

Synthesys™

Player's Handbook

Version 0.8

Table of Contents

SyntheSys © 2003 Jon Acheson

THIS WORK MAY NOT BE SOLD, DISTRIBUTED OR REPUBLISHED ELECTRONICALLY OR IN ANY OTHER FORM WITHOUT THE EXPRESS WRITTEN CONSENT OF THE AUTHOR. IF YOU SEE THIS GUIDE BEING OFFERED FOR SALE, PLEASE CONTACT ME (acheson@rcn.com).

I would like to thank the following people who helped motivate me and provide feedback and advice during the long development period for this game:

Jon Kilgannon for coming up with his own system, Confederation, and giving me the inspiration to work seriously on a system of my own.

Bill Johnston, for lots of mathematical help in the early planning stage or the game, and especially for the skill cost curve. OK, I didn't end up using it, but that doesn't mean I'm some kind of ingrate...

Jeff Acheson

Doug Beck

Matt Pyson

Roger Christman

Jenni Sheehey

Mike de Santo

Mark Rabuck

Justin Dagna and Andrew Martin for advice on encumbrance.

Introduction.....	2
What is Roleplaying?.....	2
SyntheSys Concepts.....	3
Character Creation.....	4
Character Creation Basics.....	4
Character Concepts.....	4
Statistics.....	4
Derived Characteristics.....	6
Skills.....	7
Equipment.....	10
Action!.....	11
Using Skills.....	11
Combat.....	12
Travel and Movement.....	20
Character Growth.....	22
Receiving XP.....	22
Spending XP.....	22
Fame, Rumors, Secrets and Counterintelligence.....	23
Memes.....	23
Tracking Memes.....	23
Appendix A: Formulas.....	24
Derived Statistics.....	24
Other Formulas.....	25
Appendix B: Master Skills List.....	26
Melee Combat.....	26
Ranged Combat.....	26
Other Combat-Related Skills.....	26
Vehicle Skills.....	27
Interpersonal Skills.....	28
Professional & Illicit Skills.....	28
Scientific And Technical Skills.....	29
Other Skills.....	29
Appendix C: Equipment List.....	31
Medieval Equipment.....	31
Modern Equipment.....	32
Appendix D – Modified Melee Weapon Damage Chart.....	34

Introduction

What is Roleplaying?

Picture a half-dozen people sitting around a table or living room. Together, they are creating the imaginary adventures of a group of imaginary characters. One person takes on the role of the *Game Master*, or *GM*, and acts as the referee, creator of the setting, source of information about the game world, and final arbiter of who can do what and how much they can do. Each of the other players creates one of the characters in the game, and will control what that character says and does in the imaginary world of the game.

The way the game works is that the GM starts by describing the location and situation the player's characters, also called the *PCs*, find themselves in. Next, the players decide how their characters would react in that situation given their personalities and abilities, then take turns describing to the GM and the other players what their characters are doing and saying. Dialog is often acted out, but actions like running around or swordfighting are usually described with words and gestures instead of getting up and fully acting out their actions.

The rules of the game provide a framework for determining what a character can and can't do, and how much they are able to accomplish. Most systems assign a numerical value to the probability that a given character will be able to perform a given task, and then compare the results of a roll of dice to that number to see if the character was successful. A character might need to roll a 3 or less on a standard six-sided die to perform a certain task, for instance.

As the outcome of the characters actions are determined, the GM describes the results for the players. The GM also describes the actions and reactions of any non-player characters (*NPCs*) which may also happen to be in the room. The players then respond with their characters' next actions and dialog, and so on.

The players and the GM will typically get together on a weekly or monthly basis, as the adventures of the party will take many sessions to play out. Over the series of game sessions, their characters will build up experience and gain more abilities and better skills.

Roleplaying games (RPGs) have no real victory conditions, apart from having fun and accomplishing goals within the imaginary world of the game.

An Example

[Dave is running a medieval fantasy campaign, and is acting as GM.]

Dave: It's late in the afternoon when you finally find the burial mound, right where the old man said it would be. It's a long wide grassy mound about five feet high at the crest. You can see some kind of an entranceway sunk into one end.

Linda: Yess! Bronwyn is heading over to look at the entrance.

Fred, Mark and Elaine: We want to go too.

Dave: OK, you go over to the entrance. Three stone steps lead down to a mossy wooden doorway in an arched stone frame. The steps are dirty and disused, and last fall's leaves have collected at the bottom.

Linda: Bronwyn tries to open the door.

Dave: It seems to be held shut somehow.

Fred: Cyprus knows about locks. "Allow me to open that door!" Is there a lock?

Dave: You find a keyhole bored into the door.

Fred: Cyprus picks the lock!

Dave: Give me a Lockpicking roll.

[Fred rolls some dice to see if his character succeeds at picking the lock.]

Fred: Got it! Made it by 12.

Dave: It's a really crude lock; it was hand-carved out of wood. You pick it easily.

Elaine [speaking as her character, Loannan]: Why don't I push the door open with my staff, just to be safe?

Fred, Mark and Linda: Ok.

Dave: Ok, you're going to push the door open with your staff? [Elaine nods] Ok, the door opens inward. There's so much dust in there, it's almost topsoil.

Mark: Hey, is there anyone else around?

Dave: [grins] Actually, now that you stop to look, yes. There are six blue-skinned men with clubs and spears emerging from the woods around you. They're not smiling, but you *can* see their teeth...

SyntheSys Concepts

GM

The Game Master, the person who comes up with the basic idea for the adventure and develops the setting and the non-player characters that inhabit it.

PC

A Player Character, a character created and acted out by a player that takes part in the game's imaginary adventure. The plural noun for a group of player characters is a *party* of characters.

NPC

A Non-Player Character, created and acted out by the GM. NPCs are generally either incidental characters, local flavor, or the opponents of the player characters.

Statistics (Stats)

Statistics, or Stats, are numbers which specify basic facts about a character: how big, strong, learned or good-looking they are, for instance.

Derived Statistics

Derived statistics are numbers calculated from a character's stats which indicate other facts about a character, such as how much weight they can lift, or how tough they are.

Skills

A character's abilities are spelled out with Skills. Each skill is a number value that shows how good the character is at a specific type of task: driving a car, haggling with a merchant, shooting an arrow from a bow, whatever. The cost to buy a particular skill up to a particular value is calculated based on the values of the character's stats.

Experience Points

Experience Points symbolize time spent learning or doing something. They are the "money" used to buy stats and skills for your character. When you design a character, you will be given a number of experience points to spend on stats and skills (your GM will tell you exactly how many). As time passes in the "game universe," your characters will receive more experience points which you can spend to increase the values of their stats and skills.

Campaign

A long adventure designed to be acted out over the course of many gaming sessions.

Module

A prepackaged adventure or campaign which has been prepared by the publisher of an RPG to be sold to players.

Rounding Up Numbers

If the result of a calculation leaves you with a remainder after the decimal point, round up at 0.5 to make it an integer again. This would turn 4.3 into 4, or 4.6 into 5. Only round up the final result of a calculation: do not do this at every step along the way.

Dice and Die Rolling Notation

In general, players roll dice to see if their characters succeed at using one of their skills, and to determine things like the amount of damage done by whacking an orc with a sword. Many types of dice exist for use in role-playing games: in addition to the six-sided dice most people are used to, there are four-, eight-, ten-, twenty- and even thirty- and 100-sided dice.

The common notation used to specify how many of a certain type of die to roll is $NdX+Y$, where N is the number of dice to roll, X is the number of sides on the dice, and Y is an additional number to add to the result. For instance, 1d6 means one roll of a six-sided die. If more than one die is specified, roll that many dice (or one die that many times) and total the result.

Adding D6 Rolls Together

To "add" multiple d6 rolls such as 1d6+2 and 2d6-1 together into a single combined roll, carry out the following steps:

1. Add the number of dice together.
2. Add any modifiers (-1s, +1s or +2s) together.
3. If the sum of the modifiers is greater than +2, subtract 4 from the sum and add 1 to the number of dice rolled. Keep doing this until the sum of the modifiers is +2 or less.

Example:

Using these rules, 1d6+2 plus 2d6-1 plus 3d6+2 adds up to 7d6-1.

Character Creation

Statistics

Character Creation Basics

There are five steps in creating a new SyntheSys™ character:

1. Come up with a good character concept.
2. Buy the character's basic statistics.
3. Calculate the character's derived statistics.
4. Buy the character's starting set of skills.
5. Purchase equipment.

Character Concepts

Before creating a character, it is best to think up a concept for what kind of character you want to play. That way, you can buy the character's stats and skills accordingly. It will also give you a dramatic “hook” that can help you bring the character to life in game play.

Example:

A brilliant scientific detective

A canny outdoorsman and scout

A businessperson abroad

A crusader fighting for their cause

The backbone of the organization

A grim veteran of a dozen campaigns

A person of privilege discovering responsibility

A former criminal turning over a new leaf

The celebrity laying low on holiday

The consummate operator

The last romantic

It is also helpful to the GM and the other players to consider what role your character might play in the party as a whole. If the party of characters is the crew of a starship, for instance, you might choose to build a character who is a starship pilot or engineer. You might play the captain of the ship, or a passenger who came along for the ride and maybe wound up staying.

All SyntheSys characters have 10 *Statistics* that represent their strengths and weaknesses:

Size (“Size”)	Learning (“Lrn”)
Fitness (“Fit”)	Savvy (“Svy”)
Coordination (“Coord”)	Observation (“Obs”)
Dexterity (“Dex”)	Expression (“Expr”)
Constitution (“Con”)	Charisma (“Char”)

Size is a character's physical mass. A character's strength and capacity for physical abuse are directly related to their *Size*.

Fitness is a character's strength-to-weight ratio, endurance, and flexibility. *Fitness* is important for a number of physical skills and along with *Size* also determines the strength of the character.

Coordination measures how well a character moves and carries themselves, and includes balance and hand-eye coordination. *Coord* is important for a number of physical skills.

Dexterity is a measure of fine manipulation ability. Craftsmen have high *Dex*, as do pilots, musicians, sharpshooters, pickpockets and anyone who defuses more than one bomb.

Constitution is a measure of physical toughness and resistance to pain. *Con* also helps a character resist disease and the effects of toxins. Go ahead, be a tough guy!

Learning is how well a character learns from books and formal instruction. It encompasses memory, reading and the ability to concentrate. *Lrn* also helps you find information.

Savvy indicates how well a character grasps the “unwritten rules” and picks up on how things about him or her actually work.

Observation is how sharp a character's senses are, how well they use them, and how often. It is useful for detectives, sharpshooters, scouts and socialites.

Expression is self-control and the ability to communicate with others. *Expression* is important for social, artistic, leadership and acting skills.

Charisma is a measure of basic underlying good looks (complexion, bone structure, etc.), poise, charm, and force of personality.

How To Buy Your Character's Stats

All SyntheSys characters start out with 125 points' worth of stats. Each of your character's stats can range in value from 0 to 20, where a 0 is bad and a 20 is very good. You can assign them however you like, within these boundaries.

One option when buying your *Stats* is to come up with a set of random stats by rolling 4D6-4 for each. This will give you something to look at, and you can proceed to mold your character from there.

If you need more than 125 points, extra points of stats cost 50 XP each.

Deciding Which Stats Are Important to Your Character.

You should figure out what kind of character you want to make before you go any further.

- Combat-oriented characters need high Fitness and Coordination to make their skills cheaper. Constitution makes characters "tougher," which is also good. Having a good Size is also very good, since bigger characters can survive more damage than smaller ones. Fighters in a modern or science fiction campaign will need Dexterity and Observation for their ranged weapons skills.
- Techies and wizards need high Savvy and Learning, and a good level of Dexterity is also handy.
- For lurkers, detectives and thieves, Coordination and Dexterity are crucial. Observation is also useful for skulking around.
- Social- or people-oriented characters need Expression and Observation. Charisma is also very helpful for this kind of character.

Your character's Stats will also influence their Derived Characteristics. See the next few pages for details.

Sample Stats

The Fighter	Size	14	Learning	10
	Fitness	14	Savvy	12
	Dexterity	12	Observation	12
	Coordination	14	Expression	10
	Constitution	12	Charisma	10

Marlon Howard is a hardboiled private investigator. A tall, fit fighter, yet not a hulking brute. His Fitness and Coordination have been raised to make him better at melee combat, paid for by lowering his Learning, Expression and Charisma slightly. Still, he is not particularly bad at anything.

The Operator	Size	11	Learning	11
	Fitness	12	Savvy	12
	Dexterity	11	Observation	14
	Coordination	10	Expression	14
	Constitution	10	Charisma	15

Amanda Whitecliffe is an intelligence operative working undercover in a luxury hotel-casino. Her considerable charm and social graces let her move in the highest social circles (and identify targets for recruitment). She has a high Charisma, and high Observation and Expression, paid for by paring back some of her physical attributes.

The Lurker	Size	8	Learning	8
	Fitness	14	Savvy	14
	Dexterity	18	Observation	14
	Coordination	14	Expression	10
	Constitution	13	Charisma	7

Leonce "Fader" Randall is a shady character, a compact, weaselly-looking fellow with quick hands and sharp eyes. He's no Prince Charming, in fact he looks like something the cat threw up, but he's a lethal customer in a fight. Fader has a high Dex, supported by fairly good scores in Coordination and Fitness. This is paid for by slighting his Size and Charisma.

The Goon	Size	20	Learning	8
	Fitness	20	Savvy	10
	Dexterity	12	Observation	10
	Coordination	14	Expression	8
	Constitution	12	Charisma	6

Georg Kohler is a hulking brute of an enforcer. His face looks like the inside of a punching bag. His high Size and Fitness make him a formidable fighter, but his Learning and Expression are below average, and his Charisma is quite low. Clearly he doesn't make a living based on his charm.

Derived Characteristics

Weight

Weight is the physical mass of your character, in kilograms.

$$Weight = 20 + (5 * Size) \text{ kg}$$

Health Points

Health Points (HP for short) indicate how much physical damage a character can absorb before being incapacitated. Lost HP will return as time passes in the game universe and your character heals.

For more information on damage points, healing, and etc., see **Determining Damage**, p. 14.

$$Head \ \& \ Arms = 10 + Size$$

$$Chest \ \& \ Abdomen = 10 + (2 * Size)$$

$$Legs = 12 + Size$$

Stun Points

Stun Points indicate how well your character stands up to pain, blood loss, etc. Having more of them than the other person is always good in a fight.

$$SP = 10 + Size \left(\frac{Constitution}{5} \right)$$

Strength

Strength is the measure of a character's brute physical strength. The number given equals the amount of weight that the character can bench-press or lift over their head.

$$Strength = 2 + Size \left(\frac{Fitness}{4} \right)$$

Movement

The Movement stat indicates a character's general ability to cover distance if they have to. It is used with various other modifiers (see Movement, p.____) to generate a character's actual rate of motion while running, swimming, etc.

$$Movement = Size + Fitness$$

Encumbrance Limits

The following are the upper limits of the loads a character may carry for each load level:

$$No \ Load \leq \frac{Strength}{4}$$

$$Light \ Load \leq \frac{Strength}{2}$$

$$Medium \ Load \leq Strength$$

$$Heavy \ Load \leq Strength * 2$$

$$Overload > Strength * 2$$

Skills

SyntheSys is a "skill-based" system, where the *skills* a character possesses determine what that character can and cannot do. A *skill* is a number which represents the amount of ability and training a character has in a field of study.

Buying Skills

Skills are bought by finding the average of the two stats listed for the skill (keeping the .5 in the decimal place, if any), which gives the *base* for the skill, then multiplying the base by 2X, 3X, etc. to generate the actual number for the skill. Players then roll against the skill on D100.

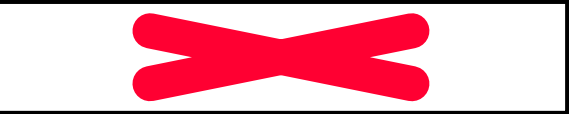
Ex: The Pistol skill is based on the Dexterity and Observation stats. If a character has a 10 Dexterity and an 11 Observation, their base for Pistol is 10.5. If that character buys 5X in Pistol, his or her skill will be 10.5 x 5, which rounds up to 53. A roll under a 53 on d100 will be a success for this skill.

The cost for the various skill multipliers are as follows:

2X	1 XP	9X	20 XP
3X	2 XP	10X	25 XP
4X	4 XP	11X	30 XP
5X	6 XP	12X	36 XP
6X	9 XP	13X	42 XP
7X	12 XP	14X	49 XP
8X	16 XP	15X	56 XP

The Skills List

In the Skills List (Appendix B), Skills are listed by Categories, which in turn are listed under headings. Headings are only there for organization; they have no effect on game mechanics.



In the example above, the **Knife** skill is in the **One-handed Melee Weapons** category, which is listed under the heading **Combat Skills**.

For more information on how skills work, see **Using Skills**, p. 11.

Sample Sets of Skills

The Fighter	Size	14	Learning	10
	Fitness	14	Savvy	12
	Dexterity	12	Observation	12
	Coordination	14	Expression	10
	Constitution	12	Charisma	10

Marlon Howard is a former soldier turned private investigator. He is not a cerebral detective. His skills are largely his combat skills from the war, with a dash of night-school investigation. It's a living, and he can usually find someone to beat the truth out of.

Marlon's stats give him a fairly level set of skill bases, with a slight weakness in the social areas, and some degree of strength in fighting and athleticism.

	Base	Mult.	Skill	Cost
Meelee Combat (Coord & Fit)				
Hand to Hand	14	7	98	12
Knife	14	5	70	6
Bayonet	14	5	70	6
Ranged Combat (Dex & Obs)				
Pistol	12	7	84	12
Rifle	12	6	72	9
Submachinegun	12	5	60	6
Thrown Weapons (Dex & Coord)				
Grenaaade!	13	5	65	6
Knife	13	4	52	4
Vehicle Skills (Dex & Coord)				
Driving	13	3	39	2
Motorcycle	13	2	26	1
Athletic Skills (Coord & Fit)				
Running	14	6	84	9
Climbing	14	5	70	6
Swimming	14	4	56	4
Observation Skills (Obs & Svy)				
Observation	12	6	72	9
Streetwise	12	6	72	9
Appraisal	12	6	72	9
Detect Lie	12	5	60	6
Spontaneous Social Skills (Xpr & Cha)				
Questioning	10	6	60	9
Intimidation	10	4	40	4
Smalltalk	10	6	60	9
Storytelling	10	4	40	4
Formal Social Skills (Lrn & Xpr)				
Manners	10	5	50	6
Self-Control	10	6	60	9

Resist Questioning	10	5	50	6
Antisocial Skills (Svy & Xpr)				
Haggling	11	3	33	2
Knowledge & Memory Skills (Lrn & Obs)				
Accounting	11	5	55	6
Paper Trailing	11	4	44	4

Total Skills Cost: 175

The Operator	Size	11	Learning	11
	Fitness	12	Savvy	12
	Dexterity	11	Observation	14
	Coordination	10	Expression	14
	Constitution	10	Charisma	15

Amanda Whitecliffe is a spy who lives by her awareness and social abilities. Her training has given her some combat abilities, but most of her training has centered around working with people. She can see right through most social pretense and falsehood, and is able to soar among the social elites with ease. She can persuade just about anyone of just about anything.

Amanda's stats are fairly balanced, with no real weaknesses and some fairly good bases for her social skills and observation. She has a smaller number of skills at higher levels, making her correspondingly more able, but also more specialized.

	Base	Mult.	Skill	Cost
Meelee Combat (Coord & Fit)				
Hand to Hand	11	5	55	6
Knife	11	3	33	2
Ranged Combat (Dex & Obs)				
Pistol	12.5	5	63	6
Rifle	12.5	3	38	2
Submachinegun	12.5	2	25	1
Vehicle Skills (Dex & Coord)				
Driving	10.5	3	32	2
Athletic Skills (Coord & Fit)				
Running	11	5	55	6
Swimming	11	4	44	4
Observation Skills (Obs & Svy)				
Observation	13	7	91	12
Streetwise	13	5	65	6
Appraisal	13	7	91	12
Detect Lie	13	7	91	12
Lipreading	13	3	39	2
Spontaneous Social Skills (Xpr & Cha)				
Questioning	14.5	6	87	9
Flattery	14.5	6	87	9

Smalltalk	14.5	6	87	9
Persuasion	14.5	7	102	12
Formal Social Skills (Lrn & Xpr)				
Manners	12.5	7	88	12
Self-Control	12.5	7	88	12
Resist Questioning	12.5	6	75	9

Antisocial Skills (Svy & Xpr)				
Lying	13	7	91	12
Knowledge & Memory Skills (Lrn & Obs)				
Names & Faces	11.5	7	81	12
Memorization	11.5	5	58	6

Total Skills Cost: 175

The Lurker	Size	8	Learning	8
	Fitness	14	Savvy	14
	Dexterity	18	Observation	14
	Coordination	14	Expression	10
	Constitution	13	Charisma	7

Leonce "Fader" Randall is a creep, a lowlife, an opportunist who traffics in vice and corruption. Though he is not entirely without principle, as such men go. And he is very much a survivor.

Fader's skills are centered around his life as a criminal, and surviving the consequences of his life as a criminal. He is a dead shot, and very hard to surprise or sneak up on. He's not a "people person" or a scholar by any means.

Fader is a character whose stats are fairly focused. This allows him to have some rather high bases in areas he is good at, but it also makes his essential social skills more expensive.

	Base	Mult.	Skill	Cost
Meelee Combat (Coord & Fit)				
Hand to Hand	14	4	56	4
Knife	14	5	70	6
Ranged Combat (Dex & Obs)				
Pistol	16	6	96	9
Thrown Weapons (Dex & Coord)				
Knife	16	5	80	6
Vehicle Skills (Dex & Coord)				
Driving	16	4	64	4
Athletic Skills (Coord & Fit)				
Running	14	3	42	2
Swimming	14	3	42	2
Climbing	14	3	42	2
Dexterity Skills (Dex & Svy)				
Pickpocket	16	5	80	6

Lockpicking	16	4	64	4
Observation Skills (Obs & Svy)				
Observation	14	7	98	12
Streetwise	14	7	98	12
Appraisal	14	6	84	9
Detect Lie	14	7	98	12
Spontaneous Social Skills (Xpr & Cha)				
Flattery	8.5	5	43	6
Smalltalk	8.5	6	51	9
Persuasion	8.5	6	51	9
Formal Social Skills (Lrn & Xpr)				
Manners	9	4	36	4
Self-Control	9	8	72	16
Resist Questioning	9	7	63	12
Antisocial Skills (Svy & Xpr)				
Lying	12	8	96	16
Weasel	12	6	72	9
Knowledge & Memory Skills (Lrn & Obs)				
Names & Faces	11	4	44	4

Total Skills Cost: 175

The Goon	Size	20	Learning	8
	Fitness	20	Savvy	10
	Dexterity	12	Observation	10
	Coordination	14	Expression	8
	Constitution	12	Charisma	6

Georg Kohler is a looming slab of congealed ugly. He's been making up for it in raw pugilism since a tender age. His mode of operation is to drag others down to his level and beat them with experience. And anything else lying around.

Georg is a character who has maxed out several stats, but this makes him weak in a number of areas. His Intimidation skill was very expensive, for instance, so much so that it limited how high his combat skills could be bought. Also, even though his athletic base is high, his athletic skills had to be shortchanged to save points.

	Base	Mult.	Skill	Cost
Meelee Combat (Coord & Fit)				
Hand to Hand	17	7	119	12
Knife	17	5	85	6
Bayonet	17	4	68	4
Ranged Combat (Dex & Obs)				
Pistol	11	7	77	12
Rifle	11	6	66	9
Submachinegun	11	5	55	6
Thrown Weapons (Dex & Coord)				

Grenaaade!	13	4	52	4
Knife	13	5	65	6
Vehicle Skills (Dex & Coord)				
Driving	13	3	39	2
Motorcycle	13	2	26	1
Athletic Skills (Coord & Fit)				
Running	17	4	68	4
Climbing	17	4	68	4
Swimming	17	4	68	4
Observation Skills (Obs & Svy)				
Observation	10	6	60	9
Streetwise	10	5	50	6
Appraisal	10	5	50	6
Detect Lie	10	4	40	4
Spontaneous Social Skills (Xpr & Cha)				
Questioning	7	6	42	9
Intimidation	7	10	70	25
Smalltalk	7	4	28	4
Formal Social Skills (Lrn & Xpr)				
Manners	8	5	40	6
Self-Control	8	6	48	9
Resist Questioning	8	5	40	6
Antisocial Skills (Svy & Xpr)				
Lying	9	6	54	9
Weasel	9	5	45	6
Knowledge & Memory Skills (Lrn & Obs)				
Sports Trivia	9	3	27	2

Total Skills Cost: 175

Equipment

Equipment is all of the gear your characters will be carrying on their adventures: clothing, backpacks, maps, weapons, armor, etc. You will need to outfit your character with some starting equipment when you create it. There will be opportunities to buy more gear later on if need be.

Buying Equipment

Equipment has two main costs: the purchase price, and the increase to your character's Cost of Living that owning and operating the equipment causes. In addition, there are limits to the amount of gear your character can carry on their back and/or hide on their person.

Purchase Price

The purchase price of an item is the cost to actually purchase the item. This is paid out of a character's Spending Money. Characters will receive more Spending Money as time goes by.

Cost of Living Modifier

The Cost of Living Modifier reflects the costs of operating and maintaining equipment, as opposed to purchasing it. Simple items like a shovel or a compass or a knife have negligible impact on a character's Cost of Living (except in bulk). Expensive equipment like a helicopter will cost the character lots of money to keep in good working order. Add the Cost of Living Modifier for the item to your character's Cost of Living. If your Cost of Living exceeds your Income, your gear will start to wear out and break.

Encumbrance

Each piece of equipment has an Encumbrance value which indicates how bulky and heavy it is. The total of the Encumbrance values of the gear you are carrying around on you is determines your Load:

Load Level	Effects
No Load	+20 to Acrobatics, Dodge
Light Load	+10 to Acrobatics, Dodge
Medium Load	None.
Heavy Load	Penalties to movement
Overload	Severe penalties to movement, chance of injury

As your Load increases, you will start to be slowed down by it, particularly in combat, and will take penalties to some skills which require you to be able to move freely.

Encumbrance and Concealment

The Encumbrance value of the item also affects how hard it is to conceal an item on your person (a gun under your coat, for instance). If it's more than half your Size, you will start taking penalties. Some types of clothing let you conceal more things on your person (a long trenchcoat, for instance), but can also make you stand out in a crowd.

A Sample Load-Out

Action!

Using Skills

Skill Rolls and Modifiers

To see if a character is able to accomplish something, a skill roll is performed. The player rolls d100, subtracts various *modifiers* that may apply, and compares the result to the number listed for that skill on his/her character's character sheet. If the result of the roll is less than or equal to the character's skill, the character succeeds. Otherwise, they fail.

Example:

Barb's character, Lady Eberswanly, is jumping her horse over a high fence. The GM rules that this should subtract a -10 modifier from her roll (i.e. add 10 to her roll). Barb's character has the Horse Riding skill at 45, and Barb rolls a 32. Since $32 + 10$ is less than 45, Lady Eberswanly and her horse clear the fence and ride on.

Modifiers reflect the way that a particular task may be easier or more difficult due to the circumstances the characters find themselves in.

Comparing Skills: The Duel

To compare the results of two characters' skill rolls, subtract the final number rolled for each character from that character's skill. The largest resulting number wins; ties are ties, with both characters doing equally well (to each other, if applicable).

Example:

Ralph's character, Sir Cedric Blowhard, captain of the HMS Incorrigible, is settling an affair of honor with his archrival, Captain Fogbank of the Petulant (an NPC). The duel is being settled with 12-pounder naval cannon at a range of 12 paces. Ralph rolls a 27, and the GM rolls a 45. Since both characters have a skill of 50 with the aforementioned artillery (and the short range serves to offset any effects of intoxication the characters may be feeling), both characters would have made their rolls and blown each other to kingdom come. However, since Ralph made his roll by 23, while the GM only made his roll by 5, Ralph's character shoots first and goes on to a long and distinguished career, while vile bits of NPC rain down on the surrounding countryside for the next few days.

When You Fail a Roll

Most failed skill rolls are just a temporary setback. If at first you don't succeed, try, try again. Roll again to see if you succeed the second time. Your GM may add penalties for repeated failure or if you are trying something risky.

Example:

Rookie ninja Tanaka is climbing up a steep mountainside. The GM asks for a Climbing roll. Tanaka fails, and slips, sliding down a bit. He then rerolls his skill, makes it, and reaches the summit.

When You Don't Have a Skill

What if a character is stuck in a situation where they need to use a skill or background that they don't have? What if they have a skill that's sort of like what they want to do?

- If the character does not have the skill in question, but has another skill in the same category (except an "OTHER" skill; see below), they can roll on that Skill instead, but with a -25 modifier added onto their skill roll.
- If the character does not have any skills in the same category, they must roll against the base for that skill (the sum of their relevant stats).
- A character that uses this rule is obliged to spend at least one XP on the skill they didn't have the next time they spend XP. This will buy them a 2X in the skill.

Example:

Sir Michael the Rash is besieged by orcs, and has dropped his sword in the river to boot. He has picked up a spare club, but does not have the Club skill. Fortunately for him, he can swing that club using his Sword skill with a -25 modifier. The player running Sir Michael must then put 1 XP into his Club skill the next time he spends XP.

"OTHER" Skills

Other skill represent skills that are grouped in the skill category for the sake of organization, but are too unusual in the way they work to give you any useful crossover of experience. If your character has an "OTHER" skill, he or she cannot apply it to related skills in that category: it is just too different. Characters with the "normal" skills from that category cannot apply those skills to the OTHER skills, for the same reason.

Combat

“Purpose of your visit?”

“Combat.”

- Customs inspector to Kanuka Clancy, Patlabor 1

During most role-playing, there is no need to establish a fixed order for who goes when. Generally, an informal round-robin order is sufficient. Action scenes require a bit more coordination, however, both to make sure everyone is given their fair chance to do something, and to prevent the game session from turning into chaos.

In general, the combat system for SyntheSys is designed to do two things:

- Spell out the order of who gets to go first, and who gets to go after that.
- Provide a sense of back-and-forth, action and reaction.

The Shot Clock

SyntheSys uses a “shot clock” system to determine who gets to go next. The “shot clock” represents the number of “ticks” which must pass by on an imaginary clock before a given character can act.

Players start by rolling 1d6 to determine the starting numbers on their characters’ shot clocks, and then count down in unison. When a character’s shot clock reaches zero, that character can act.

Each action a character takes puts points back on their shot clock. They must then wait until their shot clock counts back down to zero before they can act again.

Players can keep track of their shot clock using counters drawn from and returned to a pool, or with marks on a piece of paper.

When Not to Use the Shot Clock

The shot clock is intended to be used for most encounters between one or more PCs and one or more NPCs. However, in some cases like a High Noon gunfighter’s duel, it may be more appropriate to assume that the characters will both go at the same time, with the character making their skill roll by the most amount going first.

Modifiers to Starting Points

Characters can reduce the starting number on their by making successful Observation rolls to see the enemy coming, or by staging an ambush, etc.

Characters who are ambushed may have penalties added to their starting points.

Taking Actions

Taking an action in combat will generally call for the player to make one or more skill rolls for their character on a combat-related skill.

Simultaneous Actions

When two characters’ shot clocks count down to zero simultaneously, they are considered to be acting simultaneously. If it is necessary to determine who went first, the person who makes their skill roll by the greatest amount goes first.

The Shot Cost of Actions

In general, the shot cost of actions is as follows:

3 Points for Offensive Actions & Maneuvering

“Offensive action” means attacking an enemy with your character’s fists or a sword or a gun, or using the weapons in a vehicle or the vehicle itself. Non-combat offensive actions like picking a pocket also cost three ticks of the clock when done during combat.

Other 3-point actions include:

- Going from a standing start to a jog or a run (or vice versa).
- Going from a jog to a run
- Doing a standing broad jump

1 Point for Defense, & Minor Actions.

Defensive actions include blocking or parrying a weapon, dodging, or diving for cover. Starting to apply first aid is also a defensive movement.

Other 1-point actions include:

- Going from a prone position to a standing or kneeling position.
- Looking around you for something.
- Taking out a piece of equipment your character has stowed in a pocket or belt pouch somewhere on his/her person.
- Taking off a backpack so you can look in it.
- Taking a snapshot with a camera.
- Opening a lock with a key that’s already in your hand.
- Drawing a weapon (this can be combined with an attack, but there will be penalties to the attack)

Exception for Defensive Moves

Whenever a character is attacked, they have the option to take a defensive move right then, even though their shot clock has not yet counted down to zero. However, they still add the cost of the defensive move to their shot clock, so it will be even longer before they get to move again.

Doing Two Things At Once

What if you want to, for instance, juggle three tennis balls while riding a unicycle? Both of these things require skill rolls, and have to be done simultaneously.

If characters are doing two things at once, they must make both skill rolls at one-third their normal skill. A character cannot do more than two things at once.

Notes:

- This rule applies only to simultaneous actions: it cannot be used to do two things one after another (you can't dive outside then shoot, but you can shoot wildly while diving). To do one thing after another, do the first thing, then wait and do the second thing once your shot clock counts down to zero.
- The 1/3 skill penalty applies even if the other action doesn't require a skill roll (firing while running up a hill, for instance).
- This rule cannot be used to attack two different targets simultaneously with a weapon in each hand.
- The shot cost for the action is equal to the higher of the two shot costs.

Attacking a Target

Once your character's shot clock has counted down to zero, you can choose to make an attack against a target which is close enough for your character to hit. To attempt an attack, make a skill check against the appropriate weapon skill. To strike an enemy with a sword, for instance, you would roll against your Sword skill. This will be compared to your enemy's defense roll, if any.

- If you make your attack roll by more than the defender, you have hit your enemy, and can then determine how much damage you did (see **Determining Damage**, p. 14). Remember how much you made your roll by: it figures into the amount of damage done.
- If your enemy does not make a defense roll, you merely have to succeed at your attack roll to hit them.

- If you fail your attack roll, or if your enemy makes their defense roll by more, you have failed to hit them.

In all cases, you must add the cost of your attack to your shot clock (3 points plus any additional timing penalties that may be in effect).

Drawing a Weapon and Firing

Drawing a weapon as a one-point action incurs no penalty. Drawing a weapon and firing as part of a 3-point attack incurs a -40 penalty to your attack roll.

Defending Yourself

You can defend yourself at any time that you are attacked, though you will add 2 points to your shot clock each time you do so. You can defend yourself in a number of ways:

Parrying With a Weapon or Shield

To parry with a weapon or shield, use the appropriate Meleé Combat skill. If you make your roll by more than your attacker, you will have successfully parried the blow. For details, see **Meleé Combat**, p. 17.

Defending against Ranged Weapons

Parrying an attack from a ranged weapon with a melee weapon like a sword is difficult and will give you penalties to your roll. Blocking a missile weapon with a shield is considerably easier.

Dodging or Ducking

To dodge or duck a blow, roll against either the Dodge skill, or any Meleé Combat skill with a -25 modifier. If you make your roll by more than your attacker, you will have dodged the blow.

Running Away

A time-honored defense against attack. You opponent can pursue you, of course (see

Races and Chases, p. 20) and may get to take a swipe at you if you have to run past them.

Waiting to Attack or Defend

If you want, your character can choose to wait for something else to happen before taking another action. They might be guarding a doorway, for instance, and would want to wait until the enemy came within reach to attack or defend themselves. In this case, the character's shot clock stays at zero, until they decide to do something, or are forced to dodge or take some other defensive action.

Determining Damage

There are two parts to determining the amount of damage done to a character by an attack:

1. Determining Hit Location
2. Rolling for Damage

Determining Hit Location

To determine where on their body the target character was hit, take the amount the player made their attack roll by and add 1d100. Compare the result against the **Hit Location Chart**, p. 15.

Rolling for Damage

The amount of damage done by a successful attack is determined by rolling a number of six-sided dice and examining the result.

The total amount of dice rolled is determined by the type of attack:

- For ranged weapons and firearms, roll the number of dice indicated by the weapon type.
- For thrown weapons and melee weapons, roll the number of dice indicated by the weapon's modified damage (see Modified Damage).

Modified Damage

The amount of damage done by meleé weapons (swords, axes, clubs, etc.) and thrown weapons (spears, throwing knives, etc) varies with the Strength of the attacker. Stronger characters do more damage, weaker characters less.

To determine the amount of damage done in an attack, cross-reference the damage listed for the weapon against your character's Strength on the Modified Damage chart on page XX.

Health vs. Stun Damage

The values generated by the die rolls are then applied to two of your Derived Characteristics:

- Health Points, which represent actual tissue damage. Each hit location on a character's body has a certain amount of health points determined by their Size.
- Stun Points, which represents a character's ability to stay alert and functioning. A character has a single pool of Stun points the size of which is determined by the character's Size and Constitution.

Armor, Penetration, and Damage

All attacks do Stun damage, and may inflict Health damage as well depending on the Penetration value of the attack and the Armor value of the defender's armor (if any).

Penetration indicates the ability of a weapon to go through armor and inflict damage. Bare fists have a Penetration of 0.

Armor indicates the protective value of armor. An unarmored character's Armor value is 1.

Subtract the Penetration value of the attack from the Armor value of the defense. For each point of Armor left over, one die of the attack is converted to Stun damage only. The remaining dice are then rolled, and the results are added up to determine the total Health damage done by the attack. The amount of Stun damage done by the attack is determined by rolling the Stun only dice and adding their values to the totals for the other dice.

Example:

Bob makes a 5d6 attack with a Penetration of 6 against Joe, who is wearing Armor value 9 armor. Two dice were converted to stun, so he rolls 2d6 damage, doing a total of 6 points of Health damage. He then rolls the 3d6 stun, getting a 12, and adds it to the 6 points rolled previously for a total of 18 points of Stun.

The Soak value of the armor is then subtracted from the Health and Stun damage rolled, and the leftover damage is applied against the character who was attacked.

Example:

Joe's armor has a Health Soak of 3 and a Stun Soak of 5. These values are subtracted from the 6 points of Health and 18 points of Stun damage, so that Joe ends up taking only 3 points of Health damage and 13 points of Stun damage.

Table 1 Hit Location Chart

Roll	Hit Location	Effect	Shield
1-10	Equipment	Damage to minor equipment. Must be repaired afterwards. Ex: canteens and waterskins, backpacks.	
11-20	Secondary Thigh	-2d6 damage to Leg	
21-30	Primary Thigh	-2d6 damage to Leg	
31-40	Secondary Shin	-1d6 damage to Secondary Leg	
41-50	Primary Shin	-1d6 damage to Primary Leg	
51-55	Secondary Arm	-1d6 damage to Secondary Arm	1-3
56-60	Primary Arm	-1d6 damage to Primary Arm	
61-65	Damage to Armor or Major Equipment.	Roll damage: if it exceeds the equipment's Soak, it is damaged, and the character has a -10 to their rolls. Appropriate gear includes armor, shoes, webbing, communications gear, etc.	1-3
66-70	Glancing Blow to the Head	-1d6 damage to the Head, +1d6 Stun	
71-75	Secondary Shoulder	Normal damage to Secondary Arm	1-3
76-80	Primary Shoulder	Normal damage to Primary Arm	
81-85	Hips/Buttocks	Normal damage to abdomen, +1d6 Stun	
86-87	Secondary Foot	+1d6 damage to Secondary Leg	
88-89	Primary Foot	+1d6 damage to Primary Leg	
90-91	Secondary Knee	+2d6 damage to Secondary Leg	
92-93	Primary Knee	+2d6 damage to Primary Leg	
94-95	Secondary Hand	+2d6 damage to Secondary Arm	
96-97	Primary Hand	+2d6 damage to Primary Arm	
98-106	Abdomen	Normal damage	1-3
107-108	Groin	+2d6 damage to Abdomen	2-3
109-110	Kidneys	+1d6 damage to Abdomen, +1d6 Stun	
111-120	Chest	Normal damage	
121-130	Ribs	+1d6 Damage to the Chest, +1d6 Stun	
131-140	Head	Normal damage to Head, +1D6 Stun	
141-145	Damage to Weapon	Roll damage: if it exceeds the weapon's Soak, it breaks and must be repaired before it can be used again.	
146-150	Armpit	+2d6 damage to the chest, -1 pt armor	
151-155	Gonads	+2d6 damage to Abdomen, +2d6 Stun	
156-160	Face	+1d6 damage to Head	
161-165	Neck	+2d6 damage to Head	
166-170	Throat	+2d6 damage to Head, -1 pt. Armor	
171-180	Forehead	+2d6 damage to Head, +1d6 Stun	
181-190	Temples	+2d6 damage to Head, +2d6 Stun	
191-195	Primary Eye	+3d6 damage to Head, -2 pt. Armor	
195-200	Secondary Eye	+3d6 damage to Head, -2 pt. Armor	
201-205	Through the Heart	+4d6 damage to Chest	
206-210	Decapitation Strike	+4d6 damage to Head	
211-220	Hewn in Twain	+6d6 damage to abdomen	

Effects of Damage

Damage has three main effects on player characters: adding time to their shot clock, incapacitation and death.

Time Added to Shot Clock

- Players add one point to their characters' shot clocks for every multiple of their Constitution that they take in Stun damage. If they take less than their Constitution in stun, they add nothing.
- Players add one point to their characters' shot clocks for every multiple of their species' Size Index in Health damage that they take (humans are size 1). *Ouch!*

Incapacitation from Damage

Loss of Health

If a body part loses more than half of its Health Points, any actions which use that part of the body are at a -50.

- All actions which are done standing up are considered to use the legs. If a character can sit or lay down and still do an action, they can avoid the penalty from a leg injury that way.
- All actions are considered to use the head, chest and abdomen. A character will take a -50 penalty to all actions from each of these areas if they lose more than half of their Health Points there.

Once a body part has zero or less hit points left in it, it is unable to be used (see also Death, below). The character will be at a -50 to all actions. In addition, the character will lose Stun equal to the amount of points the body part is below zero every other tick of their shot clock until their character receives a successful First Aid roll.

Loss of Stun

If a character loses more than half of their Stun Points, they take a -20 penalty to all actions.

Out of Stun points? You're unconscious!

Death

If a character's Head or Chest is reduced to zero Health Points, they are unconscious and near death.

If the character's Stun Points drop below the negative of their maximum value, the character dies.

Recovery

Characters who survive being injured will eventually heal completely.¹ The number of Health and Stun Points that a character gains back in a given time period are in proportion to that character's size:

- A character gains back their Size + Constitution in Stun each day.
- A character gains back one Health point per day. In addition, for each day, they roll d100 against twice their Size + Constitution to see if they gain back an additional point of health. Health points regained are distributed among all hit locations which have received damage.

Example:

Lt. Zorch is injured in the head and chest. The next day, he gets one point of Health back automatically, and makes his d100 roll to gain back a second point of health. One point is added back to his head, and the other is added to his chest.

Maiming

If a body part now has a greater negative value than its original positive value (down to -27 from a 26, for example), it is considered to have been functionally obliterated and will no longer heal without surgical/magical help.

¹ Yes, it *is* unrealistic, but then this is a *game*.

Melee Combat

Melee combat is hand-to-hand combat that uses either bare hands and fists, or weapons like swords, spears and clubs. For combat with guns, bows and arrows, thrown weapons and all other ranged weapons, see **Ranged Combat**, p. 18.

Characteristics of Melee Weapons

Damage	The number and type of dice rolled to determine damage.
Penetration	The weapon's ability to go through armor.
Weapon HP	The amount of damage the weapon can take before breaking.
Minimum Strength Required	The minimum Strength required to use the weapon without penalty. A character may use a weapon that is above their Strength, but they will incur a penalty of two points to their roll for each point of Strength they lack.
Encumbrance	How heavy and awkward to tote around the weapon is.
Range	A target this far away from the wielder of this weapon (measured in meters from where they are standing) can still be hit.

How to Survive a Swordfight

The things your character can do to improve their chances in melee combat are:

- Be alert. See trouble coming.
- Parry incoming attacks, or carry a shield to protect yourself.
- Use a weapon with a longer reach, such as a greatsword, spear, lance, pike or polearm.
- Make use of defensive terrain and fortifications. Get your back to a wall, or if you have time, build defenses like ramparts or a palisade.
- Fight in formation with your fellow party members, so that you are protecting each others' backs and flanks.

Spotting Trouble Coming

Characters who make successful Observation rolls to spot potential trouble or ambushes can deduct 1 starting point from their shot clock for every 30 points they make their Observation roll by, down to a minimum of 1 starting point.

Characters who fail their Observation rolls may be forced to add starting points to their shot clocks at the discretion of the GM.

Parrying an Attack

To parry with a weapon or shield, use the appropriate Meleé Combat skill. If you make your roll by more than your attacker, you will have successfully parried the blow.

Parrying Ranged Attacks

- Parrying a thrown weapon has a –30 difficulty.
- Parrying an arrow has a –50 difficulty.
- Parrying a crossbow bolt has a –100 difficulty.
- Parrying bullets, flame-thrower fire, cannon balls, artillery shells or any projectile from a weapon that is not man-portable is impossible.

Using a Shield

To block an attack with a shield, make a contested roll with the defender's shield skill against the attacker's weapon skill.

Using a shield aids a character in three ways:

- The defender may receive bonuses to their defense roll depending on the size of the shield.
- Shields are much better at blocking ranged attacks than parrying with a weapon.
- Even if the defender does not actively block with his/her shield, the attacker still subtracts the shield's Passive Defense modifier from his/her attack roll.

If the attacker succeeds in his/her attack and rolls a hit location that would normally be covered by the shield, the next highest location is hit instead.

Weapon Reach

Using a weapon with a longer reach has the advantage that your opponents must get inside your weapon's reach in order to attack you.

To do this, they must execute a 1-point attack maneuver where they block the longer weapon as they slip inside its reach (the character with the longer weapon must do a 1-point defense to prevent this). The character moving inside the longer weapon's range must beat their opponent in a contest of their respective weapon skills. Once the character with the shorter range is inside the longer weapon's reach, both opponents fight normally.

The character with the longer weapon can try to withdraw outside the shorter weapon's range again: this is handled as another set of 1-point actions.

Fighting from Fortifications

Fighting in Formation

If fighting from a fortification is impossible, the next best thing is to form up into formation with your fellow combatants so that you can guard each other's flanks and backs.

Strangling Attacks

Typically, a strangling attack is a 1d6 continuous attack.

Roll normal attack w/-20 penalty to get the garrotte on.

After that, roll 1d6 each tick of the shot clock.

Victim can counter at -30 to break loose, vs attacker's Garrotte skill.

Ranged Combat

Characteristics of Ranged Weapons

Damage	The number and type of dice rolled to determine damage.
Penetration	The weapon's ability to go through armor.
Minimum Strength Required	The minimum Strength required to use the weapon without penalty. A character may use a weapon that is above their Strength, but they will incur a penalty of two points to their roll for each point of Strength they lack.
Recoil	The amount of recoil generated by the weapon. If the Recoil is greater than a character's Strength, they add an extra point to their shot clock for each attack they perform. If the Recoil is more than five points greater than their Strength, they add an extra point to their shot clock for each five points of Strength they lack.
Encumbrance	How heavy and awkward to tote around the weapon is.
Range	The range of the weapon in meters.
Capacity	The number of shots that can be fired by the weapon before it becomes necessary to reload. An "N/A" indicates that the weapon doesn't hold the ammunition at all, as in the case of a bow or sling.
Type of Fire	
Reload Time	

Thrown Weapons

How to Survive a Gunfight

The things your character can do to improve their chances in ranged combat are:

- Be alert. See trouble coming.
- Use whatever cover is available. If your enemy is using thrown weapons, arrows or other primitive projectiles, a shield may be helpful.
- Aim your shots.

- Use enough gun. Rifles beat handguns every time.
- A mousegun in the hand beats a cannon in the holster.
- No, you can't dodge bullets. Or duck. Much.

Aimed Shots

Cover

As with a shield in Melee combat, firing from cover adds to the difficulty of attacks against you depending on the type of cover:

Type of Cover	Modifier
Firing from behind small object (fire hydrant, lawn jockey, etc.)	-10
Firing from behind large object (car, dumpster, boulder)	-20
Firing around corner	-20
Firing from a rooftop or tree	-20
Firing from foxhole or deep ditch	-30
Firing from a bunker	-40
Firing prone (any type of cover)	Add'l -10

If the attack succeeds, roll d100 and add to the amount you made the attack roll by (including the modifier for cover). If you roll a hit location that would be protected by their cover, move up the table to the next appropriate hit location.

Combat with Automatic Weapons

Automatic weapons are weapons that fire two or more bullets, ray beams, etc. with each pull of the trigger. This includes conventional "full-auto" weapons like machineguns, as well as guns that fire a burst of 3-5 bullets with each trigger pull, like most modern assault rifles.

Travel and Movement

Distance Covered in a Day

The following table gives the Movement Modifier for various different types of foot travel over three different periods of time: the Combat Round, the Hour, and the 8-hour travel day.

The distance which a character can travel in a day is determined by the following formula:

$$\text{Movement} \times \text{Rate / Hour} = \text{Distance}$$

Movement Type	Rate/Hour	Rate/Day
Wounded Crawl	0.03 miles	0.24 miles
Crawl	0.06 miles	0.56 miles
Walk	0.12 miles	0.96 miles
Jog	0.18 miles	-
Run	0.25 miles	-
Sprint	-	-
Bicycle	0.575 miles	4.6 miles
Swimming	0.05 miles	-
Cross-Country Skiing	0.20 miles	1.60 miles
Roller Skating	0.49 miles	3.92 miles

Races and Chases

Chases in Synthesys consist of a series of obstacles which each of the parties must get past. The shot clock is used in much the same way as in combat. Failure to negotiate an obstacle adds extra points to a character’s shot clock. Clearing an obstacle well may add extra points to opponents’ shot clocks:

Skill Roll Result	Effect on Shot Clock
Made it by 1 – 49	Move Forward 1 space
Made it by 50 +	Move Forward 2 spaces

Starting Positions

The quarry will usually get a head start: they start a couple spaces ahead, and their shot clock starts at 0. The pursuers roll 1d6 to determine their starting position, possibly modified by other rolls (Observation, etc) as usual.

Cost of Movement

The shot clock cost for each unit of movement in a chase is 3 points. This is reduced if the character makes their roll by a sufficient amount (see table above).

Getting Away

The quarry gets away either if they reach some objective or place of safety (usually the end of the course of obstacles), or if they get so far ahead the pursuers cannot reasonably follow them any more. The GM has the option to extend the course on the fly if he/she so desires.

Catching Up

If the pursuers catch up with the pursued, they can try to tackle them or otherwise stop them.

Other Considerations for Pursuers

If the pursuers fail particularly badly, the GM has the option to add to the difficulty of other pursuers behind them because they have to go around.

For the pursuers who wind up in the back of the pack, the GM should reduce the difficulty of the obstacles, because the obstacles have already been broken down/cleared out by the front-runners.

“Heading Them Off at the Pass”

Some pursuers may opt to try to head the quarry off at the pass, take a shortcut to get ahead, etc. This requires either them to be at the point where they can head the quarry off, or to get there passing a hopefully shorter series of obstacles.

The GM may require the pursuers to make an Area Knowledge roll to even know about the pass or the shortcut. If the pursuer is doing some kind of acrobatic trick to get ahead (running on rooftops and jumping from house to house, etc), they must make the appropriate rolls.

Collisions

When two characters plow into each other, or that copyrighted jungle hero swings his vine into the path of an oncoming rhino, it's important to know how to figure damage from the collision. In its most basic form, collision damage is computed with the following formula:

$$\text{damage} = \frac{\text{mass} \times \text{relative speed of impact}}{1000}$$

Weight for this formula is in kilograms, and the relative speed is in kilometers per hour.

This damage is applied equally to both objects involved in the collision. It is figured as normal damage which is subtracted from four hit locations which are determined using the Whole Body Hit Location table. Hit locations which are rolled twice are simply twice as injured.

Collisions normally have 0 Penetration, unless you happen to run into something with spikes.

Falling

A fall is like a collision with the ground. Falls use the same formula for damage as collisions, with the relative speed of impact being the velocity at which you are falling when you hit the ground.

The following table gives the speed of impact for falls from ground level up to the point where atmospheric friction prevents you from falling any faster (terminal velocity).

Height	Speed of Impact
5	18
10	25
15	31
20	36
25	40
30	44
35	47
40	51
45	54
50	57
55	59
60	62
65	64
70	67
75	69
80	72
85	74
90	76
95	78
100	80
105	82
115	86

Height	Speed of Impact
110	84
120	88
125	89
130	91
135	93
140	95
145	96
150	98
155	100
160	101
165	103
170	104
175	106
180	107
185	109
190	110
195	112
200	113
205	115
210	116
215+	117

Character Growth

As a party of player character's adventures continue, the characters will grow and become more capable adventurers. This is done by the GM awarding Experience Points to the characters. These Experience points can then be spent to buy or raise skills or improve the stats of the player characters.

Receiving XP

Experience Points (XP) are awarded to each character by the GM based on a number of factors including the number of sessions the player showed up for, the amount of time passing in the game world, and how well the character was played. XP are usually given out after each gaming session. Different characters may receive different amounts of XP for each session based on the opinion of the GM as to how well they were played.

The XP received are marked down on the character's character sheet so that they can be kept track of.

Spending XP

Buying and Raising Skills

Skills are raised and new skills bought in the same fashion as they were when the character was created. See **Buying Skills**, p. 7 for details.

Raising Stats

Raising a stat costs 50 XP per point raised.

Size cannot be raised more than 5 points from its initial value unless the character was started as a child.

Lowering Stats

Stats cannot normally be lowered after the character has been created, unless the player has a good reason why and gets the GM's permission. Lowering a stat does not return any XP to the player.

Fame, Rumors, Secrets and Counterintelligence

This chapter provides rules that allow the GM to simulate the flow of information through the world of the game. This will allow the GM to track the fame of individuals or groups, as well as simulating the spread of secrets and the efforts of counterintelligence and spin control types to squash them.

Memes

A *meme* is the basic unit of information in SyntheSys. A meme is a piece of information that acts like a virus: it travels around through social groups and gets repeated and propagated endlessly.

SyntheSys simulates the flow of information in the game world by tracking the life cycles of the various memes that are in play.

Characteristics of a Meme

Memes are composed of information and some characteristics that determine how widely spread the information is and who knows about it.

Information

The information in a meme should be recorded in a simple sentence that lists **who**, **what**, **where**, **when** and **why**. Note that not all memes must list all of these things. Some sample sentences are:

- Someone has been robbing banks in the metro area for the past week dressed as a court jester.
- The allies have broken the Japanese code.
- The Legion of Heroes defeated Malevolo on the 5th of May 2004.
- Lord Acton is a great fan of the joust.
- There's a guy called Spivey who knows everything that goes on in the Irish mob.

Characteristics

Memes have the following characteristics:

Geographical Origin

Sociopolitical Origin

Date of Origin

How Broadly Known/Fame

Tracking Memes

For each character or party, there is a fame/history sheet which lists several adjectives that apply to them. There are also specific things that person or group has done listed (usually at the 1-sentence "what we did last ep" level of detail). Each of these meme listings has a fame number associated with it. On a roll to see if a character has heard of you, they will roll a number, and will know all memes they rolled under.

If someone is paper-trailing you, they roll on the same table to get the skinny on you.

The same sheet also lists your secrets, hopefully at negative fame levels.

Characters will build their fame on certain memes as the campaign goes on. They can also raise or lower individual memes using Publicity or CounterIntelligence skills.

Maybe have a set of default memes at the top of the memesheet?

Appendix A: Formulas

Derived Statistics

The following are the absolute versions of the formulas for derived characteristics, including the *Species Modifier (SpecMod)*.

Species Modifier (SpecMod)

The Species Modifier is a multiplier applied to most derived stats to simulate the relative toughness or weakness of the species.

$$\text{SpecMod} = \text{SizeIndex} * \text{NPC Suck Factor}$$

SizeIndex indicates the relative size of a species.

NPC Suck Factor is a modifier used to make some types of monsters or nonhumans appropriately puny or tough for their size.

SizeIndex, *NPC Suck Factor* and *SpecMod* for human player characters are all **1**, and the formulas in the front of the book are simplified accordingly.

Weight

Weight is the physical mass of your character, in kilograms.

$$\text{Weight} = \text{SpecMod}(20 + (5 * \text{Size})) \text{ kg}$$

Health Points

Health Points (HP) for short) indicate how much physical damage a character can absorb before being incapacitated. Lost HP will return as time passes in the game universe and your character heals.

For more information on damage points, healing, and etc., see **Determining Damage**, p. 14.

$$\text{Head \& Arms} = \text{SpecMod}(10 + \text{Size})$$

$$\text{Chest \& Abdomen} = \text{SpecMod}(10 + (2 * \text{Size}))$$

$$\text{Legs} = \text{SpecMod}(12 + \text{Size})$$

Stun Points

Stun Points indicate how well your character stands up to pain, blood loss, etc. Having more of them than the other person is always good in a fight.

$$\text{SP} = \text{SpecMod}\left(10 + \text{Size}\left(\frac{\text{Constitution}}{5}\right)\right)$$

Strength

Strength is the measure of a character's brute physical strength. The number given equals the amount of weight that the character can bench-press or lift over their head.

$$\text{Strength} = \text{SpecMod}\left(2 + \text{Size}\left(\frac{\text{Fitness}}{4}\right)\right)$$

Movement

The Movement stat indicates a character's general ability to cover distance if they have to. It is used with various other modifiers (see , p.) to generate a character's actual rate of motion while running, swimming, etc.

$$\text{Movement} = \text{SizeIndex}(\text{Size} + \text{Fitness})$$

Melee Combat Damage Modified for Strength

The number of “steps” up/down the damage chart when the damage done by a melee weapon is modified by the character’s Strength.

$$\text{Steps} = (\text{Strength} - 25) * \left(\frac{\text{StandardDice}}{25}\right)$$

StandardDice is the standard number of dice of damage done by the melee weapon.

To convert steps into dice, divide by four to get the number of d6, and add the remainder to -1 to get the modifier, then add the dice to the standard damage using the rules on page 3.

Encumbrance Limits

The following are the upper limits of the loads a character may carry for each load level:

$$\text{No Load} \leq \frac{\text{Strength}}{4}$$

$$\text{Light Load} \leq \frac{\text{Strength}}{2}$$

$$\text{Medium Load} \leq \text{Strength}$$

$$\text{Heavy Load} \leq \text{Strength} * 2$$

$$\text{Overload} > \text{Strength} * 2$$

Other Formulas

Skill Multiplier Cost

Microsoft Excel

The cost of a given skill multiplier is determined using the following function in Excel:

```
Function iSkillCost(iMultiplier As Integer) As Integer
iCost = 0
For iCounter = 2 To iMultiplier
    iCost = iCost + Fix(iCounter / 2)
Next iCounter
iSkillCost = iCost
End Function
```

JavaScript

```
var iSkill = this.getField("MCSkillName01")
var iMult = this.getField("MCMult01")
var iCost = 0
```

```
if (iSkill.value != "") {
    for (ivar = 2; ivar <= iMult.value; ivar++) {
        iCost += (ivar/2)
        if (iCost % 1 == 0.5) {
            iCost -= 0.5
        }
    }
}
```

```
event.value = iCost
}
else {event.value = ""}
```

Figuring Encumbrance Values

For most items, Encumbrance follows the following formula:

$$\text{Encumbrance} = \frac{\text{Weight}}{0.5} + \frac{\text{Volume}}{5000}$$

For all encumbrance calculations, weight is in kilograms, length is in centimeters, and volume is in cubic centimeters.

Simplified Encumbrance of Rope

For Rope, cables, and similar objects, use the following formula to determine encumbrance for a coiled up length:

$$\text{Encumbrance} = \left(\frac{\text{Weight}}{0.5} \right) + \left(\frac{\text{Length} * \text{Diameter}^2}{2000} \right)$$

Simplified Encumbrance of Long Objects

For objects whose length is more than four times their other dimensions, such as sticks, rods, staves, knives, swords and rifles, use the following formula to compute volume encumbrance:

$$\text{Encumbrance} = \left(\frac{\text{Weight}}{0.5} \right) + \left(\frac{\text{Length}}{20} \right)$$

Simplified Encumbrance of Flat Objects

For objects whose length and width are more than four times their height, such as shields, badges, books and handguns, use the following formula to compute volume encumbrance:

$$\text{Encumbrance} = \left(\frac{\text{Weight}}{0.5} \right) + \left(\frac{\text{Width} * \text{Length}}{400} \right)$$

Appendix B: Master Skills List

Melee Combat

Unarmed Melee Skills [Fit, Coord]

Military Training (Also taking cover, dive-roll, shoulder roll)
Self-Defense
Martial Arts
Zero-G Combat
Dodge

One-Handed Melee Weapon Skills [Fit, Coord]

Knife (also Stiletto, Dagger)
Sword (also Shortsword, Broadsword, Bastard Sword)
Katana
Axe (also Hatchet/Tomahawk and Battle Axe)
Clubbing Weapons (also Club, Mace, Blackjack, Warhammer, Blackjack, Police baton)
OTHER: Flail, Nunchaku, [flexible weapons?] etc.

Two-Handed Melee Weapon Skills [Fit, Coord]

Greatsword (also Greatsword, Bastard Sword)
Two-Handed Axe (also One and Two-Headed Battle Axe)
Clubbing Weapons (also Maul, Great Mace, Great Hammer)
Staff
Halberd

One-Handed Thrusting Weapon Skills [Fit, Coord]

Spear
Mounted Lance

Two-handed Thrusting Weapon Skills [Fit, Coord]

Pike
Spear & Thrusting Polearm

Shield Skills [Fit, Coord]

Shield (also Small, Round, Kite, Heater)

Fencing Skills [Fit, Coord]

Parrying Dagger
Rapier

Cutlass

Ranged Combat

Firearms [Dex, Obs]

Pistol
Submachinegun (also Machine Pistol)
Rifle (also Rifle, Assault Rifle)
Crossbow
Shotgun
Laser
Heavy Weapons (also Bazooka, Recoilless Rifle, Shoulder-Fired Missile Launcher)
Grenade Launcher (Also "blooper," M203)
Machinegun

Primitive Ranged Weapons [Dex, Obs]

Archery (also Longbow, Shortbow, Compound)
Slingshot
OTHER: Sling, Blowgun

Artillery [Lrn, Obs]

Field Cannon (also Howitzer, self-propelled artillery))
Indirect Fire (Mortar)

Thrown Weapons [Dex, Coord]

Knife
Sword
Shuriken
Throwing Irons
Handaxe
Boomerang
Bolo
Dart
Spear (also Heavy Spear, Javelin, Spear-Thrower)

Other Combat-Related Skills

Acrobatics [Fit, Coord]
Blindfighting [Svy, Obs]
Demolitions [Dex, Lrn]
Fast-Draw [Dex, Coord]
Stealth [Coord, Obs]
Strategy [Lrn, Svy]
Military Tactics (also Shield Wall, Squad, etc.) [Svy, Obs]
Zero Gravity (also spacesuit handling) [Fit, Coord]

Vehicle Skills

Vehicle Weapons Skills [Dex, Obs]

Swivel Mount (also .50-Cal, Mk. 19 grenade launcher)
Turreted Weapon
Axial Mount (also Spinal Mount)
Guided Missile
Starship Fire Control
Bombing
Bomb, Torpedo

Piloting [Dex, Coord]

Antigrav (also Aircar, Landing Craft)
Fixed-Wing (also Glider, Light Airplane, Transport, Supersonic
& Hypersonic Transport, Combat, Stunt)
Helicopter (also Combat, stunt)
Vectored-Thrust
Zero-g
Aerospace Piloting (also Reentry & Aerobraking)
Hang Glider
Parachute

Driving Skills [Dex, Coord]

Two-Wheeled (also Moped, Motorcycle, Off-Roads)
Four-Wheeled & up (also Car, Large Truck, Racing, Stunt,
Dragster, Semi, Tracked Vehicle, Off-Roads)
OTHER: Hovercraft, Treaded, Railroading, Snowmobile
Power Boating (also Zodiac, Outboard, Inboard)

Animal Handling

Training [Lrn, Expr]
Handling (incl. Herding) [Obs, Expr]
Riding (also Combat, Bareback, Formal) [Coord, Obs]

Artistic and Trade Skills

Fine Arts [Dex, Expr]

Painting
Illustration
Calligraphy
Forgery
Art Forgery
Engraving
Sculpture
Jewelry-making

Composition [Obs, Expr]

Composition (also Photographic Composition &
Cinematography)
Writing (also Editing, Prose, Poetry, Article, Structuring)
Reporting (also Taking Dictation)
Songwriting & Composing

Culinary [Dex, Expr]

Cooking (also Food Prep, Chef)

Musical Skills [Dex, Expr]

Guitar
Harp
Sitar
Keyboards (also Organ, Piano, Synthesizer, Accordion)
Horns
Trumpet, Big Brass, French Horn
Singing (Classical, Rock)
Strings (also Violin, Viola, Cello, Bass)
Woodwinds (also Flute, Sax, Piccolo, Clarinet, Recorder)
Percussion
OTHER: Trombone, Bagpipes

Physical Performance [Coord, Expr]

Dance
Pratfalls & Stunts
Stage Fighting

Interpersonal Skills

Formal Social Skills [Lrn, Expr]

- Grooming
- Manners (also Tact, High Society, Professionalism)
- Resist Persuasion
- Resist Questioning
- Self-Control
- Teaching
- Wardrobe (Costuming & fashion sense)

Spontaneous Social Skills [Expr, Charisma]

- Acting (Improv/Method)
- Flattery (Schmooze, Sucking Up)
- Hosting
- Impersonation (also Impressions)
- Insult (also Humiliate)
- Inspiration (also Rallying, Tempting)
- Intimidation (also Bullying, Overbearance, Presence)
- Leadership (also Discipline, Motivation, Orders)
- Persuasion (also Argument, Mediation, Salesmanship)
- Public Speaking (also Emcee, Speechmaking, Preaching, Comedy, Reciting Poetry)
- Questioning (also Interrogate, Casual)
- Seduction
- Smalltalk (also Conversation, Flirt, Lounge Lizardry, Gossip)
- Storytelling
- Ventriloquism

Antisocial Skills [Svy, Expr]

- Bribery
- Cover-Up
- Haggling
- Lying
- Promotion
- Weasel

Other Social Skills

- Drinking [Constitution, Expr]

Professional & Illicit Skills

Dexterity Skills [Dex, Svy]

- Card Sharking
- Disguise
- Electronic Lockpicking
- Escapology
- Mechanical Lockpicking
- Pickpocket/Cutpurse
- Slight-of-Hand

Observation Skills [Obs, Svy]

- Appraisal (Interview, Casual)
- Concealment (on your person)
- Detect Lie
- Find Contact
- Forensics
- Lipreading
- Observation (also Stakeout)
- Scrounging
- Scrutiny
- Shadowing (also Tailing)
- Speed Reading
- Streetwise
- Tracking
- Trap Locating

Knowledge & Memory Skills [Lrn, Obs]

- Names & Faces
- Area Knowledge
- Trivia
- Geography
- Memorization
- Accounting (Show Me The Money!)
- Paper Trailing (Credit & Bkgr. Check)
- Business (Running a business or organization)

Trade Skills [Dex, Lrn]

- Armoring
- Auto Mechanics (also Auto Body)
- Bartending/Mixology
- Brewing & Distilling
- Butchery
- Carpentry
- Gem Cutting
- Leatherworking

Masonry
Metalworking
Photography
Plumbing
Watchmaking
Welding
Winemaking

Programming
Systems Administration
Security/Hacking

Tech Skills [Lrn, Svy]

Electronics (also Fabrication, Assembly/Repair, Troubleshooting, Design, Power Systems, Circuitry, Microcircuitry)
Mechanics [Learning, Savvy] (also Fabrication, Assembly/Repair, Troubleshooting, Design)
Nuclear (also Fabrication, Assembly/Repair, Troubleshooting, Design, Weapons, Power)
Chemistry (also Analysis, Synthesis)
Architectural Engineering (also HVAC and Plumbing)
Civil Engineering (also drainage and foundations)
Starship Life Systems
Starship Magic Star Drive Tech

Scientific And Technical Skills

Hard Sciences [Lrn, Svy]

Astronomy
Biology
Chemistry
Cryptography
Geology
Mathematics
Zoology

Soft Sciences [Lrn, Svy]

Anthropology
Psychology
Sociology

Medical Science [Lrn, Svy]

Diseases/Immunology
Neurosurgeon
Podiatry
Pharmacology (also Anesthesia, Psychiatry)
Poisoning [Lrn, Svy]

Other Medical Skills

Autopsy [Lrn, Obs]
Paramedic/First Aid [Dex, Lrn]
Surgery [Dex, Lrn]

Communications [Lrn, Svy]

Operation
ECM

Languages [Lrn, Svy]

Languages

Computer Skills [Lrn, Svy]

General Use (also Word Processing, Spreadsheet, Graphics, Games)

Other Skills

Magic Skills [Lrn, Svy]

Conjuring
Control
Channeling
Detection
Detect Spell, Detect Mana
Identification
Charging

Physical Skills [Fit, Coord]

Bicycling
Climbing
Rock, Spelunking, Buildings
Diving
Gymnastics (also general jumping, rolling)
Hiking (also forced marching)
Running (also Sprint, Endurance)
Scuba Diving
Skateboarding
Skating (Roller, Ice)
Swimming
Track & Field
Boating (Rowboat, Canoe, Kayak)
Sailing
OTHER: Windsurfing, Surfing, Jet Ski

Other Physical Skills

Juggling [Dex, Coord]

Survival Skills [Lrn, Obs]

Foraging

Camping/Survival (also Arctic, Desert, Tropic, Forest, Closed Ecosystem)

Gaming Skills [Lrn, Svy]

Gambling

RPG Mechanics

Game Knowledge

Skills That Are Really Other Skills

Evil Leadership = Leadership + Intimidation

Biochemistry = Biology + Chemistry

Bluffing = Lie

Coercion = Persuasion + Intimidation

Corrupting Someone = Persuasion + Inspiration

Domesticating Something = Teaching/Animal Training + Skill

Being Taught

Holding Your Tongue = Self-Control + Manners

Impress = Grooming + Wardrobe + Smalltalk

Literary & Film Criticism = Writing + Bullshit

Mentoring = Leadership + Teaching

Misdirection = Lying + Persuasion

Partying = Drinking + Smalltalk

Politics = Public Speaking + Persuasion + Leadership + Lying + Weaseling

Appendix C: Equipment List

Medieval Equipment

Melee Weapons

Type	Description	Cost	COL Adj.	Encumbrance
Pointed Stick	Fire-hardened, sharpened wooden stick. Dam 2d6, Pen 3, Range 1			
Knife	Small utility knife. Dam 1d6, Pen 6, Range 0	\$???	0	1
Dagger	Kidney dagger. Dam 3d6-1, Pen 6, Range 0	\$???	0	2
Club	Wooden club. Dam 4d6+1, Pen 1, Range 1	\$???		6
Mace	Steel mace. Dam 5d6+2, Pen 5, Range 1	\$???		7.5
Maul	2-handed wooden maul. Dam 10d6, Pen 2, Range 1-2			
Short Sword	Dam 4d6+2, Pen 6, Range 0-1	\$???		6
Longsword	Dam 5d6, Pen 6, Range 1	\$???		7
Bastard Sword	One-handed: Dam 6d6-1, Pen 6, Range 1 Two-handed: Dam 7d6, Pen 6, Range 1	\$???		9
Greatsword	Dam 8d6+2, Pen 6, Range 1-2	\$???		12
Hatchet	Small 1-handed wood-cutter's hatchet. Dam 4d6+2, Pen 6, Range 1	\$???		4.5
Tomahawk	Dam 5d6-1, Pen 6, Range 1	\$???		5
Bearded Axe	Dam 5d6, Pen 6, Range 1	\$???		6
Battle Axe	Dam 6d6-1, Pen 6, Range 1	\$???		8
Woodsman's Axe	2-handed timber axe. Dam 7d6, Pen 6, Range 1	\$???		8
Great Axe	2-handed bearded axe. Dam 9d6, Pen 6, Range 1-2	\$???		12
Spear	1.8 meter one-handed spear. Dam 4d6+1, Pen 7, Range 1-2	\$???		13
Pike	5.5 meter two-handed spear. Dam 7d6+2, Pen 7, Range 5-6	\$???		40
Halberd	Axelike polearm with hook & thrusting point. Dam 10d6+1, Pen 6, Range 1-2	\$???		17
Glaive	Polearm with large knife-shaped blade. Dam 12d6-1, Pen 6, Range 1-2	\$???		19.5
Lance	Lance for mounted knight. Dam 5d6, Pen 7, Range 2-3	\$???		27

Ranged Weapons

Type	Description	Cost	COL Adj.	Encumbrance
Longbow	Arrows Dam 3d6, Pen 9, Range			
Crossbow	Bolts Dam 2d6+2, Pen 10, Range			

Clothing & Armor

		Armor		Encumbrance

Type	Description	Value	Cost	COL Adj.	Worn/Carried
Travelling clothes	Sensible hiking/riding clothes	-	\$???		
Cloak	Woolen cloak		\$???		
Fur Cloak	Heavy fur cloak.	2			
Heavy Furs	Warm bearskin cloathing.	3			
Leather Armor	Tough leather lorica-style armor.	4	\$???		
Heavy Leather Armor	Thick boiled leather	5			
Mail Hauberk	Hooded chainmail shirt, covers elbows to knees.	8	\$???		Size*/ Size*
Plate Mail		10			
Medium round shield			\$???		[the same either way]
Kite Shield					
Heater Shield					

Adventuring Gear

Type	Description	Cost	COL Adj.	Enc.
Rope	100' of 1" hemp rope, suitable for climbing	\$???	0	17
		\$???		

Modern Equipment

Melee Weapons

Type	Description	Cost	COL Adj.	Encumbrance
Pocket Knife	Small utility knife. 1d6 Dam, Pen 6, Range 0	\$???	0	1
Survival Knife	Military fixed blade survival knife. Dam 3d6, Pen 6, Range 0	\$???		2.5
Meat Cleaver	Dam 4d6+1, Pen 6, Range 1	\$???		4
Frying Pan	Heavy cast iron skillet. Dam 5d6+1, Pen 5, Range 1			8
Baseball Bat	Aluminum baseball bat. Dam 5d6+2, Pen 5, Range 1	\$???		4
Security Baton	Side-handled baton. Dam 4d6+1, Pen 5, Range 1	\$???		4
Collapsible Baton	Telescoping metal baton. Dam 4d6-1, Pen 6, Range 1	\$???		2/4
Fire Axe	2-handed fire axe. Dam 8d6+1, Pen 6, Range 1	\$???		9.5
Shovel	Long-handled garden spade. Dam 8d6, Pen 6, Range 1-2	\$???		10.5

Firearms & Ranged Weapons

Type	Description	Cost	COL Adj.	Encumbrance

Clothing & Armor

Type	Description	Armor Value	Cost	COL Adj.	Encumbrance Worn/Carried

--	--	--	--	--	--

Adventuring Gear

Type	Description	Cost	COL Adj.	Enc.
Rope	150 feet of assault line in a nylon rope bag.	\$???		8
Survival Kit, small	Minimal pocket-sized survival kit			
Backpack				
Fanny Pack				
Camera Bag				
Tent				
Sleeping Bag				
Compass				
Large Flashlight				
First Aid Kit				
2 Qt. Canteen				
1 Qt. Canteen				

Appendix D – Modified Melee Weapon Damage Chart

		Normal Melee Weapon Damage									
S	t	6	7	8	9	10	11	12	13	14	
		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
6		1d6+2	2d6-1	2d6	2d6+1	2d6+2	3d6+1	4d6+1	5d6	6d6-1	6d6+2
7		1d6+2	2d6-1	2d6	2d6+1	2d6+2	3d6+2	4d6+1	5d6	6d6-1	7d6-1
8		1d6+2	2d6-1	2d6	2d6+1	2d6+2	3d6+2	4d6+1	5d6	6d6	7d6-1
9		1d6+2	2d6-1	2d6	2d6+1	3d6-1	3d6+2	4d6+1	5d6+1	6d6	7d6-1
10		1d6+2	2d6-1	2d6	2d6+1	3d6-1	3d6+2	4d6+1	5d6+1	6d6	7d6
11		1d6+2	2d6-1	2d6	2d6+1	3d6-1	3d6+2	4d6+2	5d6+1	6d6+1	7d6
12		1d6+2	2d6-1	2d6	2d6+1	3d6-1	3d6+2	4d6+2	5d6+1	6d6+1	7d6
13		2d6-1	2d6	2d6+1	2d6+2	3d6-1	4d6-1	4d6+2	5d6+2	6d6+1	7d6+1
14		2d6-1	2d6	2d6+1	2d6+2	3d6-1	4d6-1	4d6+2	5d6+2	6d6+1	7d6+1
15		2d6-1	2d6	2d6+1	2d6+2	3d6-1	4d6-1	4d6+2	5d6+2	6d6+2	7d6+1
16		2d6-1	2d6	2d6+1	2d6+2	3d6-1	4d6-1	5d6-1	5d6+2	6d6+2	7d6+2
17		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6-1	5d6-1	6d6-1	6d6+2	7d6+2
18		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6-1	5d6-1	6d6-1	7d6-1	7d6+2
19		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6-1	6d6-1	7d6-1	8d6-1
20		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6-1	6d6-1	7d6-1	8d6-1
21		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6-1	8d6-1
22		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
23		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
24		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
25		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
26		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
27		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
28		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
29		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6+1	8d6+1
30		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6+1	6d6+1	7d6+1	8d6+1
31		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6+1	6d6+1	7d6+1	8d6+1
32		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6+1	5d6+1	6d6+1	7d6+1	8d6+2
33		2d6-1	2d6	2d6+1	2d6+2	3d6	4d6+1	5d6+1	6d6+1	7d6+2	8d6+2
34		2d6-1	2d6	2d6+1	2d6+2	3d6+1	4d6+1	5d6+1	6d6+2	7d6+2	8d6+2
35		2d6-1	2d6	2d6+1	2d6+2	3d6+1	4d6+1	5d6+2	6d6+2	7d6+2	9d6-1
36		2d6-1	2d6	2d6+1	2d6+2	3d6+1	4d6+1	5d6+2	6d6+2	8d6-1	9d6-1
37		2d6-1	2d6	2d6+1	2d6+2	3d6+1	4d6+1	5d6+2	6d6+2	8d6-1	9d6-1
38		2d6	2d6+1	2d6+2	3d6-1	3d6+1	4d6+2	5d6+2	7d6-1	8d6-1	9d6
39		2d6	2d6+1	2d6+2	3d6-1	3d6+1	4d6+2	5d6+2	7d6-1	8d6-1	9d6
40		2d6	2d6+1	2d6+2	3d6-1	3d6+1	4d6+2	6d6-1	7d6-1	8d6	9d6
41		2d6	2d6+1	2d6+2	3d6-1	3d6+1	4d6+2	6d6-1	7d6-1	8d6	9d6+1
42		2d6	2d6+1	2d6+2	3d6-1	3d6+2	4d6+2	6d6-1	7d6	8d6	9d6+1
43		2d6	2d6+1	2d6+2	3d6-1	3d6+2	4d6+2	6d6-1	7d6	8d6+1	9d6+1
44		2d6	2d6+1	2d6+2	3d6-1	3d6+2	5d6-1	6d6-1	7d6	8d6+1	9d6+2
45		2d6	2d6+1	2d6+2	3d6-1	3d6+2	5d6-1	6d6	7d6	8d6+1	9d6+2
46		2d6	2d6+1	2d6+2	3d6-1	3d6+2	5d6-1	6d6	7d6+1	8d6+1	9d6+2
47		2d6	2d6+1	2d6+2	3d6-1	3d6+2	5d6-1	6d6	7d6+1	8d6+2	10d6-1
49		2d6	2d6+1	2d6+2	3d6-1	3d6+2	5d6-1	6d6	7d6+1	8d6+2	10d6-1
50		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+1	7d6+2	9d6-1	10d6
51		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+1	7d6+2	9d6-1	10d6
52		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+1	7d6+2	9d6-1	10d6
53		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+1	7d6+2	9d6-1	10d6
54		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+1	7d6+2	9d6	10d6+1
55		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+2	8d6-1	9d6	10d6+1
56		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6	6d6+2	8d6-1	9d6	10d6+1
57		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6+1	6d6+2	8d6-1	9d6	10d6+2
58		2d6+1	2d6+2	3d6-1	3d6	4d6-1	5d6+1	6d6+2	8d6-1	9d6+1	10d6+2
59		2d6+1	2d6+2	3d6-1	3d6	4d6	5d6+1	6d6+2	8d6	9d6+1	10d6+2
60		2d6+1	2d6+2	3d6-1	3d6	4d6	5d6+1	7d6-1	8d6	9d6+1	11d6-1

Normal Melee Weapon Damage

	2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
61	2d6+1	2d6+2	3d6-1	3d6	4d6	5d6+1	7d6-1	8d6	9d6+2	11d6-1
62	2d6+1	2d6+2	3d6-1	3d6	4d6	5d6+1	7d6-1	8d6	9d6+2	11d6-1
63	2d6+2	3d6-1	3d6	3d6+1	4d6	5d6+2	7d6-1	8d6+1	9d6+2	11d6
64	2d6+2	3d6-1	3d6	3d6+1	4d6	5d6+2	7d6-1	8d6+1	9d6+2	11d6
65	2d6+2	3d6-1	3d6	3d6+1	4d6	5d6+2	7d6	8d6+1	10d6-1	11d6
66	2d6+2	3d6-1	3d6	3d6+1	4d6	5d6+2	7d6	8d6+1	10d6-1	11d6+1
67	2d6+2	3d6-1	3d6	3d6+1	4d6+1	5d6+2	7d6	8d6+2	10d6-1	11d6+1
68	2d6+2	3d6-1	3d6	3d6+1	4d6+1	5d6+2	7d6	8d6+2	10d6	11d6+1
69	2d6+2	3d6-1	3d6	3d6+1	4d6+1	6d6-1	7d6	8d6+2	10d6	11d6+2
70	2d6+2	3d6-1	3d6	3d6+1	4d6+1	6d6-1	7d6+1	8d6+2	10d6	11d6+2
71	2d6+2	3d6-1	3d6	3d6+1	4d6+1	6d6-1	7d6+1	9d6-1	10d6	11d6+2
73	2d6+2	3d6-1	3d6	3d6+1	4d6+1	6d6-1	7d6+1	9d6-1	10d6+1	12d6-1
74	2d6+2	3d6-1	3d6	3d6+1	4d6+1	6d6-1	7d6+1	9d6-1	10d6+1	12d6-1
75	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	7d6+2	9d6	10d6+2	12d6
76	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	7d6+2	9d6	10d6+2	12d6
77	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	7d6+2	9d6	10d6+2	12d6
78	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	7d6+2	9d6	10d6+2	12d6
79	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	7d6+2	9d6	11d6-1	12d6+1
80	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	8d6-1	9d6+1	11d6-1	12d6+1
81	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6	8d6-1	9d6+1	11d6-1	12d6+1
82	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6+1	8d6-1	9d6+1	11d6-1	12d6+2
83	3d6-1	3d6	3d6+1	3d6+2	4d6+2	6d6+1	8d6-1	9d6+1	11d6	12d6+2
84	3d6-1	3d6	3d6+1	3d6+2	5d6-1	6d6+1	8d6-1	9d6+2	11d6	12d6+2
85	3d6-1	3d6	3d6+1	3d6+2	5d6-1	6d6+1	8d6	9d6+2	11d6	13d6-1
86	3d6-1	3d6	3d6+1	3d6+2	5d6-1	6d6+1	8d6	9d6+2	11d6+1	13d6-1
87	3d6-1	3d6	3d6+1	3d6+2	5d6-1	6d6+1	8d6	9d6+2	11d6+1	13d6-1
88	3d6	3d6+1	3d6+2	4d6-1	5d6-1	6d6+2	8d6	10d6-1	11d6+1	13d6
89	3d6	3d6+1	3d6+2	4d6-1	5d6-1	6d6+2	8d6	10d6-1	11d6+1	13d6
90	3d6	3d6+1	3d6+2	4d6-1	5d6-1	6d6+2	8d6+1	10d6-1	11d6+2	13d6
92	3d6	3d6+1	3d6+2	4d6-1	5d6	6d6+2	8d6+1	10d6	11d6+2	13d6+1
93	3d6	3d6+1	3d6+2	4d6-1	5d6	6d6+2	8d6+1	10d6	12d6-1	13d6+1
94	3d6	3d6+1	3d6+2	4d6-1	5d6	7d6-1	8d6+1	10d6	12d6-1	13d6+2
95	3d6	3d6+1	3d6+2	4d6-1	5d6	7d6-1	8d6+2	10d6	12d6-1	13d6+2
97	3d6	3d6+1	3d6+2	4d6-1	5d6	7d6-1	8d6+2	10d6+1	12d6	14d6-1
98	3d6	3d6+1	3d6+2	4d6-1	5d6	7d6-1	8d6+2	10d6+1	12d6	14d6-1
99	3d6	3d6+1	3d6+2	4d6-1	5d6	7d6-1	8d6+2	10d6+1	12d6	14d6-1
100	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6-1	10d6+2	12d6+1	14d6
101	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6-1	10d6+2	12d6+1	14d6
102	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6-1	10d6+2	12d6+1	14d6
103	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6-1	10d6+2	12d6+1	14d6
104	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6-1	10d6+2	12d6+2	14d6+1
105	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6	11d6-1	12d6+2	14d6+1
106	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6	9d6	11d6-1	12d6+2	14d6+1
107	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6+1	9d6	11d6-1	12d6+2	14d6+2
108	3d6+1	3d6+2	4d6-1	4d6	5d6+1	7d6+1	9d6	11d6-1	13d6-1	14d6+2
109	3d6+1	3d6+2	4d6-1	4d6	5d6+2	7d6+1	9d6	11d6	13d6-1	14d6+2
110	3d6+1	3d6+2	4d6-1	4d6	5d6+2	7d6+1	9d6+1	11d6	13d6-1	15d6-1
111	3d6+1	3d6+2	4d6-1	4d6	5d6+2	7d6+1	9d6+1	11d6	13d6	15d6-1
112	3d6+1	3d6+2	4d6-1	4d6	5d6+2	7d6+1	9d6+1	11d6	13d6	15d6-1
113	3d6+2	4d6-1	4d6	4d6+1	5d6+2	7d6+2	9d6+1	11d6+1	13d6	15d6
115	3d6+2	4d6-1	4d6	4d6+1	5d6+2	7d6+2	9d6+2	11d6+1	13d6+1	15d6
116	3d6+2	4d6-1	4d6	4d6+1	5d6+2	7d6+2	9d6+2	11d6+1	13d6+1	15d6+1
117	3d6+2	4d6-1	4d6	4d6+1	6d6-1	7d6+2	9d6+2	11d6+2	13d6+1	15d6+1
119	3d6+2	4d6-1	4d6	4d6+1	6d6-1	8d6-1	9d6+2	11d6+2	13d6+2	15d6+2
120	3d6+2	4d6-1	4d6	4d6+1	6d6-1	8d6-1	10d6-1	11d6+2	13d6+2	15d6+2
121	3d6+2	4d6-1	4d6	4d6+1	6d6-1	8d6-1	10d6-1	12d6-1	13d6+2	15d6+2
123	3d6+2	4d6-1	4d6	4d6+1	6d6-1	8d6-1	10d6-1	12d6-1	14d6-1	16d6-1
124	3d6+2	4d6-1	4d6	4d6+1	6d6-1	8d6-1	10d6-1	12d6-1	14d6-1	16d6-1
125	4d6-1	4d6	4d6+1	4d6+2	6d6	8d6	10d6	12d6	14d6	16d6

Strength

Normal Melee Weapon Damage

	2d6-1	2d6	2d6+1	2d6+2	3d6	4d6	5d6	6d6	7d6	8d6
127	4d6-1	4d6	4d6+1	4d6+2	6d6	8d6	10d6	12d6	14d6	16d6
129	4d6-1	4d6	4d6+1	4d6+2	6d6	8d6	10d6	12d6	14d6+1	16d6+1
130	4d6-1	4d6	4d6+1	4d6+2	6d6	8d6	10d6+1	12d6+1	14d6+1	16d6+1
131	4d6-1	4d6	4d6+1	4d6+2	6d6	8d6	10d6+1	12d6+1	14d6+1	16d6+1
133	4d6-1	4d6	4d6+1	4d6+2	6d6	8d6+1	10d6+1	12d6+1	14d6+2	16d6+2
134	4d6-1	4d6	4d6+1	4d6+2	6d6+1	8d6+1	10d6+1	12d6+2	14d6+2	16d6+2
135	4d6-1	4d6	4d6+1	4d6+2	6d6+1	8d6+1	10d6+2	12d6+2	14d6+2	17d6-1
137	4d6-1	4d6	4d6+1	4d6+2	6d6+1	8d6+1	10d6+2	12d6+2	15d6-1	17d6-1
139	4d6	4d6+1	4d6+2	5d6-1	6d6+1	8d6+2	10d6+2	13d6-1	15d6-1	17d6
140	4d6	4d6+1	4d6+2	5d6-1	6d6+1	8d6+2	11d6-1	13d6-1	15d6	17d6
141	4d6	4d6+1	4d6+2	5d6-1	6d6+1	8d6+2	11d6-1	13d6-1	15d6	17d6+1
143	4d6	4d6+1	4d6+2	5d6-1	6d6+2	8d6+2	11d6-1	13d6	15d6+1	17d6+1
145	4d6	4d6+1	4d6+2	5d6-1	6d6+2	9d6-1	11d6	13d6	15d6+1	17d6+2
146	4d6	4d6+1	4d6+2	5d6-1	6d6+2	9d6-1	11d6	13d6+1	15d6+1	17d6+2
149	4d6	4d6+1	4d6+2	5d6-1	6d6+2	9d6-1	11d6	13d6+1	15d6+2	18d6-1
150	4d6+1	4d6+2	5d6-1	5d6	7d6-1	9d6	11d6+1	13d6+2	16d6-1	18d6
151	4d6+1	4d6+2	5d6-1	5d6	7d6-1	9d6	11d6+1	13d6+2	16d6-1	18d6
155	4d6+1	4d6+2	5d6-1	5d6	7d6-1	9d6	11d6+2	14d6-1	16d6	18d6+1
156	4d6+1	4d6+2	5d6-1	5d6	7d6-1	9d6	11d6+2	14d6-1	16d6	18d6+1
157	4d6+1	4d6+2	5d6-1	5d6	7d6-1	9d6+1	11d6+2	14d6-1	16d6	18d6+2
161	4d6+1	4d6+2	5d6-1	5d6	7d6	9d6+1	12d6-1	14d6	16d6+2	19d6-1
162	4d6+1	4d6+2	5d6-1	5d6	7d6	9d6+1	12d6-1	14d6	16d6+2	19d6-1
167	4d6+2	5d6-1	5d6	5d6+1	7d6+1	9d6+2	12d6	14d6+2	17d6-1	19d6+1
168	4d6+2	5d6-1	5d6	5d6+1	7d6+1	9d6+2	12d6	14d6+2	17d6	19d6+1
173	4d6+2	5d6-1	5d6	5d6+1	7d6+1	10d6-1	12d6+1	15d6-1	17d6+1	20d6-1
174	4d6+2	5d6-1	5d6	5d6+1	7d6+1	10d6-1	12d6+1	15d6-1	17d6+1	20d6-1
179	5d6-1	5d6	5d6+1	5d6+2	7d6+2	10d6	12d6+2	15d6	18d6-1	20d6+1
185	5d6-1	5d6	5d6+1	5d6+2	8d6-1	10d6+1	13d6	15d6+2	18d6	21d6-1