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Mano a Mano is a Role-Playing System - a set of rules for Role-Playing Games (RPGs) - created by Seth Galbraith and Benjamin Galbraith. Mano a Mano is a simple, flexible system which emphasizes realistic hand to hand combat, including effects of size, injury and real time. Mano a Mano can be used for almost any genre of RPG.

http://gameartsguild.com/mano-a-mano

Gameplay

Players and Characters

Mano a Mano is designed for one or more players with each player controlling one or more individual characters. In other words it is designed for role-playing games and may be too detailed for strategy games where a player directs armies or other large groups of characters.

One of the players may be a Game Master (GM) who referees the game and controls the bad guys, but Mano a Mano can also be used in games that do not have a GM. In games refereed by a GM, characters controlled by the GM are called Non-Player Characters (NPCs) and characters controlled by the other players are called Player Characters (PCs.)

Tools

The simplest Mano a Mano games can be played with nothing but ordinary six-sided dice, paper and pens or pencils. Printed *Character Sheets* speed up character creation. Beans, coins or dice with 10 or more sides can be used as damage counters. A hex mat and markers can show each character's direction and location during combat action. We prefer to use a 1/50 scale hex mat with 2 centimeter spacing. (Each 2 centimeter space represents 1 meter.)

You will also need information about the game you are playing. Templates, Occupations, Ability and Equipment Lists are needed to create characters. An adventure refereed by a GM will have more information, such as NPCs, maps and story information. (See *Game Design*)

Character Points

Many things described in the *Mano a Mano* Role-Playing System - including *characters*, *equipment*, *templates* and *abilities* - have a Character Point (CP) value. CP is a rough estimate of how valuable that thing is. For example, players often design new characters with a CP limit of about 2500 CP (not including equipment.) CP might also be used to compare the strength of the characters and equipment on opposing teams.

Success Rolls

Rolls and Modifiers

In *Mano a Mano*, a roll is a random value generated by rolling one six-sided *die* plus *modifiers*. Modifiers can be positive or negative. Positive modifiers increase the total roll. Negative modifiers decrease the total roll.

Success Level

If an action is successful, the roll for success, minus the highest roll against it, is the action's "success level." Actions with a success level of one or more are fully successful, and actions with a success level of 0 are half successful. Actions with a success level of less than 0 are not successful.

Single Action

When rolling for the success of an action not directed at another character, roll one *die* for success and one for failure. Add whatever modifiers apply to the situation to the rolls. If the success roll is higher than the failure roll by a full success level, then the action is successful. If the action is successful by 0, then the action is half successful.

Difficulty

Difficulty is the total modifier to the roll against the success of an action. An action with a difficulty of 0 is slightly difficult, an action with a difficulty of 5 is very difficult, and an action with a difficulty of 10 is nearly impossible. Environment and hastiness can effect the difficulty of an action:

- Add 1 to the difficulty for unfavorable circumstances
- Add 2 to the difficulty for very unfavorable circumstances or a combination of unfavorable circumstances
- Add 1 to the success roll for favorable circumstances
- Add 2 to the success roll for very favorable circumstances or a combination of favorable circumstances

Opposing Actions

If rolling for the success of two players' opposing actions, roll one die for the success of each action and add the modifiers. The action with the higher total succeeds and the other action fails, if it is successful by at least one success level. If the rolls are exactly equal, both actions are "half successful."

Multiple Opposing Actions

If two or more characters are trying to stop another character's action there can be multiple rolls against the success of that action. If any of those rolls are higher than the one action they are all trying to stop, by at least one success level, the action they were trying to stop fails. Otherwise, if any of those rolls are equal to the roll of the action they are all trying to stop, the action they were trying to stop is half-successful. If all of those rolls are less than the roll of the action they are trying to stop the action is successful.

Half Success

Sometimes half success is not good enough and half successful actions are the same as failed actions. But usually, "half successful" means an action has half the effect it would have if it was fully successful. This means an opposing action or even multiple opposing actions can be half successful when the action they are trying to stop is also half successful.

Game Design

Adventures

The action of a role-playing game plays out in a setting called an **adventure**. An adventure could be a single battle or a series of battles, a haunted castle full of secrets, a story which the players can influence through their characters' actions, or an open-ended scenario where players choose which goals their characters work toward. A **campaign** is a complex adventure which requires players to meet together for several sessions of playing, or a series of simple adventures using the same characters.

Creating Adventures

To create an adventure, you'll need a system for recording ideas and organizing information such as a notebook and pencil or a word processor. You may need hex mats or graph paper to create maps. Templates, occupations, abilit1.0y and equipment lists can be designed on paper or using office software. *Template worksheets* and *compact templates* can be printed or copied for creating templates. Equipment lists can be created using *detailed descriptions* of each item or a single *equipment list*. *Character sheets* should be prepared for important non-player characters, especially characters the player-characters can fight. (See *Character Creation*.)

Some adventures are a sequence of challenges like an obstacle course which forces the characters to follow a story line, but letting the story develop naturally in an environment that encourages the players to play their characters creatively is usually more engaging.

Sourcebooks

A sourcebook is a document with information for creating and playing adventures. A sourcebook can contain a complete adventure or compaign. A more general sourcebook might describe a setting used in several adventures, such as a sourcebook for generic fantasy adventures. A more specific sourcebook might focus on one detail of a setting, like a book with extra monsters for a scenario. Some sourcebooks provide material for adventures in multiple settings. For example, a sourcebook for characters with thieving and burgling skills might apply to modern adventures and fantasy campaigns.

A sourcebook containing a complete adventure will include a detailed description of the setting, what kind of characters the the players should control, descriptions and character sheets for non-player characters, maps and diagrams, and rules for how the action of the adventure should play out. The sourcebook may contain a detailed inventory of the items in every room and the goods for sale in every store. A good adventure sourcebook should not leave the GM in a situation where he has to invent new material during the game.

Templates

Templates are used to generate characters. Each template represents a certain type of character. The character could be a person, animal, alien, monster or even a machine depending on their template. A template can be a race, species, model, stereotype or archetype. Age categories and sexes can have separate templates if the differences are significant. The template provides modifiers for most of the character's natural features:

Use this template worksheet to design a template:

```
Template _____
Mass _____ kg – _____ kg
Length _____ m – _____ m  type:_____

  Agility  Speed  Health   Power           CP
                                    -
  (_____+_____+_____+_____)   =   (_____)

ABILITIES          Limit Mod  ModCP   SpcCP    CP
_____ _____ ___  (_____)+(_____)=(_____)
_____ _____ ___  (_____)+(_____)=(_____)
_____ _____ ___  (_____)+(_____)=(_____)
_____ _____ ___  (_____)+(_____)=(_____)

NATURAL ARMOR          Abs Cvr   AbsCP     CP
_____ ___ ___  x (_____)=(_____)
_____ ___ ___  x (_____)=(_____)

NATURAL WEAPONS  Dex  Reach  Shp   Qty      CP
                       m
_____ ____  CP (_____+_____+_____)=(_____)
                       m
_____ ____  CP (_____+_____+_____)=(_____)
                       m
_____ ____  CP (_____+_____+_____)=(_____)

            Manual Dexterity CP (_____)

                     Total CP (_____)
```

This compact template is easier for players to use:

```
TEMPLATE _____
Mass _____kg – _____kg
Length _____m – _____m _____

Agi Spd Health  Power       CP
                     -
___ ___ _____ ___-___   _____

ABILITIES              Limit Mod
_____ _____ ___
_____ _____ ___
_____ _____ ___
_____ _____ ___

NATURAL ARMOR          Cvr Abs
_____ ___ ___
_____ ___ ___

NATURAL WEAPONS Dex Reach Shp Qty
                      m
_____ ___ ___ ___ ___
                      m
_____ ___ ___ ___ ___
                      m
_____ ___ ___ ___ ___
```

Template

This is the name of the template, which can include details such as age group or sex if each sex or age group has a separate template.

Length

Length is the minimum and maximum length of characters represented by the template. Type is the kind of length measured for this template: length, height, wingspan, etc.

Mass

This is the minimum and maximum mass for characters who use this template.

Agility

Agility is roughly based on size, but some templates are awkward or slow moving for their size, and others are surprisingly agile for their size. Agility is on a 0-8 scale with humans in the middle (4 Agi)

Speed

Speed is maximum number of times a character of this template can attack per round with a single weapon. Large creatures typically have less speed. Speed emphasizes strength and energy while agility emphasizes coordination and reflexes, but the main difference is that agility affects the success of actions while speed affects how fast actions can be performed.

Speed Description

5	extremely fast (shrew, tasmanian devil)
4	very fast (cat, fighting cock, ninja)
3	fast (dog, trained fighter) (cinematic human speed)
2	medium (horse, normal person) (realistic human speed)
1	slow (python, elephant, turtle)
1/2	very slow (tortoise)
1/4	extremely slow (sloth)
0	sluggish (snail, plant) (imperceptible movement)

Power (and half power)

Power is the maximum damage a character of the template can cause in a single attack with natural weapons. Creatures of roughly human size and power have 4 power. Creatures with 0 power cannot do any damage with their natural weapons. Half power is the maximum damage a character of the template can cause cause in a quick attack with natural weapons. Half power is power divided by two, rounded down. Half power and power are listed together on the template as a range. If a template has 5 power, then it's half power is 2, and they are both listed under Power on the template as "2 - 5".

Health

The average health modifier for a given size is two times the average power modifier for that size minus eight, but the health modifier is almost never less than -4.

Size Table

Health, agility and power are all related to a template's size. The following guidelines should help guide template creation, but some creatures will be stronger or weaker, quicker or clumsier than their mass would suggest.

Health	Agi	Pwr	Mass	Examples
-4	8	0-0	< 10 g	hummingbird, small bug
-4	7	0-1	10-999 g	rat, mouse, largest insects
-4	6	1-2	1-9 kg	cat, fox, rabbit
-2	5	1-3	10-39 kg	dog, coyote
0	4	2-4	40-199 kg	human, deer, wolf
4	3	3-6	200-999 kg	cow, lion, horse, bear, moose
12	2	5-10	1-9 tonnes	giraffe, hippo, rhino, elephant
22	1	7-15	10-99 tonnes	largest dinosaurs
32	0	10-20	> 1000 tonnes	largest whales

Abilities

Templates can give characters natural abilities or disabilities, and ability or disability **modifiers** (Mod). Usually characters can develop ability levels which increase their ability modifier above this minimum value. If the ability cannot be improved by exercise or experience or can only be improved to a certain level, the ability should have a **limit** (Lim). This limit is the maximum number of ability levels a character of this template can develop in this ability.

Natural Armor

A template can have one or more types of natural armor. Each type of armor can have a different **absorption** (Abs) modifier. Absorption is the amount of attack power the armor can block from a single attack.

Abs	Examples
1	thick hide, scales or guard hairs, light exoskeleton
2	big scales, small bones in skin, modest exoskeleton
3	large bony scutes, strong exoskeleton, light shell
4-5	carapace, bony shield, heavy exoskeleton, hard shell
6-9	unbreakable shell, probably quite heavy
10+	harder than armor found in nature

The **cover** (Cvr) value of each type of natural armor is the number of areas it protects. A template's natural armor can protect up to 5 areas. Only one type of armor can protect a given area. Each area might represent 20% of the body's surface, or the areas may represent five levels of priority: vital targets, main targets, secondary targets, minor targets, and weak points. The total cover of a character's natural armor types cannot be more than 5. If the total cover is 5 then all 5 areas are protected and the weakest part of the armor has unlimited cover (the weakest part of the armor absorbs attack power from attacks with a success level of 5 or greater. See *Action/Armor and Weapons*.)

Cvr	Description
1	limited armor - protects a specific area of the body like a shield
2	partial armor - more area(s) covered but less than 50%
3	extensive armor - at least 50% cover like a shell or carapace
4	fully armored - covers the whole body but has weak points
5	tough hide - full cover without weak points

Natural Weapons

Dex (Manual Dexterity)

A natural weapon may be a hand or manipulator which is used to wield weapons. (The terms *hand* and *manipulator* can be used interchangeably.)

A hand's manual dexterity is added to the character's combat modifier with weapons held in that hand.

Dex	Description
0	fully developed manipulator (right hand for most humans)
-1	improved tool-manipulator (left hand for the average human)
-2	basic tool-using manipulator (ape hand)
-3	dextrous grasping limb (raccoon paw)
-4	basic grasping limb

Rch (Reach)

The natural weapon's reach is the maximum range of attacks with the weapon. If the natural weapon is a hand, it's reach is also added to the reach of weapons held in that hand.

Shp (Sharpness)

Sharpness determines whether the weapon's attack power becomes damage or stun. (See Action/Damage.) If the natural weapon is a hand, this sharpness does not affect the damage and stun of weapons held in that hand.

Qty (Quantity)

Having more than one natural weapon allows a creature with at least 1 speed to attack more often. (This is different from having more speed because it does not allow a creature with only 1 speed to do powerful actions.) If a creature cannot use it's natural weapons quickly, they may count as a single natural weapon. For example, an Elephant has both tusks and a trunk that can be used as weapons, but the elephant cannot use them as separate weapons in a combo attack. A character with at least two hands can do a secondary attack with a hand weapon - as long as the character has a weapon in each hand.

Maimed Characters

A character who has lost (or never had) the use of a limb may be effectively slower because of not having secondary natural or hand weapon attacks. The game designer should decide whether characters are allowed to be missing limbs.

Template CP

Total CP
A template's total CP value is the sum of the CP of the template's health, speed, agility, power, abilities, disabilities, natural weapons and armor.

Health CP
Each point of health is worth 200 CP.

Ability CP
A template's ability CP is the CP of a template's natural ability and disability modifiers plus any special CP the abilities or disabilities might have. Some exceptional abilities - like flight - have a special CP value just to have the ability even if the ability has no modifier. (The special CP of a natural ability is part of the template's CP, so it is not added again to the character's CP.) For example, having the flight ability with a modifier of 0 adds 500 CP. Flight with a +3 modifier adds 1100 CP: +3 ability modifier (600 CP) plus the special CP for flight (500 CP).

Disability	CP		Ability	CP
-1	-100		1	100
-2	-300		2	300
-3	-600		3	600
-4	-1000		4	1000
			5	1500
			6	2100
			7	2800
			8	3600

Flight (500 CP)
Flight ability has a special CP of 500. The flight modifier affects how fast and maneuverable the character is while flying. Flight with a modifier of 0 means a character can barely fly horizontally at the same speed they were going when they took off.

Agility, Speed and Power CP
The CP of agility, speed and power is loosely based on the ability CP scale.

Agility	CP		Speed	CP
0	-2000		0	-5000
1	-1200		1/4	-3000
2	-600		1/2	-1500
3	-200		1	-500
4	0		2	0
5	200		3	500
6	600		4	1500
7	1200		5	3000
8	2000			

Power	CP		Power	CP
0	-2000		11	2800
1	-1200		12	3600
2	-600		13	4500
3	-200		14	5500
4	0		15	6600
5	100		16	7800
6	300		17	9100
7	600		18	10500
8	1000		19	12000
9	1500		20	13600
10	2100			

Natural Armor CP
The CP of natural armor is the absorption level on the ability CP scale multiplied by the cover.

Natural Weapon CP
The CP of each natural weapon is the sum of the CP of the natural weapon's reach and sharpness, plus 100 CP if the weapon's quantity is greater than 1. The reach and sharpness CP is the same for natural weapons and artificial weapons (weapons which are not part of a template.) (See Character Creation/Character Equipment/Equipment CP.)

Manual Dexterity CP
A template's dexterity CP is based on the two hands with the most dexterity (**best** and **second**-best.)

- Templates with no hands have -1500 dexterity CP.

- Dexterity CP for templates with a single hand is 200 times the hand's dexterity minus 500.

- If a template has a second-best hand with less dexterity than the best hand, then the dexterity CP is 100 times the dexterity of the second-best hand plus 200 times the dexterity of the best hand.

- If the best and second-best hands have the same dexterity (an ambidextrous template for example) the CP is 300 times this dexterity.

Dexterity		
Best	Second	CP
Ambidextrous		
0	0	0
-1	-1	-300
-2	-2	-600
-3	-3	-900
-4	-4	-1200
Different Hands		
0	-1	-100
0	-2	-200
0	-3	-300
0	-4	-400
-1	-2	-400
-1	-3	-500
-1	-4	-600
-2	-3	-700
-2	-4	-800
-3	-4	-1000
Single Handed		
0		-500
-1		-700
-2		-900
-3		-1100
-4		-1300
No Hands		-1500

Make a Template - Template Generation Example

This example shows how to generate a character template. (See *Game Design/Templates*.) I envision a Template of nasty monsters called "Sabretooth Penguins" which are about human sized but stockier, with clawed hands and sharp teeth.

1. Dimensions and Modifiers - Sabertooth Penguins are around 40 to 90 kg and 0.75 to 1.5 meters tall. They are similar to humans in speed, power, health and agility, so we give them 2 speed, 4 power and agility and no health modifier. We record the power as a range from half power to full power: "2-4".

2. Abilities - As super-fast waddling predators, Sabertooth Penguins have no lame disability. Their flippers give them a +3 swimming ability modifier.

3. Natural Weapons and Armor - Sabertooth Penguins have clawed hands with 0.5 meters of reach and a manual dexterity modifier of 0. Their teeth and claws are somewhat sharp (3 sharpness.)

4. Character Points (CP) - 2 power, 2 speed, 4 agility and no health modifier are all worth 0 CP. 0.5 m reach is worth 100 CP. 3 sharpness is worth 400 CP. Multiple natural weapons adds 100 CP. Ambidextrous hands with 0 manual dexterity modifier is worth 0 CP. Swimming ability with a +3 modifier is worth 600 CP. The total CP of our new Sabretooth Penguin template is 1200 CP.

```
TEMPLATE        Sabretooth Penguin
Length/Height   0.75 m - 1.50 m
Mass               40 kg - 90 kg

 Agility  Speed  Health   Power            CP
    4        2       0      2-4
 (  0   +   0   +   0   +   0   )   =   (   0   )

ABILITIES        Limit Mod  ModCP   SpcCP      CP
Swimming         none  +3  ( 600 )+(  0  )=(  600 )
_____  ____  ___         (_____)+(_____)=(_____)
_____  ____  ___         (_____)+(_____)=(_____)
_____  ____  ___         (_____)+(_____)=(_____)

NATURAL ARMOR            Abs Cvr    AbsCP       CP
_____    ___ ___  x (_____)  = (_____)
_____    ___ ___  x (_____)  = (_____)

NATURAL WEAPONS  Dex  Reach  Shp   Qty        CP
Claws and Teeth   0   0.5 m   3     3
                      CP ( 100 + 400 + 100 )=(  600 )
_____  ____ _____ _____ _____
                      CP (_____+_____+_____)=(_____)
_____  ____ _____ _____ _____
                      CP (_____+_____+_____)=(_____)

                    Manual Dexterity CP (   0   )

                           Total CP ( 1200 )


TEMPLATE   Sabretooth Penguin
Mass         40 kg - 90 kg
Length     0.75 m - 1.50 m height

Agi Spd Health Power      CP
 4   2    0    2-4       1200

ABILITIES               Limit Mod
Swimming                none  +3
_____ _____ ___
_____ _____ ___
_____ _____ ___

NATURAL ARMOR           Abs Cvr
_____ ___ ___
_____ ___ ___

NATURAL WEAPONS Dex Reach Shp Qty
Claws and Teeth  0  0.5 m  3   3
_____ ___ _____ ___ ___
_____ ___ _____ ___ ___
```

Occupations

An occupation gives a character advantages: opportunities, status and privileges, but the occupation may also have requirements: qualifications, duties and liabilities. Occupations can provide character development opportunities during the game. Characters can change occupations and have more than one occupation at the same time, as long as they meet the occupation's requirements and the game or GM allows it.

A game's list of occupations balances the advantages and requirements of each occupation.

Requirements

The requirements of an occupation come in four categories:

Qualifications - An occupation can require a specific template, along with specific abilities and modifiers. An occupation can also require training, education or accomplishments. In addition it can have specific requirements in regards to culture, social class, age, sex, reputation, popularity, appointment, election or inheritance.

Duties - Occupations can require time commitments. Occupations may also require the character to have a limit on how many other occupations the character can have. (For example an occupation may require that the character have no other occupations.) Occupations can also require standards of conduct for characters.

Liabilities - Occupations can change a character's reputation for better or for worse. They can have political requirements, forcing the character to choose sides in a divided social enviornment. Occupations can make a character guilty by association if his occupation is or becomes suspect or unpopular.

Limits - It is possible for there to be a limited number of certain occupations. (For example, one "kingdom" can usually only have one "king.") Some occupations can require that there first has to be a vacancy before an occupation can be obtained.

Advantages

Occupations can give characters specific advantages having to do with equipment, income, opportunities, status, or privileges.

Example

Knight - is required to have at least a +3 modifier in law ability and a +2 modifier to sword fighting ability. To maintain the occupation of Knight, the character must always obey the law in public, must always resist attempts to break the law in public, and must obey all direct orders from the King. Knights are always entitled to 5000 CP worth of equipment from the King. (If this equipment is damaged or lost, it may be restored at the King's armory.) Knights are entitled to the property of any Robber they capture. In this case, (in addition to that Robber's property,) the Knight also receives a reward of equipment from the King, equal to the personal CP of the Robber.

Robber - is required to have at least a +2 modifier to stealth ability and a +1 modifier in any armed combat ability. Robbers can always trade in stolen items for half of the item's CP on the black market. A Robber may lose these privileges if he aids in another Robber's capture.

If a character meets both of these occupation's requirements they may begin as either a Robber or Knight. If this character begins as a Robber, but gains the reputation of being a hero who is loyal to the king, and if he ceases to take advantage of his robber privileges, the King may choose to give this character the occupation of "Knight." If this character begins as a knight, but proves himself disloyal to the king by participating in unlawful activity, he has the option of becoming a Robber, but loses all of his Knight privileges.

Notice that if two characters are identical, except for their occupations, the Knight would be considered to have an advantage over the Robber, but the Knight has stricter requirements.

Abilities

Abilities allow characters to do certain types of actions, or do them better. Each of a character's abilities has a modifier which is added as to success rolls when a character tries to use the ability to do something difficult. Abilities can also give the character other advantages based on ability modifier. Characters can usually try to use (or fake) many abilities they don't have, but some special abilities, like flight, cannot be imitated without the right abilities or equipment. These abilities often have a special CP value. (See *Game Design/Template CP*.)

Each game should have an ability list adapted to the setting and style of play. The following ability list is just one example of the abilities a game might have. Some abilities may only be available to certain templates, and others have a maximum modifier. (See *Game Design/Templates/Abilities*.) The game designer should decide which abilities characters can develop. Some abilities may be available to all characters all the time. Others may only be available to certain templates, or may only be changed while creating a character.

Athletic Abilities

Athletic abilities can increase a character's health. (See *Action/Damage and Health*.) Athletic abilities do not include fighting abilities such as hand to hand or marksmanship, but do include movement abilities such as running, swimming and climbing. (See *Action/Movement*.) Other athletic abilities could include stamina, dance or yoga.

Strength

An athletic ability which affects a character's grip. (See Character Creation/Grip.)

Running

An athletic ability that improves a character's ability to move on the ground.

Swimming

An athletic ability that improves a character's ability to move in water.

Climbing

An athletic ability that improves a character's ability to climb.

Acrobatics

An athletic ability which helps a character perform acrobatic feats, such as jumping and tumbling without getting hurt.

Flight

An athletic ability that improves a character's ability to move in the air. Usually characters may not develop the flight ability unless their template also has this ability.

Stealth and Detection Abilities

Sleight of hand

The ability to use illusion, distraction and suggestion as well as manual dexterity to perform subtle actions in plain sight without being noticed. Sleight of hand can be used to conceal weapons, draw them without being noticed, pick pockets, pass notes in class and perform magic tricks.

Stealth

The ability to remain undetected while sneaking around, ambushing, or hiding from searches. Stealth is used against detection rolls. When a stealth roll succeeds against one or more opposing detection rolls, the character using stealth successfully hides from the characters trying to find him. (See Gameplay/Success Rolls/Multiple Opposing Actions.)

Detection

The ability to detect others sneaking around, avoid ambushes, and search for hidden objects and characters. Detection is used against stealth rolls. When a detection roll succeeds against a stealth roll, the detecting character successfully finds those trying to hide from him.

Transportation Abilities

Navigation

This ability is used to control water vehicles. For piloting planes, see piloting ability. Navigation includes both the ability to steer the vessel and the ability to use charts, instruments and visual cues to get where you want to go.

Piloting

This ability is used to control air vehicles. For piloting boats see navigation ability. Piloting includes both the ability to steer and land the vehicle, and the ability to use instruments, charts and so forth.

Driving

This ability is used to control mechanical ground vehicles. This ability includes both the physical skill of driving and knowledge of roads and traffic systems related to driving.

Animal handling

A knowledge of animal behavior, maintenance and safety. Animal handling includes the ability to control riding animals, but not the physical ability to do riding stunts. (See riding ability.)

Riding

An athletic ability similar to animal handling ability except that it can only be used to control animals that are ridden. Riding ability helps with physically challenging riding stunts.

Combat Abilities

Unarmed combat

A character's unarmed combat modifier is added to their close range fighting bonuses with grappling techniques or natural weapons. A martial-arts themed game might have more than one unarmed combat ability, with a different set of techniques for each of these abilities.

One-handed weapons

A combat ability which can be used with short weapons and flexible weapons as long as the heft of the weapon is at least one point less than the character's grip.

Two-handed weapons

A combat ability which can be used with long weapons and some short weapons and flexible weapons (ball and chain, giant sword, bastard sword, broadsword, club, cane, maul, axe, mattock)

Thrown weapons

A combat ability used when throwing thrown weapons or hand weapons. This ability can be used for catching and throwing both weapons and other items.

Marksmanship

A combat ability used with guns and bows

Communication Abilities

Each language the character knows in addition to the character's first language is an ability. Effective conversation in languages other than the character's first language usually requires a success roll.

Communication

This ability improves a character's ability to communicate in all languages, including the character's native language. Communication or specific language ability modifier, whichever is greater, is added to success rolls for simple communication, like asking for the general direction to a named place. More complex communication may use the character's language ability or communication modifier, whichever is less. Complex communication in a character's first language can even require a communication success roll.

Acting

This ability is used by a character to change their own behavior for entertainment or deception. Acting can be used for concealing beliefs or intentions, and for impersonation. Acting ability can make a believable lie more convincing, but making a lie believable may require both communication and acting ability.

Other Abilities

Agriculture
The ability to produce raw materials by growing plants and animals.

Art
This ability is used to make effective visual presentations, including decoration, sculpting, painting and drawing.

Cooking
This ability is used to produce food from appropriate raw materials.

Craftsmanship
General proficiency in creating "low tech" products in a variety of materials from textiles to smithing, carpentry and stonework.

Engineering
The ability to design and repair technologically sophisticated things, from structures to gadgets.

Law
Understanding how systems of government work, and the ability to use those systems.

Medicine
This ability is used to help injured characters heal, to treat sickness, disease and poisoning, and to help characters stay healthy. (A character can also use their medical knowledge to poison others or spread disease.)

Music
The ability to produce effective structured audio presentations. Music includes the ability to recognize, remember and repeat organized patterns of pitch and rythm, as long as the character is physically able to hear and duplicate the sounds.

Regeneration
Improves the character's ability to heal quickly. The character recovers one extra damage point each week for each point of their regeneration modifier.

Science
The ability to learn about the natural world through observation and experiments. Science also includes the ability to share observations and broad familiarity with current scientific knowledge. Scientific research combined with the application of other abilities helps to increase the level of technology available.

Teaching
This ability is used to help other characters learn.

Disabilities

While other Abilities have a positive effect on a character, disabilities have a negative effect. Disabilities affect a broad range of success rolls. One disability can interfere with the use of several Abilities.

Farsighted
Farsightedness affects close range actions such as hand to hand and craftsmanship.

Nearsighted
Nearsightedness affects long range actions such as navigation and marksmanship.

Deaf
Deafness affects sound-dependent actions such as detection and communication.

Lame
Lameness affects movement abilities such as acrobatics, running, swimming, and climbing.

Ignorant
Ignorance affects any action for which you do not have a specific ability modifier.

Disability levels are similar to normal ability levels, but disability levels are subtracted instead of added to success rolls. Disability Level modifiers are cumulative: If a character has 3 levels of Deaf and 4 levels of Nearsighted, then he has a total of -7 to detect a target at a distance (-3 for not being able to hear well and -4 for poor distance vision.) Unless otherwise specified, disabilities have a maximum level of 4 (a modifier of -4/negative four.)

Game designers should consider limitations on disabilities, to prevent characters with severe disabilities or multiple disabilities from getting huge advantages with the extra CP, and to prevent players from creating characters who are too difficult to play. A gem could limit which disabilities are allowed, maximum disability levels, how many disabilities a character can have, or the combined CP value of a character's disabilities.

Equipment

Decide what equipment will be included in the game, and who may use it. Often each template will have a separate equipment list - especially if the shapes or sizes of the templates are very different. Also decide what equipment characters should have when they start the game. Starting equipment may depend on a character's occupation. A character might start with a certain amount of CP in equipment or money to buy equipment. (See *Game Design/Occupations*.)

Equipment Lists

Equipment lists show the modifiers of each item in the game. These modifiers are similar to the modifiers in the equipment section of a character sheet, except that these modifiers are independent of the character using them. (See *Character Creation/Character Equipment*.)

Item Name	Special Modifiers	CP	Mass	Heft	Power	Shp	Reach	Cvr	Abs
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___
_____	_____	___	___ kg	___	-	___	___ m	___	___

CP (Character Points)

The CP value of this item.

Mass

The item's mass in kg. Weapon mass is based on heft (see below.) The mass of medieval armor is typically the wearer's mass multiplied by the armor's cover and absorption divided by 100. Some armor is heavier, especially scale armor and brigandine which are held together by a heavy cloth or leather backing. Modern armor and armor that only protects a vital area, such as a helmet or breastplate, can be lighter.

Heft

Heft is the grip a character must have to wield the weapon easily. A weapon's heft is usually based on it's mass, but a hand weapon weighted for extra attack power, such as a mace, may have a little more heft. The heft of a bow reflects it's pull rather than it's weight. A firearm with a strong kick may have extra heft to reflect it's kick.

Heft	Mass	Heft	Mass
0	0 g	13	200 kg
1	30 g	14	300 kg
2	100 g	15	500 kg
3	300 g	16	1 tonnes
4	500 g	17	2 tonnes
5	1 kg	18	3 tonnes
6	2 kg	19	5 tonnes
7	3 kg	20	10 tonnes
8	5 kg	21	20 tonnes
9	10 kg	22	30 tonnes
10	20 kg	23	50 tonnes
11	30 kg	24	100 tonnes

Power (and half power)

Power is the maximum damage the weapon can cause in a single attack. A weapon's power is almost never less than it's heft. A well balanced hand weapon might have a few more power than it's heft, but a firearm can have much more power than heft. A weapon's half power is the weapon's power divided by 2, rounded down. Power is always listed as a range from the weapon's half power to it's full power. A weapon with 9 power has a half power of 4, so it's power would be listed as the range "4-9".

Shp (Sharpness)

Sharpness determines whether the weapon causes stun or damage. (See *Action/Damage*.)

Sharpness Examples

Sharpness	Examples
None	paddded weapon, always does stun
4	blunt weapon, usually does stun
3	edged weapon, sharp natural weapons, equal damage and stun
2	very sharp weapon, sharpest natural weapons, more damage than stun
1	razor sharp or specialized piercing weapon, usually does damage
0	weapon only does damage

Reach

The item's reach if it is a hand weapon, or the item's effective range if it is a missile weapon.

Cvr (Cover)

Cover determines how likely the item will block an attack.

Abs (Absorption)

Absorption determines how much attack power is absorbed by this item when it blocks an attack.

Equipment can also have **special modifiers** which are written between the item's name and the CP value. A detailed equipment list may also include other information, such as the reduced pull required to keep a compound bow drawn, the procedure for operating firearms (cocking, reloading, burst fire,Untitled1 etc.) or the type of damage inflicted by weapons. To qualify as an impaling weapon, the weapon must be specially designed with a long narrow tip. Natural weapons are often impaling weapons so they can penetrate vital organs, punch through bone, and kill quickly. Bullets are usually impaling weapons.

Grp (Grapple)

Improves a character's ability to use the weapon while grappling.

Atk (Attack)

Improves a character's ability to successfully hit targets.

A/G (Attack and Grapple)

This modifier applies to grappling and successfully hitting targets.

Par (Parry)
Improves a character's ability to avoid hand to hand attacks.

Con (Conceal)
Improves the character's ability to carry the weapon without it being noticed.

Cut (Cutting Resistance)
Extra absorption when the item blocks a cutting weapon. Tough, flexible armor - such as leather and chainmail - resists cutting.

Imp (Impaling Resistance)
Extra absorption when the item blocks an impaling weapon. Hard, smooth, angled, springy and stretchy armor deflects piercing attacks. Armor with more resistance to impaling than other attacks might include some lamellar armors or modern ballistic vests and helmets covered with strong, tightly woven fibers that catch bullets.

Blu (Bludgeoning Resistance)
Extra absorption when the item blocks a bludgeoning weapon. Padded or ablative armor - such as a bicycle helmet - absorbs more damage from blunt trauma, explosions, collisions and so on.

The CP of armor is the CP value for the armor's **absorption** (Abs) on the default CP scale multiplied by the armor's **cover** (Cvr). The CP of special armor absorption types, such as **bludgeoning** (Blu), **cutting** (Cut) and **impaling** (Imp) are calculated the same way, using the special armor modifier instead of absorption.

The CP of **power** and **heft** is based on the difference between them. Subtract a weapon's heft from it's power to get the weapon's **leverage**. The CP of the weapon's leverage is found using the default CP scale. Aside from determining leverage, power and heft have no CP value.

The CP of **sharpness** is 1000 minus 200 times the weapon's sharpness, but never less than 0. If a weapon is padded so that it has no sharpness at all and only causes stun, then it's sharpness CP is 0.

Sharpness	CP
0	1000
1	800
2	600
3	400
4	200
None	0

Each tenth of a meter (0.1 m, 10 cm or about 4 inches) of **reach** is worth 20 CP.

Reach	CP	Reach	CP
0 m	0	2.0 m	400
0.1 m	20	2.5 m	500
0.2 m	40	3.0 m	600
0.3 m	60	3.5 m	700
0.4 m	80	4.0 m	800
0.5 m	100	5.0 m	1000
0.6 m	120	6.0 m	1200
0.7 m	140	7.0 m	1400
0.8 m	160	8.0 m	1600
0.9 m	180	9.0 m	1800
1.0 m	200	10 m	2000
1.1 m	220	12 m	2400
1.2 m	240	14 m	2800
1.3 m	260	16 m	3200
1.4 m	280	18 m	3600
1.5 m	300	20 m	4000
1.6 m	320	25 m	5000
1.7 m	340	30 m	6000
1.8 m	360	40 m	8000
1.9 m	380	50 m	10000

Equipment CP

The default CP scale is used for **concealment** (Con) and **leverage** (see below.) The double CP scale is used for **parry** (Par) and **grapple** (Grp). The triple CP scale is used for **attack** (Atk).

Modifier	Default	CP Double	Triple
-4	-1000	-2000	-3000
-3	-600	-1200	-1800
-2	-300	-600	-900
-1	-100	-200	-300
0	0	0	0
1	100	200	300
2	300	600	900
3	600	1200	1800
4	1000	2000	3000
5	1500	3000	4500
6	2100	4200	6300
7	2800	5600	8400
8	3600	7200	10800
9	4500	9000	13500
10	5500	11000	16500
11	6600	13200	19800
12	7800	15600	23400

An item's **mass** also modifies it's CP:

mass	CP	mass	CP	mass	CP	mass	CP	mass	CP
0 g	0	10 g	-200	1 kg	-400	100 kg	-600	10 tonnes	-800
0.1 g	-10	15 g	-210	1.5 kg	-410	150 kg	-610	15 tonnes	-810
0.2 g	-20	20 g	-220	2 kg	-420	200 kg	-620	20 tonnes	-820
0.3 g	-30	30 g	-230	3 kg	-430	300 kg	-630	30 tonnes	-830
0.4 g	-40	40 g	-240	4 kg	-440	400 kg	-640	40 tonnes	-840
0.5 g	-50	50 g	-250	5 kg	-450	500 kg	-650	50 tonnes	-850
0.6 g	-60	60 g	-260	6 kg	-460	600 kg	-660	60 tonnes	-860
0.7 g	-69	70 g	-270	7 kg	-470	700 kg	-670	70 tonnes	-870
0.8 g	-80	80 g	-280	8 kg	-480	800 kg	-680	80 tonnes	-880
0.9 g	-90	90 g	-290	9 kg	-490	900 kg	-690	90 tonnes	-890
1 g	-100	100 g	-300	10 kg	-500	1 tonnes	-700	100 tonnes	-900
1.5 g	-110	150 g	-310	15 kg	-510	1.5 tonnes	-710	150 tonnes	-910
2 g	-120	200 g	-320	20 kg	-520	2 tonnes	-720	200 tonnes	-920
3 g	-130	300 g	-330	30 kg	-530	3 tonnes	-730	300 tonnes	-930
4 g	-140	400 g	-340	40 kg	-540	4 tonnes	-740	400 tonnes	-940
5 g	-150	500 g	-350	50 kg	-550	5 tonnes	-750	500 tonnes	-950
6 g	-160	600 g	-360	60 kg	-560	6 tonnes	-760	600 tonnes	-960
7 g	-170	700 g	-370	70 kg	-570	7 tonnes	-770	700 tonnes	-970
8 g	-180	800 g	-380	80 kg	-580	8 tonnes	-780	800 tonnes	-980
9 g	-190	900 g	-390	90 kg	-590	9 tonnes	-790	900 tonnes	-990

Armor - example armor list

BODY ARMOR	CP	Mass	Heft	Power	Shp	Reach	Cvr	Abs	Spec.
Padded Coat	960	4 kg					4	1	
Leather Armor	1720	8 kg					4	2	
Scale Armor	2890	15 kg					4	3	
Chainmail	3490	15 kg					5	3	
Brigandine	3490	15 kg					3	4	
Lamellar	4490	15 kg					4	4	
Full Plate	7975	25 kg					5	5	
Half Plate	4990	15 kg					3	5	
Breastplate	3540	6 kg					2	5	
Leather Jacket	880	2 kg					3	1	
Ballistic Vest	1780	2 kg					2	3	
Rifle Plate	2070	3 kg					1	5	
HELMETS	**CP**	**Mass**	**Heft**	**Power**	**Shp**	**Reach**	**Cvr**	**Abs**	**Spec**
Leather Cap	750	0 kg					1	1	
Helmet	2050	5 kg					1	5	
Full Helmet	3500	10 kg					2	5	
Crash Helmet	1780	2 kg					2	3	
Ballistic Helmet	2100	1 kg					1	5	
SHIELDS	**CP**	**Mass**	**Heft**	**Power**	**Shp**	**Reach**	**Cvr**	**Abs**	**Spec**
Buckler	780	2 kg	4	2 - 4	4	0 m	1	4	
Wooden Shield	1070	3 kg	6	3 - 6	4	0.5 m	2	3	
Leather Shield	860	4 kg	6	3 - 6	4	1 m	3	2	

Hand Weapons - example hand to hand weapon list

SHORT WEAPONS	CP	Mass	Heft	Power	Shp	Reach	Cvr	Abs	Spec.
Axe	1260	4 kg	6	4 - 8	0	1 m			Grp 1
Cane	500	1 kg	4	3 - 6	4	1 m			Grp 1
Baton	200	1 kg	4	3 - 6	4	0.5 m			
Club	280	2 kg	5	3 - 7	4	1 m			
Hammer	-30	3 kg	5	3 - 6	4	0.5 m			
Mattock	550	5 kg	8	4 - 8	1	1 m			
Maul	-60	6 kg	8	4 - 8	4	1 m			
Pick	500	1 kg	4	2 - 4	2	0.5 m			Grp 1
Spike Knuckles	200	1 kg	4	2 - 4	2	0 m			
Gaff	380	2 kg	5	3 - 6	2	0.5 m			
Knife	680	0.2 kg	4	2 - 4	0	0 m			
Wooden Sword	600	1 kg	5	3 - 7	3	0.5 m			Par 1
Short Sword	780	2 kg	5	3 - 6	0	0.5 m			
Broadsword	1270	3 kg	6	4 - 8	0	1 m			Par 1
Bastard Sword	1250	5 kg	6	4 - 8	0	1 m			Par 1
Giant Sword	1120	8 kg	7	4 - 8	0	1.5 m			Par 1
Pair of Spurs	200	1 kg	4	2 - 4	2	0 m			
LONG WEAPONS	**CP**	**Mass**	**Heft**	**Power**	**Shp**	**Reach**	**Cvr**	**Abs**	**Spec.**
Pole	170	3 kg	6	3 - 6	4	2 m			
Pike	800	10 kg	8	4 - 8	1	2.5 m			
Spear	980	2 kg	5	3 - 6	0	1.5 m			
Staff	80	2 kg	5	3 - 6	4	1 m			
Trident	1160	4 kg	5	3 - 6	0	1.5 m			Grp 1
Bardiche	1030	7 kg	7	4 - 8	0	1 m			Par 1
Halberd	1240	6 kg	6	4 - 8	0	2 m			
Glaive	1050	5 kg	6	4 - 8	0	1 m			
FLEXIBLE WEAPONS	**CP**	**Mass**	**Heft**	**Power**	**Shp**	**Reach**	**Cvr**	**Abs**	**Spec.**
Ball and Chain	320	8 kg	8	4 - 8	3	1 m			Grp 1
Flail	580	2 kg	6	3 - 6	2	1 m			Grp 1
Bullwhip	980	2 kg	6	3 - 6	2	3 m			Grp 1
Goad	400	1 kg	4	2 - 4	3	1 m			Grp 1

Missile Weapons - example long range weapon list

THROWN WEAPONS	CP	Mass	Heft	Power	Shp	Reach	Cvr	Abs	Spec.
Stone/Bullet	-100	0.1 kg	4	2 - 4	4	0 m			
Sling	3700	1 kg	5	3 - 6	0	15 m			
Staff Sling	6880	2 kg	6	4 - 8	0	30 m			
Boomerang	0	1 kg	3	2 - 4	4	0.5 m			
Grapple	280	2 kg	6	3 - 6	3	0.5 m			Grp 1
Tomahawk	300	1 kg	4	2 - 4	2	0.5 m			
Javelin	600	1 kg	4	2 - 4	1	1 m			
Harpoon	760	4 kg	6	3 - 6	0	1 m			
Atlatl Dart	680	2 kg	4	2 - 4	1	1.5 m			
Atlatl (Thrower)	7200	1 kg	5	4 - 8	0	30 m			
BOWS	**CP**	**Mass**	**Heft**	**Power**	**Shp**	**Reach**			**Spec.**
Arrow	900	0 kg	2	1 - 2	1	0.5 m			
Bolt	700	0 kg	2	1 - 2	2	0.5 m			
Light Bow	29600	1 kg	4	2 - 4		150 m			
Composite Bow	35700	1 kg	5	3 - 6		180 m			
Longbow	47680	2 kg	7	4 - 8		240 m			
Compound Bow	29900	1 kg	4	3 - 6		150 m			
Crossbow	41570	3 kg	8	4 - 8		210 m			
GUNS	**CP**	**Mass**	**Heft**	**Power**	**Shp**	**Reach**			**Spec.**
Blowgun	4000	0 kg	2	1 - 2	0	15 m			
Pistol	18400	1 kg	5	2 - 5	1	90 m			
Sub-machine-gun	18280	2 kg	6	2 - 5	1	90 m			
Hunting Rifle	90470	3 kg	7	3 - 6	0	450 m			
Shotgun	9370	3 kg	7	3 - 7	1	45 m			
Assault Rifle	90670	3 kg	7	4 - 8	0	450 m			
Machine-gun	125990	15 kg	10	10 - 20	0	600 m			
Grenade Launcher	30980	2 kg	6	5 - 10	3	150 m			
Rocket Launcher	42950	5 kg	8	7 - 15	2	200 m			

Character Creation

Typically one player - the GM (Game Master) will tell the other players to create characters with a certain CP (Character Point) allowance from a list of templates. (See *Gameplay/Players and Characters* and *Game Design/Templates*.) CP allowance and the list of template's players can use to design their characters depends on the specific game being played.

To create a character, you need a pencil and a character sheet. Customize the character by choosing a template, name, age, sex, build, abilities and equipment. (You may also be able to give the character weaknesses, such as missing limbs or disabilities.) The total CP of these options must not be greater than your Character Point allowance (See *Character Creation/Character CP*.)

Character Sheet

NAME   AGE   SEX   TEMPLATE

_____ _____ _____ _____

OCCUPATION(S)   BUILD

_____ _____

Length	_____ _____	Power	_____	MOVEMENT (m)	CHARACTER POINTS (CP)
Mass	_____ kg	Grip	_____	Stride _____	Template CP (_____)
Health	_____	CC (kg)	_____	ground _____	Ability CP (_____)
Health/2	_____	Equip. Mass	_____	water _____	Build CP (_____)
Agility	_____	Encumbrance	_____	air _____	Other CP (_____)
Speed	_____	Spd-Enc	_____	climb _____	Total CP (_____)

ABILITIES/disabilities Mod Lvl   (CP)   Mod Lvl   (CP)

_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)
_____ ___ ___ (_____) _____ ___ ___ (_____)

EQUIPMENT	special modifiers	Qty	Mass	Heft	Cmb	Reach	Cvr	Abs	Power	Shp
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___
_____	_____	___	____	____	___	_____	___	___	_-___	___

           STUN | DAMAGE
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Character CP

Total CP

A character's total CP value is the sum of the character's template CP, build CP ability CP and other CP (such as the CP of missing limbs.)

Template CP

The CP of the character's template is given in the template.

Build CP

The CP of a character's build comes from the table to the right.

CP	Build
	small builds
-100	small
+100	small and powerful
+200	small and tough
	weaker builds
-900	feeble
-500	puny
-300	delicate
-200	wimpy
	typical builds
+400	fast (light)
0	normal
-400	slow (heavy)
	athletic builds
+700	fast and tough
+600	fast and powerful
+300	tough
+200	powerful
	large builds
+100	big
+500	big and fast
+900	big and very fast

Missing Limbs

If the character is missing any limbs described in their Template, subtract the difference between the value of the character's natural weapons and their template's natural weapons from their **other CP**. For example, suppose a human template has a dominant hand with 0 manual dexterity and an off hand with -1 manual dexterity. The human template's dexterity CP is -100. If a human sword fighter looses his right hand in a fight then he only has one hand with -1 manual dexterity (-700 CP), so subtract the difference (600 CP) from his other CP.

Ability CP

A character's ability level has the same CP value as a template's ability modifier. The template's ability modifiers are already included in the template CP, so a character's ability CP is based on the character's ability levels, and not on the character's ability modifiers.

CP	Disability
-1000	-4
-600	-3
-300	-2
-100	-1

CP	Ability
100	1
300	2
600	3
1000	4
1500	5
2100	6
2800	7
3600	8

For example, if a Character has a +6 modifier in Stealth ability and his Template has +4 Stealth, then he has 2 levels of Stealth, which is worth 300 CP. If a character has a -3 Nearsighted modifier and their template does not have this disability, then he has 3 levels of Nearsighted, which is worth -600 CP.

An item's mass also modifies its CP:

mass	CP	mass	CP	mass	CP	mass	CP	mass	CP
0 g	0	10 g	-200	1 kg	-400	100 kg	-600	10 tonnes	-800
0.1 g	-10	15 g	-210	1.5 kg	-410	150 kg	-610	15 tonnes	-810
0.2 g	-20	20 g	-220	2 kg	-420	200 kg	-620	20 tonnes	-820
0.3 g	-30	30 g	-230	3 kg	-430	300 kg	-630	30 tonnes	-830
0.4 g	-40	40 g	-240	4 kg	-440	400 kg	-640	40 tonnes	-840
0.5 g	-50	50 g	-250	5 kg	-450	500 kg	-650	50 tonnes	-850
0.6 g	-60	60 g	-260	6 kg	-460	600 kg	-660	60 tonnes	-860
0.7 g	-70	70 g	-270	7 kg	-470	700 kg	-670	70 tonnes	-870
0.8 g	-80	80 g	-280	8 kg	-480	800 kg	-680	80 tonnes	-880
0.9 g	-90	90 g	-290	9 kg	-490	900 kg	-690	90 tonnes	-890
1 g	-100	100 g	-300	10 kg	-500	1 tonnes	-700	100 tonnes	-900
1.5 g	-110	150 g	-310	15 kg	-510	1.5 tonnes	-710	150 tonnes	-910
2 g	-120	200 g	-320	20 kg	-520	2 tonnes	-720	200 tonnes	-920
3 g	-130	300 g	-330	30 kg	-530	3 tonnes	-730	300 tonnes	-930
4 g	-140	400 g	-340	40 kg	-540	4 tonnes	-740	400 tonnes	-940
5 g	-150	500 g	-350	50 kg	-550	5 tonnes	-750	500 tonnes	-950
6 g	-160	600 g	-360	60 kg	-560	6 tonnes	-760	600 tonnes	-960
7 g	-170	700 g	-370	70 kg	-570	7 tonnes	-770	700 tonnes	-970
8 g	-180	800 g	-380	80 kg	-580	8 tonnes	-780	800 tonnes	-980
9 g	-190	900 g	-390	90 kg	-590	9 tonnes	-790	900 tonnes	-990

Choose a Template

Select a template with a CP no greater than your Character Point allowance. The selection of templates depends on the game you are playing. Record the template's CP as the character's template CP. Copy the template's **speed**, **agility**, **power**, **health**, **abilities**, disabilities and modifiers.

Description

Make up a **name** for your character. If the template name includes **sex'** *or age* category copy these as age and sex on the character sheet; Otherwise, choose the age of the character and a sex appropriate to the template, usually "male" or "female". Age can be described in years or as a category such as "child", "youth", "adult", "old", or "ancient". You may also invent a more detailed description and background for your character, appropriate to the game being played. Certain parts of a character's description may be limited or described differently in various games or for specific templates. Some Templates may be sexless, or height may be replaced by length or wingspan.

Missing Limbs

If the game allows, the one or more of the character's limbs could be missing or crippled. If the missing or crippled limb is a natural weapon, reduce the weapon's quantity (Qty) by 1. If the missing or crippled limb limb is important to movement, give the character 1 or more levels of Lame disability.

Build

Choose a build from the following list or from a list of builds provided by the template, game or GM. Some templates may have a list of builds which is different from the following example. Mechanical characters may be built to exact specifications and have no build variations, while some animals vary in size more than others.

Add the **agility**, **health** and **power** modifiers for the build to the values copied from the character's template. When a build changes a character's power their **half power** needs to be recalculated, so the power modifiers here also increase or decrease the character's half power by half as much. If a character's template's power is listed as "2-5" the "powerful" build will give the character +2 power and +1 half power, and you would write the character's new power as "3-7".

Build	Power	Health	Agility	Mass
Small Builds				
small	-2	-4	+1	less than template range
small and powerful	0	-4	+1	less than template range
small and tough	-2	0	+1	less than template range
Weaker Builds				
feeble	-2	-4	-1	less than template range
puny	-2	-4	0	less than template range
delicate	0	-4	0	within template range
wimpy	-2	0	0	within template range
Typical Builds				
fast (light)	0	0	+1	within template range (less than average)
normal	0	0	0	within template range
slow (heavy)	0	0	-1	within template range (more than average)
Athletic Builds				
fast and tough	0	+4	+1	within template range
fast and powerful	+2	0	+1	within template range
tough	0	+4	0	within template range
powerful	+2	0	0	within template range
Large Builds				
big	+2	+4	-1	more than template range
big and fast	+2	+4	0	more than template range
big and very fast	+2	+4	+1	more than template range

Choose a **length** in the range of length values on the character sheet. Copy the length type ("height", "length", "wingspan", etc.) from the template to the space next to the length on the character sheet.

Choose a **mass** in the range of masses on the character sheet, or outside the range as suggested by the character's build. In the following list, "less than template range" means the character's mass should be between half of the build's minimum mass and the build's minimum mass. "More than template range" means the character's mass should be between the template's maximum mass and twice the template's maximum mass.

Character Abilities

Abilities
You may give the character new abilities from the list of abilities the game or template allows you to develop.

Disabilities
You may choose as many disabilities as the game allows.

Ability Levels
A character's ability modifiers are their template's ability modifiers plus their ability levels. Or in othe0.20"r words, a character's ability level is the difference between their personal ability modifiers and their template's ability modifiers. A template may impose a limit on how many ability levels a character can develop.

Health
A character's health is the sum of the character's two highest athletic ability modifiers plus one. (See Action/Damage.)

Health/2
A character's health/2 is half of the character's health, rounded down. (See Action/Damage.)

Grip
Grip is a character's power plus their strength ability modifier. Grip is the heft of the biggest weapons the character can wield easily. Any weapons larger than this are unwieldy. Unwieldy weapons may only be used to do one quick action per turn (and no powerful actions.) A heavy weapon may increase a character's encumbrance penalty too, reducing speed and movement.

CC (Carrying Capacity)
CC is the amount of equipment a character can carry without encumbrance. CC is determined by the character's grip.

Grip	CC	Grip	CC
0	0 g	13	500 kg
1	500 g	14	1 tonne
2	1 kg	15	2 tonnes
3	2 kg	16	3 tonnes
4	3 kg	17	5 tonnes
5	5 kg	18	10 tonnes
6	10 kg	19	20 tonnes
7	20 kg	20	30 tonnes
8	30 kg	21	50 tonnes
9	50 kg	22	100 tonnes
10	100 kg	23	200 tonnes
11	200 kg	24	300 tonnes
12	300 kg	25	500 tonnes

Choosing Occupations

You may be able - or required - to give your character one or more occupations. Occupations give the character advantages, disadvantages, duties or privileges. A character may have any occupations as long as they meet the requirements for those occupations. The game may impose additional limitations, like a minimum or maximum number of occupations. (See *Game Design/Occupations*.)

Character Equipment

Add the template's **natural weapons** and **natural armor** to the character's equipment. The power of a natural weapon is the character's power. Dexterity (Dex) is a special modifier. The combat modifier (Cmb) of a natural weapon is usually the character's agility plus unarmed combat ability modifier. (See *Game Design/Abilities/Other Abilities*.) The character may begin with other equipment, depending on the game, template, occupation, or other factors. A character's modifiers when using an item are listed in the equipment section of the character sheet. These are determined by comparing the character's modifiers to the item's modifiers, and may be different from the values listed on the equipment list for that item. (See *Game Design/Equipment* and *Character Development/Inventory Management*.)

Encumbrance and Movement

Equip. Mass (equipment mass)
Add up the mass of all of the character's equipment and write the total here.

Encumbrance
Encumbrance is the character's equipment mass divided by the character's CC and rounded down. If the character's CC is 10 and his total equipment mass is 29 then his encumbrance is 2. (29 divided by 10 is 2.9, and 2.9 rounded down is 2.) Encumbrance reduces a character's movement.

Spd-Enc (speed minus encumbrance)
Speed minus encumbrance, along with stride and movement abilities, determines a character's ground, water, air and climbing movement.

Stride
Stride is one plus the character's running ability modifier minus their lame disability modifier. This is used to determine a character's ground movement.

Ground
If a character's stride is greater than zero, their ground movement is their stride multiplied by their Spd-Enc. If the character's stride is 0, their ground movement is 1. If the character's stride is less than 0, their ground movement is 0. (See *Action/Movement*.)

Water
Water movement is Spd-Enc multiplied by swimming ability modifier. (See *Action/Movement*.)

Air
Only characters who can fly have air movement. Air movement is either Spd-Enc multiplied by flight ability modifier or ground movement, whichever is greater. (See *Action/Movement*.)

Climbing
While climbing, movement is Spd-Enc multiplied by the longest reach of the character's hands or 0.5 m whichever is longer. (See *Game Design/Templates/Natural Weapons* and *Action/Movement*.)

Make a Character - Character Generation Example

This example explains how to make a playable character. Consult the game-specific rules or the Game Master (GM) to find out what Templates and how many Character Points (CP) you can use to make characters. (See *Character Creation*.) The player has a blank character sheet and a pencil which can be used to erase and change values after they have been written down.

Choose the Type of Character You Want to Make

Here we'll assume that we are allowed to use 2500 CP to make a single character whose Template is "Sabretooth Penguin". (See *Game Design/Make a Template*.) We decide to create an average-sized male Sabretooth Penguin named Modre. We record the name, sex, age, template and build on the character sheet. We record the CP value of the Sabretooth Penguin template (1200 CP) as the Template CP on Modre's character sheet. This leaves us with 1300 CP to customize Modre later.

Copy Dimensions, Modifiers and Abilities from the Template

Now we look at Modre's Template to see how it affects his dimensions and modifiers. Modre is a Sabretooth Penguin, so his height will be between 0.75 m and 1.50 m, and his mass should be between 40 kg and 90 kg. We decide that Modre should be a typical Sabretooth Penguin 1.00 m tall and 60 kg. We copy the agility (4), speed (2), power (2-4) and health (0) from the Sabretooth Penguin template to Modre's character sheet. The Sabretooth Penguin template has a +3 swimming modifier, so we add that ability and modifier to Modre's character sheet.

```
TEMPLATE   Sabretooth Penguin
Mass       40 kg - 90 kg
Length     0.75 m - 1.50 m height

Agi Spd Health Power     CP
 4   2    0     2-4     1200

ABILITIES              Limit Mod
Swimming               none  +3
_____ _____ ___
_____ _____ ___
_____ _____ ___

NATURAL ARMOR          Abs Cvr
_____ ___ ___
_____ ___ ___

NATURAL WEAPONS Dex Reach Shp Qty
Claws and Teeth  0  0.5 m  3   3
_____ ___ _____ ___ ___
_____ ___ _____ ___ ___
```

Natural Weapons

Now we copy the claws and teeth from the Sabretooth Penguin template to the first line of Modre's equipment list. Enter 0 for the mass of the teeth and claws. Their mass is already included in his the mass of Modre's body and does not affect Modre's encumbrance. The claws are hands with a manual dexterity modifier of 0. They have 0.5 m of reach and 3 sharpness. The quantity of Modre's natural weapons is 3 (two claws and the teeth.) The power of the claws is the range "2-4" - copied from Modre's power modifier at the top of the character sheet. The combat modifier of the claws will be Modre's agility. If Modre develops an ability he can use when fighting with the claws, we will add that ability's modifier to the claws combat modifier. (See *Character Development/Inventory Management*.)

Use the Remaining CP to Customize the Character

The next step is to make Modre more competent and interesting by distributing the CP remaining after subtracting Modre's Template CP (1200 CP) from the CP allowance (2500 CP). Modre has 1300 CP remaining for enhancements. An average build is worth 0 CP, so we record that as modre's Build CP. Modre does not have any other unusual features like missing limbs, so his Other CP is also 0.

The rest of the CP allowance (1300 CP) will be distributed among Modre's abilities. We'll improve his swimming by giving him 2 swimming ability levels (300 CP.) This makes makes his total swimming modifier +5 (+3 from the Sabretooth Penguin template's swimming modifier and +2 from Modre's own swimming ability levels.) We'll give him 3 levels of one-handed weapons ability (600 CP.) Modre's one-handed weapons modifier is the same as his ability level (+3) because the Sabretooth Penguin template does not have a one-handed weapons modifier. We use the remaining 400 CP to give Modre 2 levels of craftsmanship ability and 1 level of fishing ability.

Modre's total CP is 2500 (1200 Template CP + 1300 Ability CP + 0 Build CP + 0 Other CP.) Equipment CP is not listed on the character sheet.

Occupation and Equipment

Modre meets the minimum qualifications to be a Robber. We decide this suits the personality we envision for Modre, so we make his occupation "Robber".

Modre has made an "Ice Blade" (see *Character Developing/Making Equipment/Equipment Generation Example*.)

To put this weapon onto Modre's character sheet:

- First we copy the item name, mass, heft and sharpness from the weapon listing to the character sheet.
- Modre only has one Ice Blade, so we make it's quantity (Qty) 1.
- Modre's Ice Blade has a combat modifier of 7: Modre's agility (4) plus Modre's one-handed weapons ability modifier (3).
- Modre's Ice Blade has 1.5 m reach (his claws reach plus the Ice Blade's reach.)
- Because the Ice Blade's power is higher than Modre's power, Modre's Ice Blade power is the same as the Ice Blade's power (3-6).
- Since Modre has no other equipment, the Ice Blade is not heavy enough to change his encumbrance.
- The Ice Blade has no cover, absorption or other modifiers.

Movement, Encumbrance and Health

Modre's +5 swimming ability modifier is multiplied by his 2 speed to give him 10 meters of water movement. Modre has no running ability or lame disability modifier, so his stride is 0 and his ground movement is 1 meter. Modre's climbing movement is 1 meter: the reach of his claws (0.5 m) multiplied by his speed (2). We leave air movement blank because Modre cannot fly.

Modre does not have a strength ability modifier, so his grip stays the same as the Sabretooth Penguin's 4xPwr. We find Modre's carrying capacity (CC) from his grip and the CC table. Modre's CC is 3 kg, so Modre's movement is reduced by 1 meter for every 3 kg of equipment he carries.

Modre's only athletic ability is swimming. We add Modre's swimming ability modifier (+5) to his health, so Modre has 5 health. Modre's health/2 is 3 (half of his health, rounded up.)

Item Name	Special Modifiers	CP	Mass	Heft	Reach	Pwr	Shp
Ice Blade	(no special modifiers)	550	0.5 kg	4	1.0 m	3-6	2

```
NAME                            AGE     SEX      TEMPLATE
Modre                                   male     Sabretooth Penguin

OCCUPATION(S)                                    BUILD
Robber                                           average

Length/Height  1.0 m   Power      2-4   MOVEMENT         CHARACTER POINTS (CP)
Mass           60 kg   Grip        8    Stride   0    Template CP ( 1200 )
Health          5      CC         3 kg  ground   1 m  Ability  CP ( 1300 )
Health/2        3      Equip. Mass 7 kg water   10 m  Build    CP (    0 )
Agility         4      Encumbrance 2    air           Other    CP (    0 )
Speed           2      Spd-Enc     0    climb    1 m  Total    CP ( 2500 )

ABILITIES/disabilities Mod Lvl  (CP)                      Mod Lvl   (CP)
swimming                5   2  ( 300 ) _____ ___ ___ (_____)
one-handed weapons      3   3  ( 600 ) _____ ___ ___ (_____)
fishing                 1   1  ( 100 ) _____ ___ ___ (_____)
craftsmanship           2   2  ( 300 ) _____ ___ ___ (_____)
_____ ___ ___       (_____) _____ ___ ___ (_____)
_____ ___ ___       (_____) _____ ___ ___ (_____)
_____ ___ ___       (_____) _____ ___ ___ (_____)
_____ ___ ___       (_____) _____ ___ ___ (_____)

EQUIPMENT          special modifiers Qty Mass Heft Cmb Reach Cvr Abs  Power  Shp
claws and teeth            0 Dex      3   0    0    4   0.5 m  0   0   2-4    3
Ice Blade                             1   0.5  8    7   1.5 m  0   0   3-6    2
_____ _____ ___ ____ ____ ___ _____ __ __ _-__ ___
_____ _____ ___ ____ ____ ___ _____ __ __ _-__ ___
_____ _____ ___ ____ ____ ___ _____ __ __ _-__ ___
_____ _____ ___ ____ ____ ___ _____ __ __ _-__ ___
_____ _____ ___ ____ ____ ___ _____ __ __ _-__ ___
_____ _____ ___ ____ ____ ___ _____ __ __ _-__ ___

            STUN                    |           DAMAGE
                                    |
                                    |
                                    |
                                    |
                                    |
```

Action

Damage and Health

Attack Power

Attack power is the maximum stun or damage an attack can do.

	fully successful	half-successful
missile weapon attack	the weapon's power	the weapon's half power
powerful or outreaching hand-to-hand attack	the character's power with the weapon	the character's half power with the weapon
quick, aimed or flanking hand-to-hand attack	the character's half power with the weapon	0 (the attack hits but has no power)

Stun

Stun is the short-term effect of pain and injury and recovers in seconds.

Damage

Damage is the long-term effect of injuries that heal slowly.

Health

Health is the maximum stun plus damage a character can take without being incapacitated and falling down

Health/2

Health/2 is the amount of stun plus damage a character can take without a damage penalty.

Healing

Characters recover one damage point each week, plus one damage point for each point of their regeneration ability modifier.

Rest

Rest is an attempt to heal the character faster. Every week make a success roll with a +1 modifier for each day the character engages in no physically strenuous activity - especially combat, training or travel. If the roll is successful, the character recovers twice as much damage as normal. Opposition to this healing roll would include lack of resources, harsh conditions, poison or infection (up to +5 for each individual opposing factor.)

Rounds, Turns and Actions

A **round** of action represents one to two seconds of game time - enough time for most characters to perform a single action or quick combination. Each character has one **turn** during each round. Rounds can be measured from the beginning of any character's turn until the beginning of their next turn (or from the end of their turn until the end of the next.

Order - If there is no surprise attack, characters may choose to start out in defense mode or ready to counter, and who goes first is decided by the circumstances (whoever throws the first punch in the story,) or random die rolls if there is a dispute. (Characters with longer reach or weapon range usually have the opportunity to attack first.) Characters typically take turns in the order their players are seated, going around the group of players clockwise. To move in formation, characters may delay their turns until they are sequential.

Surprise - Stealth and detection abilities are used for surprise attacks. If two characters are mutually stalking each other, do two separate rolls. If both fail, combat doesn't happen. If both succeed, they fight without either having the advantage of surprise. The Character who has the advantage of surprise gets to go first, while the character who has been surprised is not ready to defend (+2 defense) or counter.

Speed - Characters with 1/4 speed must skip 3 out of four turns, so they must skip the next three turns of moving and actions after one turn of moving and performing actions. Characters with 1/3 speed must skip 2 out of 3 turns, and Characters with 1/2 speed must skip every other turn. Characters may skip more turns than they are required to skip.

Actions - If a character's stun plus damage is less than half of their health (health/2), they can move and do one powerful action, quick action, combo, counterattack or covering action. If a character's stun plus damage is at least half of their health (health/2), they can only move half as far and perform only one quick action.

	Quick Actions	Powerful Actions
Strikes	attack	powerful attack, flanking
Takedowns	push	trip, throw
Holds	hold	wrench, choke, disarm, reversal
Defense	evasion	defend (evasion + single attack)
Stance	drop, stand	instant stand
Aiming	aim	aimed attack
Throwing	quick throwing	powerful throwing, heave
Archery	draw (light)	draw (heavy), draw and fire
Reload	load, unload	replace a clip

Other quick actions include things like pushing a door closed. Slower actions could count as powerful actions or take a certain number of turns.

Combos

A character can perform one quick action in a combo for each point of speed (rounded up, so a character with 1/3 speed can perform one quick action), plus an extra quick action if that character is using multiple weapons in the combo. If a character splits their attacks between multiple targets they may only attack each target one time per combo.

Counterattack

This tactic has no immediate effect, but the counterattacking character can do any attack as a defense against one attack directed at him before his next turn. (This include combos, using the normal combo attack rules, including the combo rules for attacking multiple targets.)

Covering

Covering another character is similar to counterattack, except that the covering character chooses an ally to defend instead of himself. If the covering character doesn't have enough reach to hit the attacker, or for some reason he can't parry the attack, that covering character will be hurt by the attack when he successfully defends his ally (i.e. "taking a bullet".)

Recovery - At the end of the character's turn, the character recovers one stun if they have any.

Movement

Movement is how fast the character can move in meters per round. One meter per round is 0.5 meters per second, 30 meters per minute, 1.8 kilometers per hour or a little over one mile per hour. Characters can move more than once during their turn (before and after performing actions) but the total distance may not exceed their movement. (See *Character Creation/Encumbrance and Movement*.)

Running and Jumping

A character's ground movement determines how fast they can run and move while fighting. It is also the maximum distance a character can jump with a running start. If the character can barely jump across a gap (within 1 meter of their maximum jumping distance) they must make a success roll (using their acrobatics ability modifier) or fall into the gap. Without a running start a character can jump half as far. A character can jump vertically half as high as they can jump horizontally (half of their ground movement with a running start, a quarter of their ground movement without it.) If the character can barely make a vertical leap (within 1 meter of their maximum jumping height) they must make a success roll (using their acrobatics ability modifier) or fail to reach the required height.

Swimming

Water movement determines how fast a character can swim. In water, characters have a -4 to their combat rolls. For every level of swimming ability up to level 4, characters get a +1 to combat rolls when swimming. After level 4 they still only have +4 to swimming combat rolls. When characters fight while swimming, striking (non-grappling) attacks do half as much stun as they do in air, but no more or less damage.

Flying

Air movement determines how fast a character can fly horizontally. A character's maximum rate of ascent and safe rate of descent is their flight ability modifier in meters per turn. A flight modifier of 0 means a character can barely fly horizontally at the same speed they were going when they took off. When a flying character ascends 1 meter vertically (under their own flying power) their air movement is reduced by 1 meter until they descend again or land. A character can no longer ascend when their air movement is 0. When a character descends 1 meter vertically their air movement is increased by 1 meter until they ascend again or land.

Climbing

A character's climbing movement determines how fast they can move while climbing. Each turn a character climbs - even if they don't move, make a success roll using the character's climbing ability modifier vs. the difficulty of clinging to the surface or structure the character is climbing. If the character is not trying to move, they have a +2 modifier to this roll. If the character's success level is 5 or more, they can move and perform one quick action. If the character is at least half successful but the success level is less than 5, they can move but not perform any other actions. If the character is not successful they cannot move or perform actions. If the character's success level is less than -5 they lose their grip and fall.

Attacking

Quick Attack

A normal attack counts as one quick action. A normal attack can be a strike with a hand weapon or natural weapon, throwing a weapon or firing a bow or gun.

Aimed Attack

An aimed attack has a +1 bonus to hit. You may not do an aimed attack while grappling.

Flanking Attack

A flanking attack has a +1 bonus to hit. You may not do a flanking attack while grappling.

Powerful Attack

A hand to hand attack that has more attack power. (See Action/Damage.) A couple of normal attacks has a better chance of hitting at least once, but a more powerful attack does damage quickly and hurts larger and armored characters more easily. You must be standing to do a powerful attack.

Outreaching Attack

A hand to hand attack which gives a passive defense bonus like the Evasion quick action against all characters with less reach. This attack can only be used against characters with less reach, and cannot be used while grappling or on the ground. The advantage of outreaching with a hand weapon is that it uses the character's full power with the weapon instead of half power. (See Action/Damage.)

Charging Attack

If a character travels more than 5 meters in a straight line before attacking, all in a single turn, the distance traveled (in meters) minus 5 is added to the power of the attack. (See Action/Damage.)

Readying weapons

Unless surprised, characters will usually draw their weapons before the beginning of combat. If they have to ready the weapon during an action round, drawing the weapon from it's sheath, holster, scabbard, belt, or other convenient location is a quick action.

Attacking from a Distance

The difficulty of hitting a target depends on distance, weapon and target size. A ranged weapon has a -1 attack modifier for every 10% of it's maximum range. When a character is attacked with a missile weapon they use their agility instead of a combat modifier for their defense roll. (See *Character Development/Inventory Management* for more about the relationship of combat modifer and agility to hand weapons and missile weapons.)

Grappling

A grappler can be in a dominant, neutral or inferior position relative to an opponent. Either one grappler's position is dominant and the other's is inferior, or they are both neutral. If a character is fully successful with any grappling action, he may choose whether to end up in a hold with the dominant position, or to release the hold. If a character fails, his opponent gets to decide whether to release the hold (but does not have a dominant position if that opponent did not already have it.) If a character is half successful, the only change is that his opponent loses the dominant position if that opponent had it (i.e. both characters would then be in a neutral hold.)

- Characters can grapple while standing (clinch fighting) or on the ground (ground fighting.) In a clinch, both grappling characters have a -1 modifier to all combat rolls except that a grappling character with a dominant position has a +1 modifier against his opponent in the inferior position. While ground fighting the grappling characters have the same modifiers except that instead of the -1 modifier they have a +1 defense vs. missile weapons and a -2 vs hand to hand attacks from other characters who are not grappling.

- If one grappling character has more power he controls the direction they move. If they have equal power, they move slowly in the direction the grappling character with the dominant position chooses. If they have equal power and neither grappling character has the dominant position, they don't move.

- Takedowns (push, trip and throw) are very difficult against much larger creatures. If the target of a takedown has more power than the attacker, add four times each character's power modifier to their rolls (or add four times the difference between their power bonus to the defender's roll.)

- When a character falls down they take damage as if hit by a normal attack, except that the sharpness of the attack is based on the surface they hit and they take at least two points of stun. If a character falls from a height the damage is increased by 1 for each meter they fall. If a character is pushed or thrown into a wall instead of the ground they take damage as if falling.

Push, Pull or Shove

Successfully pushing, pulling and tripping up a standing opponent forces him to move in the direction the pushing character wants, and puts the pushed character off balance so he must make an additional ability check or fall down. If the pushing character is standing when his opponent falls down, the pushing character must choose whether to let go of him or follow him to the ground. This is a grappling action.

Trip, Sweep or Attacking the Legs

Successfully attacking a standing opponent's legs with enough power puts him off balance so he must make an additional ability check or fall down. This is a grappling attack.

Throw

Successfully throwing an opponent causes him to fall automatically. He can still make an additional ability roll to avoid damage from falling but he ends up on the ground. If a throwing character is standing and chooses to fall onto him, the throwing character can cause additional damage as if successfully performing a quick attack, but does not have to roll again. Even if the thrown opponent successfully avoids falling damage, he cannot avoid the extra damage from the throwing character falling on him.

Hold

A quick grappling hold is like a normal attack except that it also is a grappling move and can improve a holding character's grappling position.

Wrench

A wrench is a more painful and potentially damaging hold which does double damage.

Choke or Strangle

A choke is a grappling attack which does double damage but only causes stun. A choke always causes at least two stun if it is successful, regardless of armor and absorption.

Disarm

Disarm is a grappling action which forces an opponent to release his weapon or other possession. If a character doing a disarm is successful, he takes the weapon from his opponent. If he is half successful, the opponent drops the weapon. If the character doing the disarm has at least two free hands, he has a -1 to disarm. If he has one free hand he has a -2 to disarm. If he is holding something in each hand, he has a -3 to disarm and the opponent drops the weapon if he is fully successful.

Maneuvering

The best defense is usually a good offense, but sometimes getting into a safer position is the best or only option.

Evasion

By moving defensively, a character can get a +2 passive defense bonus until the end of the character's next turn. Evasion is only used once per turn, but the bonus applies every time the character is attacked before the end of their next turn. (This bonus does not apply to counter-attacks.)

Defense

Defense is evasion combined with a quick attack.

Drop

The character drops to a low crouch, sitting, kneeling or prone position on the ground. While a character is on the ground, they move more slowly (-2 movement, -2 to all hand to hand combat rolls except for grappling) but they are harder to hit with missile weapons (+2 to avoid a missile weapon, even without cover, unless the attack comes from above.)

Stand

Standing up is a single quick action.

Instant Stand

Instant stand is evasion combined with standing, but it requires an success roll: agility + acrobatics vs. difficulty zero. (If a character's agility + acrobatics ability is greater than 5 they automatically succeed.) If the roll fails the character stays on the ground. If the roll is half-successful the character stands without the defense bonus.

Thrown Weapons

Quick Throwing

A character can throw a weapon with the power of a quick attack as a quick action. The maximum range of this attack is the reach of the throwing hand multiplied by the sum of the character's throwing ability modifier and the difference between the character's grip and the weapon's heft. Add the reach of a sling or spear thrower to this range. A heavier weapon cannot be thrown as far as a light weapon. Unwieldy weapons cannot be thrown quickly. Quick throwing is useful when speed or precision is important, such as knife and hatchet-throwing competitions or throwing sand in an opponent's face.

Powerful Throwing

A character can throw a weapon with the power of a powerful attack as a powerful action. The maximum range of this attack is twice the range of throwing the weapon quickly. Add the reach of a sling or spear thrower to this range. Unwieldy weapons cannot be thrown this way. Powerful throwing is useful when distance or damage is important, like throwing a javelin.

Heave

Any object the character can lift can be thrown by heaving. Heaved objects are wildly imprecise, so the character has a -3 modifier to hit the target. The maximum distance the character can heave an object is the sum of the reach of the throwing hand and the weapon's reach modifier multiplied by the sum of the character's throwing ability modifier and the difference between the character's grip and the weapon's heft. Heaving a weapon which is not unwieldy is a powerful action. Heaving an unwieldy weapon takes two turns.

Archery and Marksmanship

Loading weapons

Some weapons must be loaded before each attack, or reloaded after a certain number of uses. If the ammunition is in a convenient location (a quiver, pocket, pouch, bandoleer, etc.) it can be drawn from that location with a quick action. Then the ammunition can be loaded into a simple weapon like a sling or a bow with another quick action. More complex weapons may have more steps. For example, If you have to load a revolver one bullet at a time for example, each bullet loaded may be a quick action.

Unloading weapons

Most weapons are designed to be loaded quickly, but unloading them can be trickier. Unloading a weapon is usually a quick action, but then you are either holding the ammunition or let it drop (your choice.) Putting away the ammunition you are holding requires an extra quick action - assuming that you have a single convenient place to put it. (If you have to load several rounds of ammunition into individual locations, each round of ammunition will take a separate quick action.)

Aiming

Aiming gives you a +2 bonus to hit with your next missile weapon attack. If you get hit between aiming and the next attack, you lose the bonus. You may not aim while grappling.

Reloading

Replacing a clip of ammunition can be one powerful action or split into two quick actions (unloading and loading). If rounds must be loaded individually, each round requires a separate quick action. Some weapons take one or more turns to reload. (A "Brown Bess" musket can be fired about 3 times per minute with training, suggesting 9 turns to reload and 1 turn to fire.)

Drawing a Bow

A bow must be drawn before it can be aimed or fired. Drawing a bow counts as one action, separate from firing it, and requires the use of two hands. If the grip of each hand is at least the bow's heft, then drawing the bow is a quick action, otherwise it is a powerful action. If the bow's heft is at least 4 points greater than the grip of each hand, the character cannot draw it at all. Bows tend to be lightweight, but their power comes from their spring instead of their mass. So the heft of a bow reflects bow's pull and the grip required to draw the bow.

Keeping a Bow Drawn

The strength and concentration required to keep a bow drawn prevents you from performing any other actions until the bow is fired. (You can perform other actions while holding a crossbow, just like a loaded firearm.)

Releasing the Bow

Releasing a drawn bow without firing the arrow is a quick action.

Drawing and Firing a Bow

A light bow can be drawn and fired as a single powerful action.

Drawing a Crossbow

Drawing a crossbow without a lever or crank is the same as drawing other bows. A simple lever can replace one powerful action with two quick actions. A crank requires an extra turn for each extra point of strength it gives. For example a crank that takes 5 turns can allow you to draw a crossbow that requires 5 more strength than you have.

Stance, Posture, and Position Modifiers

To simplify keeping track of success roll modifiers, there are only 10 different actions and positions to be aware of. A character can only be in one of these positions at a time. For example, a character cannot do a flanking attack while aiming or grappling.

	Standing	On the Ground
Default	no modifiers	+2 defense vs. missiles -1 hand to hand
Aiming	+2 to hit	+2 to hit +2 defense vs. missiles -1 hand to hand
Aimed/ Flanking	+1 to hit	n/a
Evade/ Defend	+2 defense	n/a
Grappling	-1 to all rolls	-1 vs. other grapplers -2 vs. non-grapplers +1 defense vs. missiles
Dominant	+1 vs. inferior -1 vs. others	+1 vs. inferior -1 vs. other grapplers -2 vs. non-grapplers +1 defense vs. missiles

Standing

This is the position where characters are ready to do most actions, but they are also fully exposed to missile weapon attacks such as thrown weapons, slings, bows and guns. While standing a character can move at normal speed and have no special modifiers from this position.

On the Ground

While a character is crouching, crawling, sitting, or lying on the ground, they move more slowly (half movement, -1 to all hand to hand combat rolls except for grappling) but they are harder to hit with missile weapons (+2 to avoid a missile weapon, even without cover, unless the attack comes from above.)

Aiming while Standing

When a character aims a missile weapon they have a +2 to hit.

Aiming on the Ground

When a character aims from a sitting or prone position they have a +2 to hit plus the penalties for being on the ground: they move more slowly (half movement, -1 to all hand to hand combat rolls except for grappling) but they are harder to hit with missile weapons (+2 to avoid a missile weapon, even without cover, unless the attack comes from above.)

Aimed Attack and Flanking Attack

These attacks have a +1 modifier to their success roll.

Evasion and Defense

Evasion and Defense give a character a +2 passive defense bonus until the end of the character's next turn. This bonus helps them to avoid any attack which they don't counter and which is not a counter to their attack.

Clinch

When a character is grappling and standing up, but does not have the dominant position, they have a -1 to all combat rolls.

Ground Fighting

When a character is grappling on the ground, and does not have the dominant position, they have a -1 to all combat rolls against characters they are grappling with, a +1 against other characters missile weapon attacks, and -2 to combat rolls involving other characters.

Dominant Position (Standing)

+1 modifier to combat rolls against the character in the inferior position. -1 to all other combat rolls.

Dominant Position (on the Ground)

+1 modifier to combat rolls against the character in the inferior position. -1 to combat rolls involving other characters you are grappling with simultaneously, +1 against other characters missile weapon attacks, and -2 to most other combat rolls.

Armor and Weapons

Sharpness

Sharpness determines whether the attack power that gets through the target's armor becomes stun and damage. If the success level of the attack equal to or greater than the weapon's sharpness then the attack power becomes damage; Otherwise, the attack power becomes stun.

Armor

Any equipment with a cover modifier greater than 0 can be considered armor. Every piece of armor equipped has a chance of blocking an attack. Sort the armor from the highest absorption (Abs) to the lowest. For each item in the list - starting with the first - compare the success level of the attack to the cover modifier of the item plus the cover modifier of all of the items before it. If the total cover modifier is greater than or equal to the attack's success level, then the attack is "blocked" by that item, and no other items should be checked. Sometimes armor is worn in layers. A brigandine (vest lined with metal plates) is often worn over a gambeson (padded coat) or chainmail. If one peice of armor is completely overlapped by another, add the absorption of the armor with more cover to the absorption of the armor with less cover, and subtract the cover of the armor with less cover from the cover of the armor with more cover.

Mounted Combat

When the Animal Attacks

When riding an animal, the animal will fight automatically if it is trained to do so. Every time the animal attacks or defends, the rider must make a roll using their riding ability to stay mounted.

Stopping the Attack

To keep the animal from attacking the rider must make an animal handling success roll every time the animal is attacked, and every round that the animal's attacker is visible. The difficulty of this roll is +2 modifier against success, or +4 if the animal has stun or damage.

Animals that do not Fight

Animals trained to be ridden but not to fight will not attack if they are being ridden. Instead, they will try to run unless the rider makes a successful animal handling roll. This roll has a +3 modifier against success, or +5 if the animal has stun or damage.

Charging

Instead of having the animal attack, a rider may use the animal's speed to do a charging attack. (See Action/Attacking.)

Vehicles

Vehicle combat is similar to mounted combat, but most vehicles will not fight or try to run from an enemy.

Ramming

When a driver rams a target, their driving ability modifier or the vehicle's agility - whichever is lower - is used as the combat modifier. A successful ramming attack results in an automatically successful ramming counterattack by the target against the part of the vehicle used to ram (usually the front.)

Head-on and Broadside Collisions

If the vehicle and target are moving in different directions (or if only the vehicle is moving) the extra charging damage caused by the speed of both the vehicle and the target is added to the damage taken by both.

Rear-end and Sideswipe Collisions

If the vehicle and target are moving in the same direction then the charging damage is based on the difference in the distances the vehicle and target moved in that direction since the beginning of their last turn.

Combat Example

To demonstrate the basic hand-to-hand combat system, Modre the Sabretooth Penguin has a clone exactly like Modre, except the clone has not had time to make an Ice Blade. Modre decides to take out the clone before it can get started on an Ice Blade of it's own. (See *Character Creation/Character Generation Example*.)

1. Establishing Initiative

Modre tries to ambush the Clone. Modre rolls a 3, and has no stealth ability bonus to add to it. The Clone only rolls a 1 and has no detection ability to add to it, so Modre's ambush is successful (because Modre's 3 is greater than the Clone's 1.) Now on his first turn in the combat round, Modre is able to attack first and while the Clone is not prepared to defend or counter attack, because of his successful stealth roll.

2. Combat Begins

Both Sabretooth Penguins have 5 health.

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NAME                              AGE      SEX       TEMPLATE
Modre                                      male      Sabretooth Penguin

OCCUPATION(S)                                        BUILD
Robber                                               average

Length/Height  1.0 m    Power        2-4   MOVEMENT       CHARACTER POINTS (CP)
Mass          60 kg     Grip          8     Stride   0    Template CP (  1200 )
Health          5       CC           3 kg   ground   1 m  Ability  CP (  1300 )
Health/2        3       Equip. Mass  7 kg   water   10 m  Build    CP (     0 )
Agility         4       Encumbrance   2     air           Other    CP (     0 )
Speed           2       Spd-Enc       0     climb    1 m  Total    CP (  2500 )

ABILITIES/disabilities Mod Lvl   (CP)                      Mod Lvl    (CP)
swimming                5   2   ( 300 )  _____  ___ ___  (_____)
one-handed weapons      3   3   ( 600 )  _____  ___ ___  (_____)
fishing                 1   1   ( 100 )  _____  ___ ___  (_____)
craftsmanship           2   2   ( 300 )  _____  ___ ___  (_____)

EQUIPMENT         special modifiers Qty Mass Heft Cmb Reach Cvr Abs  Power  Shp
claws and teeth          0 Dex       3   0    0    4  0.5 m  0   0    2-4    3
Ice Blade                1  0.5      8   7  1.5 m  0    0    3-6  2
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NAME                              AGE      SEX       TEMPLATE
The Clone                                  male      Sabretooth Penguin

OCCUPATION(S)                                        BUILD
Robber                                               average

Length/Height  1.0 m    Power        2-4   MOVEMENT       CHARACTER POINTS (CP)
Mass          60 kg     Grip          8     Stride   0    Template CP (  1200 )
Health          5       CC           3 kg   ground   1 m  Ability  CP (  1300 )
Health/2        3       Equip. Mass  7 kg   water   10 m  Build    CP (     0 )
Agility         4       Encumbrance   2     air           Other    CP (     0 )
Speed           2       Spd-Enc       0     climb    1 m  Total    CP (  2500 )

ABILITIES/disabilities Mod Lvl   (CP)                      Mod Lvl    (CP)
swimming                5   2   ( 300 )  _____  ___ ___  (_____)
one-handed weapons      3   3   ( 600 )  _____  ___ ___  (_____)
fishing                 1   1   ( 100 )  _____  ___ ___  (_____)
craftsmanship           2   2   ( 300 )  _____  ___ ___  (_____)

EQUIPMENT         special modifiers Qty Mass Heft Cmb Reach Cvr Abs  Power  Shp
claws and teeth          0 Dex       3   0    0    4  0.5 m  0   0    2-4    3
```

3. Modre's First Turn

Because Modre has initiative, the first turn is his.

Modre does an outreaching attack, which has an attack power of 6 and a +7 to his combat roll. Modre's player rolls a 1, so that his total combat roll is 8. (Because his powerful attack was an outreaching attack, Modre also now gets a +2 defensive bonus against anyone with shorter reach than him until his next turn.)

The Clone's player rolls a 6, for a total (unarmed) combat roll of 10. Modre's 8 is less than the Clone's 10, so Modre's attack misses.

At the end of Modre's turn he can recover one stun, but he has no stun yet.

4. The Clone's First Turn

Now the Clone has initiative because his player is next in the circle.

The Clone launches a combo attack. The Clone's speed is two, but he's using two sets of claws (which count as multiple weapons), so he gets to attempt 3 quick attacks in his combo. The power of each of these quick attacks is 2, and each has a +4 combat roll bonus.

Modre defends using his Ice Blade, so he gets a +7 to defend against each attack in the Clone's combo, plus the extra +2 he has from having just done an outreaching attack (for a total of +9.)

• On the first attack in the combo, the Clone rolls a 6, for a total of 10, while Modre rolls a 1, for a total of 10. Because the rolls are the same, the attack barely grazes Modre and has no power, causing no damage or stun.

• On the second attack in the combo, the Clone again rolls a 6, for a total of 10, while Modre again rolls a 1, for a total of 10. Again, because the rolls are the same, the attack has no power.

• On the third attack in the combo, the clone rolls a 4, for a total of 8. Modre rolls a 2, for a total of 9. Because 9 is higher than 8, the clone's third attack misses.

At the end of the clone's turn he can recover one stun, but he has no stun yet.

5. Modre's Second Turn

It is Modre's turn again, and the beginning of the second combat round. Modre decides to wait and counter attack. If he had any stun he would recover it now, but he doesn't.

6. The Clone's Second Turn

The clone decides to do an aimed attack to Modre, giving the clone an extra +1 to his usual +4 combat bonus for a total of +5. The clone rolls a 5, for a total combat roll of 10.

Modre's response is a flanking counter attack, with an attack power of 3 and combat bonus of +8 (his choice of flanking attack gives him a +1 to his combat bonus.) He rolls a 3 (for a total of 11.) Because Modre's combat roll is higher, Modre's counter attack is successful instead of the Clone's attack, even though it's the clone's turn. The Clone has no armor with absorption to reduce the attack's power. Because Modre's success level (1) is less than his Ice Blade's sharpness (2) the the clone takes 3 stun instead of 3 damage.

The Clone recovers one point of stun at the end of his turn, so his stun is now 2.

7. Modre's Third Turn

Modre decides to follow up his attack with a combo. He can only use the ice blade twice in the combo because his speed is 2, but he can also use his teeth or the claw he isn't using to hold the ice blade as a secondary weapon for a third attack.

- For his first attack with the ice blade, Modre rolls a 3, for a total combat roll of 10. The clone rolls 1, for a total combat roll of 5. Modre's success level (5) is higher than his weapon's sharpness (2), so the attack does 3 damage. The Clone is now incapacitated and falling down because the Clone's damage (3) plus stun (2) is equal to the Clone's health (5).
- Modre continues to press the attack to keep the clone from recovering and getting back up. For his second ice blade attack he rolls a 2 for a total combat roll of 9. The clone rolls a 6, but has a -1 from being in a laying-down posture, for a total combat roll of 9. Modre's attack is only half successful with no power.
- Modre has one last attack with his other claw. He rolls a 1 for a total combat roll of 8, but the Clone again rolls a 6, -1 for laying down, for a total combat roll of 9. Modre's final attack in this combo misses.

Modre does not have any stun, so he does not recover any at the end of his turn.

8. The Clone's Third Turn

The Clone is incapacitated at the beginning of his turn because the Clone's stun (2) plus damage (3) is 5, which is equal to his health (5). The Clone recovers one stun at the end of his turn, so the Clone's stun is now 1.

9. Fourth round and beyond

The players continue taking turns controlling their characters in the same order until one side gives up or is unable to fight back even after recovering stun. Modre is intent on destroying the Clone so the fight will only end when the clone's damage is greater than or equal to the Clone's health.

Character Development

Developing Abilities through Training and Experience

Characters can gain CP from training, as a reward for completing an adventure, or from other experiences that improve their abilities. 1 CP can represent an hour of intense training with experts, or three hours of relaxed training on your own. CP can be given to improve a specific ability, or characters can receive flexible CP which their players decide how to use. When a character's ability CP increases, update the ability level and modifier. (See *Character Creation/Character CP*.)

When a character's strength, movement abilities and other athletic abilities increase, their health, health/2, grip, CC, encumbrance, stride, Std-Enc, ground, water, air or climbing movement may also increase. (See *Game Design/Abilities/Athletic Abilities*, *Character Creation/Character Abilities* and *Character Creation/Encumbrance and Movement*.)

Changing Occupations

While a Template has to do with the origin of the character and is a static part of the character, the character's Occupation is not permanent. As a character matures, he could easily end up with in more important Occupations related to the Occupations he has had in the past. If the character is used in a multiple campaigns or adventures, he could easily end up pursuing a wide variety of occupations throughout his lifetime.

Occupations are often unintentionally gained by a character. For example if a character is captured by enemies, his Occupation could become "prisoner" in contrast to his player's intentions.

Occupations are often development goals for a character. For example a character may want to join a "town guard" to have better access to weapons for defeating a public enemy, and successfully changing his occupation to "town guard" could be a significant accomplishment for that character.

Inventory Management or Acquiring and Losing Equipment

A character's modifiers when using an item (or the item's modifiers when used by a character) are listed in the equipment section of the character sheet. When adding equipment to the character sheet, copy the **heft**, **cover**, **absorption** and **sharpness** from the equipment list to the character sheet. The rest of the values are determined by comparing the character's modifiers to the item's modifiers, and may be different from the values listed on the equipment list for that item. (See *Character Creation/Character Sheet* and *Game Design/Equipment*.)

Qty (Quantity)
The number of these items a character has. When a character loses an item, reduce it's quantity (Qty) by 1 and reduce it's mass by the mass of one item. If the character has no more of that item (it's quantity is zero) you may remove it from the character sheet.

Mass
The item's mass in kilograms (kg) multiplied by the quantity (Qty). When a character gains or loses equipment, recalculate the total mass of the character's equipment (Equip. Mass) and the character's encumbrance. If the character's encumbrance has changed, update the character's Spd-Enc (speed - encumbrance) and movement. (See Character Creation/Encumbrance and Movement.)

Cmb (Combat Modifier)
The combat modifier for a hand weapon is the modifier of the ability the character uses with this weapon plus the character's agility. The combat modifier for a missile weapon is just the ability the character uses with the weapon. Combat modifier is added to the success of attacks with the weapon.

When a character is attacked with a hand weapon they may add the combat modifier of any one weapon they are currently using to their defense roll. When a character is attacked with a missile weapon they use their agility instead of a combat bonus for their defense roll.

Pwr (Power)
The character's power or the weapon's power, whichever is greater.

Rch (Reach)
The reach of a hand weapon is the reach of the hand wielding the weapon plus the weapon's reach modifier. The reach of a missile weapon is just the weapon's reach modifier.

Special modifiers are listed with the abbreviation for the special modifier between the name of the item and the quantity. Some special modifiers are copied directly from the equipment list to the character sheet. Others are determined by combining the character's modifiers and the item's modifiers.

Atk (Attack)
Combat modifier plus the weapon's attack modifier. This modifier is used instead of combat modifier when attacking.

Grp (Grapple)
Combat modifier plus the weapon's grapple modifier. This modifier is used instead of combat modifier when grappling.

A/G (Attack and Grapple)
Combat modifier plus the weapon's attack and grapple modifier. This modifier is used instead of combat modifier when attacking or grappling.

Par (Parry)
Combat modifier plus the weapon's parry modifier. This modifier is used instead of combat modifier when the character is attacked by a hand-to-hand attack.

Making Equipment

Creating Armor and Weapons

When a character creates a new weapon or armor, add up the character's modifiers and roll against a difficulty level of zero. They may spend 100 CP times the success level of the roll on the new weapon or armor's attributes. (See *Game Design/Equipment/Equipment CP*.) A character's modifiers to the item creation roll include craftsmanship abilities, time invested, industrial influence (technology available to the character) and tool quality:

Cover
Cover reflects the chance that an attack will be blocked by this weapon, shield or armor. The chance that an attack will target the particular area protected by this item is as important as the amount of that area actually covered. For example, a helmet covering the head (a very important target) might have the same cover as armor completely protecting the feet and shins (more area, but not as important as the head.)

Heft
Heft is related to a weapon's mass and power. (See Game Design/Equipment.)

Power
Power is related to a weapon's heft and mass. (See Game Design/Equipment.)

Sharpness
Blunt weapons, including most punches and kicks, have a sharpness of 4. A weapon with a sharpness of 1 or 0 is extremely sharp. The sharpest natural claws, quills and teeth have 2 sharpness.

Modifier	Time Invested	Industrial Influence	Tool Quality
+1	15 min	Stone age	Makeshift / lacking materials
+2	30 min	Bronze age	Low quality / cheap
+3	1 hour	Iron age	Typical / mediocre
+4	2 hours	Steel age	High quality / expensive
+5	4 hours	Industrial age	State of the art / very rare
+6	8 hours	Machine age	
+7	16 hours	Cybernetic age	
+8	32 hours	Future age	

(You can keep adding 1 to the time invested modifier by doubling the time)

Make an Item - Equipment Generation Example

We will use our Modre character from the character creation example to make a new weapon. (See *Character Creation/Make a Character*.) Modre has craftsmanship ability with a modifier of 2.

1. Add up Modifiers

We start with Modre's +2 craftsmanship ability modifier. Modre works on the weapon for 4 hours, so we add +5 for time invested. Modre is using stone age technology, relying mostly on things he can find floating around on ice bergs. We add a +1 modifier for his access to this "stone age" technology. The bone chisels he uses are considered "typical" for his stone age technology, giving him another +3 modifier and making the total modifier +11.

2. Roll vs Zero

The next step is to roll the total modifiers versus zero to get the success level of the Modre's attempt. Let's say we roll a 1, for a total of +12, and the opposing roll is a 6, so the success level for this action is +6. We multiply the success level by 100 CP and find that Modre can make a weapon with 600 CP.

3. Distribute the CP

We decide Modre is making an "ice blade". The mass of the ice blade is 0.5 kilograms, worth -350 CP, raising our total to 1150 CP. We use 300 CP because the ice blade's leverage is 2 (6 power minus 4 heft) leaving 850 CP. We use 600 CP for 2 sharpness leaving 250 CP. We use 200 CP to get 1 meter reach for the ice blade. There is nothing we can do with the last 50 CP, so the actual value of the ice blade turns out to be 550 CP instead of 600 (600 - 50 = 550 CP.)

Modre had a +2 ability modifier for making ice weapons, spent 4 hours working on the ice blade, used typical tools and stone age technology, and did poorly on his roll (his 1 versus the opposing 6) to give us a total of 600 CP for making the ice blade. The weapon has 4 leverage, 1 meter of reach, 4 power and 1/2 sharpness. A weapon with the ice blade's 4 heft should weigh about 0.5 kg. (See *Game Design/Equipment*.)

Item Name	Special Modifiers	CP	Mass	Heft	Reach	Pwr	Shp
Ice Blade	(no special modifiers)	550	0.5 kg	4	1.0 m	3-6	2