power description in the **Game Book**, the Narrator draws four cards and compares the sum of their values to the Time Travel intensity of the hero or device. If the total card value exceeds that intensity, the hero is off-course. (Naturally, the power listing does not mandate that the Narrator show these cards to the players.)

The Narrator is free to choose where the heroes end up when they go off-course, or he or she can draw a card to

select the destination time randomly. If the draw is neutral, the heroes appear in a place that looks like where they wanted to go, but is an alternate reality. A negative draw sends the heroes to the past; a positive draw indicates travel into the future.

The Narrator can compare the value of the card drawn for this aura check with the table below to determine where and when the heroes might arrive. Any destination is possible, of course, but a few dominant timescapes seem to attract visitors like moths to flame.

TIME SHIFTS BY CARD AURA AND VALUE

Negative Past Time Period

- 1 **Prehistoric Era:** Dinosaurs roam the Earth, and the Celestials arrive for the first time.
- 2 **Dawn of Mankind:** Neanderthal man falls to Cro-Magnon, on whom the Kree experiment.
- 3 **Ancient Times:** Norse, Roman, and Egyptian civilizations gain power; Atlantis falls.
- 4 **Medieval Times:** King Arthur ushers in a new age of knights and magic.
- 5 **Gothic Renaissance:** In an age of steampunk, Dracula and Frankenstein's monster define terror.
- 6 **Wild West:** As civil wars wrack nations, six-gun-wielding cowboys tame the American west.
- 7 **World War II:** The world goes to war, and the first true costumed heroes appear.
- 8 **Cold War:** Heroes vanish as Communism rises and radiation begins to warp the human genetic code.
- 9 **Dawn of the Age of Marvels:** The Fantastic Four, X-Men, and Avengers are born, along with their many foes.

Neutral Present Time Period (Alternate Reality)

- 1 **Savage Earth:** Humanity lives alongside dinosaurs, à la Devil Dinosaur.
- 2 **New Camelot:** Morgan Le Fay's faux sixth-century renaissance fair is in progress, complete with medievalized Avengers.
- 3 **The Franklinverse:** A new Earth (created by Franklin Richards as Onslaught died) replicates much of what the heroes knew.
- 4 **Age of Apocalypse:** Apocalypse and his mutants slaughter normal humanity.
- 5 **Our Earth:** Nothing has changed except that there aren't any super-people.
- 6 **Other-Earth:** After the Squadron Supreme's extreme solutions to social problems fail, conformity is the norm.
- 7 **Praetorian's Mirrorverse:** The heroes are villains and vice versa.
- 8 **The Fourth Reich:** Hitler won the war, pinning Earth under his totalitarian rule.
- 9 **Void:** A white void is all that's left after Korvac or Thanos destroys the universe.

Positive Future Time Period

- 1 **Earth X:** Normal humanity falls to a plague, leaving only superpowered survivors.
- 2 **Killraven's March:** Armored Martians conquer Earth, though a few ragtag heroes resist.
- 3 **M2:** Spider-Girl and other children of today's heroes come to the fore.
- 4 **Future Imperfect:** After World War III, an even stronger Hulk becomes Maestro of America.
- 5 **Days of Future Past:** The Sentinels conquer America, killing and imprisoning mutants.
- 6 **New Dawn:** Humans and mutants beat the Sentinels and form Xavier's Security Enforcers.
- 7 **2099:** Conformity rules, but new incarnations of current heroes break the mold.
- 8 **Thundra's World:** Sterility overcomes the population, and women take control of Earth.
- 9 **Thirty-first Century:** The Guardians of the Galaxy work to liberate Earth from the alien Badoon.
- 10 **Fortieth Century:** The earth is dying, and Kang the Conqueror rules.



How can I become a vampire?

—David Lasher
age 12

Lake Toxaway, NC

I hope you're not asking that because you WANT to become a vampire, David. The way TV and movies have glamorized vampires doesn't teach kids about the dangers of vampirism. Honestly, sometimes I think there should be tight controls on this sort of thing, but then I remember that I should trust in parents to make their own judgments. But that's a whole different discussion.

Depending on whom you believe, vampirism is either a very rare blood disorder or an ancient mystical curse. Either way, it's a bad deal. Technically, vampirism is the inability to retain blood. I don't mean hemophilia—those who have that disorder simply lack the blood clotting factors that normally help seal wounds. I mean the inability to keep blood from evaporating inside the body.

Like all human beings, vampires must have blood to live. But they have none of their own. They need to obtain enough blood from outside sources to fill their bodies every day, for each nightfall all the blood inside them disintegrates.

That should earn these poor creatures our pity. Unfortunately, the method most vampires use to get blood makes it hard to feel sorry for them. Typically they sat-

isfy their needs by killing innocents and draining blood from their bodies, usually through apertures that have developed in their enhanced canine teeth. This means that vampires must be stopped.

Fortunately for the moralists out there, vampires aren't really alive. They're actually dead creatures, and if you believe in such things as souls, then they are restless ones. (There is considerable debate on this point, as otherwise they seem to meet the definition of sentience.)

To protect the populace, heroes often try to put vampires to rest. Regular means such as knives and guns are not sufficient to slay them, but they do have some fascinating vulnerabilities: crosses, running water, stakes through the heart—that lot. (Most of us are also vulnerable to having wooden stakes rammed through our hearts, of course.)

The issue of putting vampires to rest becomes less morally uncertain when we consider that vampirism is terrifyingly communicable.

A vampire can infect another person with the affliction just

by draining his or her blood. This process usually kills the victim, who subsequently awakens from the grave as a new vampire and requires an immediate transfusion.

There are some very rare cases of living people contracting vampirism, or at least something like it. I am aware of one case of "pseudo-vampirism" in which, through serum injections, a living victim contracted a blood plague that required him to draw blood through his fangs. I am also cognizant of a half-vampire—a person who is somehow the living offspring of a vampire and a human.

In any event, vampirism is not something to covet, since even those who have contracted it usually want to end their unnatural unlfe.

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UNDEAD HEROES

Assuming you have a game involving heroes like Blade and Ghost Rider, some players may wish to play undead beings and lycanthropes. If the Narrator approves, this should be possible.

The major categories of macabre heroes are ghosts, vampires, werewolves, and zombies. The statistics given are for average members of each "species." Player heroes must have the minimums listed. To design a macabre hero from scratch, the player should draw five cards (or less, if the Narrator doesn't want the hero to be an above-average representative of the type) and add their values to the minimum scores below. There are two exceptions to this: Ghosts can't add to their physical statistics and zombies can't add to their mental statistics. A player can choose to discard up to two of the five cards to increase Edge and Hand Size; each discard raises both values by 1 point.

Ghost: Strength 0X, Agility 0X, Intellect 4X, Willpower 1X, Edge 0, Health 10. Astral Projection [W] 10, Invulnerability [S] (to Physical and Energy Attacks), Mind Control [W] 15 (Possession). Hindrance: Non-Corporeal. Calling: Repentant or Vengeance. (The occasional ghost has Body Transformation [A] 10 (Solid Form), which he or she can use to become human temporarily.) Ghosts are incorporeal spirits that live on after their bodies have died. The category includes astral travelers without host bodies and beings who have died leaving important mortal affairs unfinished. A ghost who completes his or her mission of vengeance or repentance immediately dies for good. Raising a ghost hero from the dead may restore him or her to corporeal life, if the Narrator approves.

Vampire: Strength 11X, Agility 13X, Intellect 4X, Willpower 1X, Edge 0, Health 10. Animal Form [A] 10 (Bat), Animal Form [A]



10 (Wolf), Body Armor [S] +10, Body Transformation [A] 10 (Gas Form), Hypnosis [W] 15, Immortality [S], Invulnerability [S] (to Mental Control), Invulnerability [S] (to nonsilver weapons with damage bonuses lower than +6), Life Drain [I] 8 (Telepathic Control), Life Support [S] 20, Regeneration [S] 10. Hindrances: Addicted (to blood), Fatally Vulnerable (to sunlight and running water), Phobic (of crosses, garlic, and entering a building without invitation), Triggered-Powerless (by stakes through the heart).

Calling: Uncontrolled Power or Demolisher. (Pseudo-vampires have the same statistics, but can't use Life Drain or Mind Control, nor can they change form. They aren't Phobic, but have the other vampire hindrances. They can have any calling.) Vampires are dead humans cursed with vampirism. They must have blood every day or suffer the effects of the Addicted hindrance. Raising a vampire hero from the dead returns him or her to life.

Werewolves: Strength 11D, Agility 12X, Intellect 3X, Willpower 3X, Edge 0, Health 10. Natural Weapons. Animal Form [A] 14 (Wolf), Claws [S] +3 (Limit: Wolf form only), Invulnerability [S] (to nonsilver weapons with damage bonuses lower than +6). Hindrance: Transformative (triggered by moonlight). Calling: Uncontrolled Power or Demolisher. Werewolves are normal, living humans cursed with lycanthropy. This causes them to change form every time they see the moon (or, in some cases, whenever the moon is full). Only removing the curse stops the transformations.

Zombies: Strength 8X, Agility 1X, Intellect 0X, Willpower 0X, Edge 0, Health 10. Immortality [S], Life Support [S] 20. Calling: Soldier. Zombies are dead people whom some outside power has animated to unlife. A few zombies (notably Simon Garth) retain hints of sentience. Raising a zombie from the dead brings him or her back to life.



Editor's note: Dr. Richards is out of the dimension this week. In his place, we turn to Dr. Walter Newell, the world-renowned oceanographer and occasional super hero known as Stingray.

How deep is the ocean? And how do you know?

—Marta Baynes
age 13
Venice Beach, CA



Dear Marta,

I'm pleased to answer a question about the sea, my favorite place in the world. Luckily, my favorite place on Earth covers about seventy percent of its surface.

The ocean's depth varies from place to place. Right beyond the boardwalk at Venice Beach, the ocean is only inches deep, which allows you to wade in the seawater. Out in the open seas, however, the ocean gets much, much deeper. The deepest known point is the Marianas Trench, near the Philippines. It gets as deep as 36,201 feet below sea level, or more than a mile lower than Mount Everest is high!

We oceanographers—scientists who study the sea—have only seen the deepest parts of the ocean floor in recent decades.

The ocean is dark and cold and filled with saltwater, meaning we can't just swim down for a peek. Well, most of us can't, at any rate.

Once, scientists found out the depth of the ocean by dropping a rope marked off in length units with a weight attached. When the weight hit the bottom, the scientists would look at the marks to figure out the depth. Needless to say, there weren't a whole lot of 36,000-foot pieces of rope. So scientists invented the echo sounder, which sends a pulse of sound energy down to the ocean floor. The sound travels at about a mile per second through the water. When it hits the bottom, it rebounds. The amount of time it takes to return (that is, register on our receptors again) tells us the depth. Modern echo sounders record depth in marks right on a piece of paper, so that scientists know instantly how deep the water is.

Of course, sometimes we actually go down to the bottom of the ocean. We have pressurized submarines that can travel along the sea floor, and divers can now use pressurized aqualungs and powered suits (like my Stingray costume) to swim to the depths. Most of us can't stay down for long—the pressure of the water causes us to use up our air much faster than we would on land. And without powered diving suits, we have to come up quite slowly or risk a deadly ailment called the bends.

And then there are the Atlanteans, who can breathe water. Not surprisingly, they know a great deal more than we humans do about the ocean floor. But we're still looking and still learning.

Thanks for asking, and keep watching the seas!

The ocean's depth
varies from place
to place.

UNDERWATER ACTIVITY

Humans can't survive underwater without air. Scuba tanks hold enough air to let the wearer breathe for several hours, and the special underwater compound Mr. Fantastic created permits anyone who swallows it to survive without breathing for several days. Anyone inside a submarine can stay submerged for a very long time.

DROWNING

Without adaptations or appropriate superpowers, a submerged hero begins to drown. The Narrator can deal one card in front of a drowning hero's player each exchange. The hero must make a **Strength** action with a difficulty rating equal to the total value of the cards in front of the player. Failure means the hero suffers 50 damage points. The Narrator should continue dealing out cards and requiring actions until the hero either surfaces or falls unconscious.

If the hero isn't out of the water within 3 exchanges of falling unconscious, he or she dies. Drowned heroes can be resuscitated within a few minutes of leaving the water; to do so, the would-be rescuer must make a daunting **Intellect** action, modified to challenging if he or she has the **Medicine** skill.

MOVEMENT AND COMBAT

Land-based creatures move at half their normal speeds in water, generally taking 2 exchanges to cross from one distance to another. Water-based creatures move normally. For land-based creatures, all attacks increase in difficulty by one level (4 points) when launched underwater. Projectile weapons are effective only at close combat range. Fire, conventional explosives, and gunpowder weapons don't work underwater without special modifications. Most other actions are penalized by one level as well, unless they don't involve movement. Water-based creatures can usually ignore these penalties.

Darkness is frequently a problem underwater. Below 100 feet or so, the sun's rays



do not illuminate the ocean. So the darkness may penalize a hero an additional level (4 points) per action. Again, those living in the water can usually ignore this problem.

Diving below about 100 feet causes nitrogen to enter the bloodstream. If the diver comes up quickly, the Narrator can draw a card. If it's of the **Doom** suit, the diver suffers the bends, a crippling ailment that inflicts 20 damage points and reduces his or her **Agility** score by 4 points (but no lower than 1). This latter condition persists until the victim has regained his or her full **Hand Size** or **Health**.



I've got a great idea how you can get rich quick. Get a bunch of coal, have the Thing squeeze it really hard while the Torch blasts it with heat, and you'll get a zillion dollars in diamonds! Neat, huh? (By the way, I get half, right?)

—Zerek Spiegel
age 12
New York, NY

Interesting proposition, Zerek. I'm not too keen on get-rich-quick schemes, but your suggestion intrigued me—not for the money, of course, but for the scientific value of seeing whether we could actually make a diamond from coal.

As you know, diamonds and coal are two forms of the element carbon. Extreme pressure and heat (usually applied at about 100 miles below the Earth's surface) can convert coal into diamond. This happens when the carbon atoms, which are scattered haphazardly in coal, reform into a symmetrical crystalline matrix.

I posed your question to my family at suppertime, and Johnny quickly volunteered to help. Ben was considerably more reticent, but Sue eventually sweet-talked him into it.

Here are my notes from the experiment:

Hour One: Ben delivers a ton of coal. Johnny tries to conduct the experiment himself and melts half the coal into slag. Ben threatens to pound him.

Hour Two: Ben holds a block of coal while Johnny bombards it with fire. Johnny turns up the heat too much for Ben's taste. Ben directs dozens of uncomplimentary words at Johnny and chases him around the lab.

Hour Three: Ben crushes some coal between his hands until it turns to powder, then leaves the room as Johnny washes the coal dust with fire. A small bit of crystalline powder forms, giving us hope—but no diamonds. A critical issue arises: How can Ben inflict enough pressure and Johnny enough heat at the same time?

Hour Four: (Some notes missing due to the fire that whipped through the lab. We replaced three computers, a metal door, and eight fire extinguishers.)

Hour Five: We try a new approach. Sue wraps Ben in a force field as he and Johnny apply heat and pressure. This fails when the amount of force Ben applies to the coal affects Sue's force field first. Sue goes to bed.

Hour Six: Ben and Johnny play ping pong while I weld a set of titanium steel armbands.

Hour Seven: Dragon Man attacks. We lose an hour.

Hour Eight: Ben, wearing the titanium armbands, crushes the remaining coal while Johnny blasts Ben's arms with fire. Ben invents some new words. We survey the wreckage and find one tiny, misshapen diamond among the slag. Thrilled, we take it to Maleska's Jewelry for an appraisal.

The Verdict: One half-carat diamond, significant inclusions, flaws visible to the naked eye, slightly yellowish K color quality. Market value: \$380.

Total cost of the experiment: \$32,750. Net income, —\$32,370.

I'm guessing you don't want half of that, Zerek.

On most occasions, you won't care if a hero has money. The MARVEL game doesn't concern itself with accumulation of treasure or economic accomplishment. Wealthy heroes can afford whatever they want. So if you're playing Iron Man, Mister Fantastic, Archangel, or the Wasp, you can get what you need.

This can get out of hand if players have their heroes order the moon. In such cases, the Narrator should have a few tricks to slow down profligate heroes. **First, the Narrator can be a stickler about the rule that players can only use response bonuses to modify a hero.** So if the latter wants a new base or a new suit of powered armor, the player must spend a response bonus to get it. (This might explain why the Wasp hasn't grown much in power over the years, since she apparently spends her response bonuses on clothes.)

Second, the Narrator can force occasional wealth actions to keep fortunes intact. The Narrator devises a potential economic setback—a robbery, a natural disaster, a market crash, or the like—and sets an intensity for it. The player must then make an average Willpower action opposed by the intensity of the setback. The Narrator can add the value of the Narrator card as well if the setback is one that should be somewhat random in its impact.

Third, the Narrator can always mandate a similar wealth action for a hero to get something of value. This should be a Willpower action with the difficulty set according to an average person's ability to afford the item. The Finance skill lowers this difficulty by one level. The table below shows some possible difficulties.

WEALTH ACTIONS

Difficulty	Wealth Action
Automatic	Buy a comic book
Easy	Buy groceries
Average	Buy a bicycle
Challenging	Buy a car
Daunting	Buy a house
Desperate	Buy a mansion
Superhuman	Buy a small company
Unfathomable	Buy an island
Cosmic	Buy an international conglomerate
Godlike	Buy a small country
Impossible	Buy Fort Knox



CRIMINAL OPPORTUNITIES

As noted in the *Game Book*, villains frequently run out of money. Each month, the villain must draw a card. If the result exceeds his or her Edge score, the villain is out of money and must commit a crime to replenish funds. But what kind of crime? **Whenever villainous activity becomes necessary, the Narrator can draw a card and consult the table below to see what opportunity presents itself.**

CRIME OPTIONS

Value	Crime
1	Burglary
2	Art treasure thievery
3	Jewelry heist
4	Bank job
5	Armored car stickup
6	Shipment of contraband
7	Kidnapping for ransom
8	Industrial espionage
9	Gold train robbery
10	National treasury robbery

DEAR DR. RICHARDS WORDS TO LEAVE BY**Is there anything you don't know?**

—Liz O'Bannon
age 14
Fire Island, NY

Only a fool would presume to know everything, Liz. For everything I do know, there are a billion things I don't.

For example, I don't know why a duck's quack doesn't echo. I have theories, of course—maybe all the ducks whose quacks echoed through the water were eaten by predators before they could reproduce. But I just don't know.

I don't know why there weren't any green-skinned people on Earth before this century.

I don't know what happened just before the Big Bang.

I don't know why human beings are just about the only animals that can eat chocolate without getting violently ill.

I don't know how the world got along without super heroes for so long, nor why it seems to need them so badly now.

I don't know whether there will be a Fantastic Four a hundred years from now, but I'm guessing there will be.

I don't know why in the last ten centuries there have been no new phrases that mean "I say" until the recent appearance of "I go," "I'm like," and "I'm all."

I don't know why a small error in a simple experiment caused my fellow student in college to hate me forever.

I don't know why we drive on a parkway and park on a driveway.

I don't know why the gods picked this century to come back to Earth.

I don't know why we never knew the ozone layer was so fragile.

I don't know for certain, given that we've found a Microverse, that we're not someone else's Microverse.

I don't know why some people continue to hate that which is different.

I don't know why, before the advent of super heroes, sound didn't have a color.

I don't know why we super heroes didn't try to cure cancer until one of our number was about to die from it.

I don't know why I'm so certain, given that there's an infinite number of alternate realities, that ours is the one that's truly real.

I don't know what possessed me to take my family into space without properly shielding our craft from cosmic rays. I don't know why I'm so thrilled that I did.

I don't know why my son Franklin can conjure his own universes, or why he has adventures with talking ducks, or why I love him so much my heart hurts.

But I do know one thing for sure. I have an unquenchable desire to know all that I can know in the short time I have to live. That is why I'm a scientist, and why I am so happy that there are children in the world who feel the same way.

Only a fool
would presume
to know
everything, Liz.
For everything I
do know, there
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A Scan by Unforth