

5a. Designing Equipment

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This section deals with creating equipment with characteristics appropriate to your game world. It is entirely optional, and you can play with just the basic equipment list and any extended equipment included in your setting supplement.

Determining Value

This is a quick way to determine an item's Value. Use it only when there is no other construction procedure. It provides a basic procedure you can apply to almost everything.

Standard Value

Common items have a standard Value. This represents the effort needed to produce the item, not a Basic Score. Remember that the Value of an item is not an absolute rating, but is relative to its Wealth level. A particularly elaborate item might have a relatively low Value because its Wealth level has been increased to avoid giving it a Value rating above 20.

Basic Score and Modifications

The Value of an item depends on two separate factors: the Basic Score of the item (speed, toughness, etc.); and its Modifications. Not all items possess both factors.

The Basic Score is a rating you can use instead of a characteristic to determine the size of the starting Resolution Point pool in a generic Conflict. Some items might have two or more Basic Scores, like Speed and Manoeuvrability for an aircraft. Modifications are components that are not used to replace characteristics in Conflicts, but are nevertheless important in Conflicts. Some Modifications have a numeric Value.

When both factors are present, there is usually one which is prevalent and is used to determine the item Value. For instance, a sailing Conflict will use a ship's Seaworthiness Score, so the most important factor when trying to build a ship is its Seaworthiness, rather than its Modifications.

Items with Basic Score only

The effects of some items can be summarized by their Basic Score. A good example of an item whose effects in game are fully described by a simple rating could be an Antidote for poisons (describes by its Might, see Chapter 3) or intrusion software, described by a Penetration score which will be matched against the Security rating of the system it is attempting to violate, or the Intelligence of a human guardian who is actively trying to block the hacking attempt.

Items with Modifications only

When an item cannot be used as the base for a Conflict, but has important attributes that make it useful and desirable, then its Value is based on its Modifications only.

Many items connected to a Power lack a Basic Score, and calculate their Value only on the Modifications that specific Powers imbue them with. The Value of such items can be determined by adding up the numeric ratings of their Modifications and consulting the following table, which takes into account the number of uses of the item.

Item Modifications and Value

Type of Item	Value
Magic Scroll	Modification sum x3
Spell Matrix or other permanently enchanted item	Modification sum x4
Potion or Drug	Modification sum x3
Scientific Gadget	Modification sum x4
Scientific Gadget, one-use	Modification sum x3

Note that some enchantments do have a Basic Score (Might) instead of several Modifications. In this case, treat them like items that have the Basic Score only.

Items which add Modifications to a base Value

To design an enhanced version of a common item, start with the standard Value for the item and add Modifications for enhanced attributes. The available Modifications are listed in the specific rules for the design of that kind of item, and each sub-system or setting may introduce new Modifications.

For example, the Narrator wishes to define an herbal salve that bestow a Bonus to their user's First Aid rolls. Treat the item as a one-use scientific gadget to which we are adding the equivalent of the Improve First Aid power (see Chapter 6) which has the Might Attribute with a rating of 2. The item works on a Target so there is another numeric Attribute to consider, Target 1. The total Modification rating of the item is 3, which we have to multiply by 3 for a one-use, semi-permanent item, obtaining a Modification rating of 9. We add this to the base Value for a First Aid kit which is 3 (see the equipment list) for a total Value of 12 (120 credits in cash).

Should we try and design a Healer's Kit with the same effect on the Healing skill, the multiplier would become x4, as the item is not consumed after use, and the base Value is in this case 8, with a starting Wealth of Affluent. We have a Value of 20 (8 base Value + 3 Modifications x 4 = 12), which translates into a Value of 10 with an improved Wealth level of Rich (1000 credits in cash).

Items with separate Basic Score(s) and Modifications

Some pieces of equipment have both a Basic Score that can be used as the Resolution Point pool in a Conflict, and a sum of features or Modifications that allow special actions during a Conflict or Advanced Combat. Some items may even have more than one Basic Score.

When designing or building such an item, a manufacturing team must beat the sum of all these different scores in a single Conflict. This represents the inevitable compromises one has to make, like the balance among speed, handling and equipment when designing a military vehicle. Only by neglecting one of these aspects to optimize the others does the Resolution Point Pool reach a level that the designers can hope to beat.

When repairing an item with separate scores, instead, beating the specific rating that was damaged is usually enough. If the damage affects the Modifications, it is more appropriate to assign Consequences as damage and have the repair crew beat them.

Example: Consider a Martian airship. It is average in terms of agility, so we assign it a Manoeuvrability factor of 10. It is reinforced, so we assign it a Toughness Value of 12. These two ratings are Basic Scores in our game. The main engine is the first equipment and it costs 4 points as it provides a rated Speed of 4. We add 3 points of hull armour and two weapon mounts, plus one standard cargo bay. This gives a total of 10 points of Modifications.

To create this ship or its blueprints, a team of engineers must beat the sum of three different Values: 12 for Toughness; 10 for the Modifications; and 10 for Manoeuvrability, for a total of 32. If the ship has been hit and has taken only minor structural damage, beating its Toughness in a Repair Conflict should be enough. If some systems have been hit, repairing them will probably require also a second Conflict vs. the Modification score or some Consequences, at the Narrator's option.

Designing armour

Historical armour varied even more than historical weapons, and fantasy iconography provides an even broader variation of plausible and slightly less plausible armour suits and combinations. This section allows you to create armour that fits the culture you are portraying in your game. The rules will let you find a Value for Armour Points, Coverage and Encumbrance for your custom armour elements. The guidelines will also give you an idea of the armour Value, but since this depends also on context, this parameter may require some hand-waiving on your part.

Spaces and Coverage

Each target covered by an armour element, whether the whole body or a location, has ten spaces that armour can protect, corresponding to the ten possible results of an armour Coverage roll, from 0 to 9, with 0 being the lowest Value. Some armour components can cover all ten spaces, while others can only cover some. The ability that an armour component has to cover the maximum number of spaces corresponds to its Coverage attribute.

Armour Layers

Each armour element consists of one of the two main layer types, padding or plating, plus joints if the armourer adds reinforced articulations. The type of armour layer determines the starting Coverage Value for the armour element.

Padding is the materials worn on the body. It must be soft and pliable. Typical padding is made of cloth layers (gambeson) or leather. Padding has a starting Coverage Value of 1+.

Plating is the armour main protection, and must be worn over padding. Plating has a Coverage Value of 3+.

Joints are the mobile areas that connect the plating elements, allowing you to move while protected from damage. They are usually made of soft materials similar to padding, but advanced crafting techniques allow joints made of rigid armour, like the articulations of gothic suits. Joints always have a Coverage Value of 0+, regardless of modifiers for materials or location, which means that an armour element with reinforced joints can cover all spaces that plating or padding cannot cover. However, joints greatly increase the armour encumbrance and cost.

Designing the armour element

To start the design process, determine the type of element you are creating, either suit or piece, and the location it covers. Treat armour pieces that cover different locations as being separate for armour design.

Consider the layers of your armour element one at a time, and determine the starting Coverage for that layer. Then modify it for the type of armour element and the materials used, according to the tables that follow, in order to determine the final Value for Coverage. Starting from the one with the Coverage number you have determined, all spaces in your armour element will be occupied by the armour materials you chose for it. The remaining spaces remain uncovered, although they might still be protected by another layer.

Allocating spaces

For each of the ten spaces in the armour element, assign the materials you wish to use for the appropriate layer. Start with padding, and then add plating. Both must cover the spaces with the highest numbers (up to 9) allowed by their Coverage. You can assign fewer spaces to a component to save on weight and cost. Each space covered by plating is assumed to have also padding underneath, but the latter does not count for AP and Encumbrance determination.

Example: We design a lamellar armour suit made of iron strips (plating layer 3+, modified by +1 for materials to 4+). Beneath we position chain mail (padding layer 1+, no modifications) The final allocation of materials to spaces will be as follows. Note that we have not recorded the mail when it is underneath the strips.

Layer	0	1	2	3	4	5	6	7	8	9	Total
Padding		Mail	Mail	Mail							
Plating					Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	

All spaces you cannot cover with plating or padding can be covered with joints. Note that while adding certain materials as padding is usually more convenient, padding is subject to Coverage limitations, and thus it is likely that it cannot cover all the spaces. The only way to offer total cover, particularly for limbs or the head, is that of adding the more expensive and cumbersome joints. You might also need to use different materials for joints as not all materials are fit for this purposes.

If you are adding joints, the minimum final coverage for the padding layer will be 0+. However, the Value for minimum padding coverage will determine which spaces are considered joints. All spaces that could not be normally covered are marked as joints and have an increased cost and encumbrance.

Example: If we determine that our lamellar suit is accompanied by mail joints to cover the unprotected parts of the body, the final allocation of materials to spaces will be as follows.

Layer	0	1	2	3	4	5	6	7	8	9	Total
Padding	Mail joints	Mail	Mail	Mail							
Plating					Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	

Evaluating AP and Coverage

The armour points of an armour layer depend on to the materials used for it. Its Coverage is determined by the assigned space with the lowest number.

Example. In our lamellar armour example, iron strips are AP 6 and chain mail AP 5. We note the AP and Coverage in the totals column.

Layer	0	1	2	3	4	5	6	7	8	9	Totals
Padding	Mail joints	Mail	Mail	Mail							5/0+
Plating					Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	6/4+

Evaluating Encumbrance and price

In order to determine the encumbrance of an armour element, multiply the Enc Value by the spaces covered by that armour. The Value for Enc is different for those spaces covered as plating or padding, and those covered as joints, even if the materials is the same. Multiply by the Enc multiplier provided in the Armour Element Table (ten for an armour suit), and add up the total Enc for each location. Finally, divide by 100 and round fractions up to obtain the total Enc of your armour.

Repeat the procedure for price, but do not divide the final total. This is the cost of the full suit of armour. According to the Price and Value table, Value is usually equal to the price divided by 20 (10 for completely non-metal armour), with the armour suit being of Average wealth level. If Value goes beyond 18, divide the cost by 100 instead and make it Affluent level. If it is still beyond 18, divide it by 500 and make it Rich.

Example: In our lamellar armour with mail finishing, we have the following Values for encumbrance and cost per space.

Layer	0	1	2	3	4	5	6	7	8	9	Totals
Plating					Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	Iron Strips	6/4+
Padding	Mail joints	Mail	Mail	Mail							5/0+
Enc.	8	5	5	5	7	7	7	7	7	7	65
Price	30	8	8	8	18	18	18	18	18	18	162

We are designing an armour suit, so we multiply both Values by 10. The encumbrance is thus $650 / 100 = 6.5$, rounded up to 7, while the cost is 1620 credits, which corresponds to a Value of 17 (Affluent level).

Remember to only count the outermost layer of armour. AP, price and weight for the innermost ones are already counted.

Element type table

The Armour Element Table determines the Coverage modifier for the element you are adding to your armour. Since lower Coverage Values are better than higher ones, positive modifiers are detrimental while negative modifiers are advantageous. It also determines the number by which you must multiply the cost and encumbrance before adding them to the totals.

Armour Element Table

Armour element	Coverage	Encumbrance multiplier
Full Suit	-	10
Head	-	1
Arm (or quadrupedal leg)	+1	1 (each)
Torso	-1	3
Leg	+2	2 (each)
Tail	+3	2

Material tables

The materials used for your armour elements influence their APs, cost and encumbrance, but they can also modify the Coverage of the element. Not all materials can be used to produce all armour components. The tables below provide the base parameters for historical/fantasy and hi-tech armour materials.

Fantasy/ Historical Armour Material Table

Materials	AP	Coverage	Encumb. (plating)	Encumb. (padding)	Encumb. (joints)	Cost	Cost, Joints
Pliable leather	1	-	-	1	2	1	2
Cloth (1 layer, heavy)	1	-	-	2	-	0.1	-
Cloth (multi-layer)	2	-	-	3	-	1	-
Fur, hides	2	+1	-	5	6	2	5
Mail	5	-	-	5	8	8	30
Leather scales	4	+2	4	-	-	4	-
Bronze scales	5	+2	8	-	-	8	-
Iron scales	6	+2	8	-	-	10	-
Leather strips	4	+2	4	-	-	6	-
Bronze strips	5	+1	7	-	-	15	-
Iron strips	7	+1	7	-	-	18	-
Iron bands	8	+2	8	-	-	20	-
Leather plating	4	+2	4	-	-	7	-
Bronze plating	6	-	10	-	-	15	-
Iron plating	8	-	10	-	15	20	100

Hi-Tech Armour Material Table

Materials	AP	Coverage	Encumb. (plating)	Encumb. (padding)	Encumb. (joints)	Cost	Cost, Joints
Pliable leather	1	-	-	1	2	1	2
Cloth (1 layer, heavy)	1	-	-	1	-	1	-
Kevlar	10	+1	7	-	-	12	-
Flexi polymers / silk	3	-	-	2	5	5	15
Resin	6	-	3	-	-	3	-
Steel plating	12	-	9	-	9*	10	50*
Reflec plastic**	6	-	4	-	5	20	30

[*] - modern armour makers no longer create joints with plate, so this option is only available at the Narrator's discretion.

[]** - this armour has an Absorb Light Might 2 to protect the wearer from lasers.

Localised armour example

A warrior wears headgear that consists of mail padding with Coverage 1+ and an open helm (plating) with Coverage 6+ will. To avoid the vulnerability of the zero slot we add plate joints (a visor). This single space would add more Enc and cost more than one of the spaces covered by the regular helm.

<i>Layer</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>Totals</i>
<i>Pad- ding</i>	<i>Mail</i>	<i>Mail</i>	<i>Mail</i>	<i>Mail</i>	<i>Mail</i>						<i>5/0+</i>
<i>Plating</i>						<i>Plate joints</i>	<i>Iron Plate</i>	<i>Iron Plate</i>	<i>Iron Plate</i>	<i>Iron Plate</i>	<i>8/5+</i>
<i>Enc.</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>15</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>80</i>
<i>Price</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>100</i>	<i>20</i>	<i>20</i>	<i>20</i>	<i>20</i>	<i>180</i>

On the torso, the +1 bonus to Coverage allows the mail padding to cover everything.

[illegible]

On the limbs, the warrior chooses to wear leather boots and gloves over the parts that cannot be covered by mail padding. Chain leggings and gauntlets would provide a better protection, but they would count as joints, thus adding a lot of encumbrance and cost. Not all warriors can afford to carry such a weight, or to pay for the extra price.

Arms

[illegible]

Legs

Layer	0	1	2	3	4	5	6	7	8	9	Totals
Padding	Lea-ther	Lea-ther	Lea-ther								1/0+
Plating				Mail	Mail	Mail	Mail	Mail	Mail	Mail	5/3+
Enc.	2	2	2	5	5	5	5	5	5	5	41
Price	2	2	2	8	8	8	8	8	8	8	64

In this example, the Encumbrance and cost would be:

Location	Encumbrance for Components	Encumbrance	Price for Components	Price
Head		75		180
Torso	50 x3	150	80 x3	240
Arms	44 x2	88	68 x2	136
Legs	41 x4	164	64 x4	256
Total		477 (Enc 5)		816 (Value 9, Affluent)

Our armour suit would have an Encumbrance of 5, a cost of 816 credits, a Value of 9 and a Wealth level of Affluent. It is typically the armour suit for a full time warrior on whom a feudal lord has invested some money.

The final armour Value for our warrior is thus:

Head: 5/0+, 8/0+

Arms: 1/0+, 5/2+

Torso: 5/0+

Legs: 1/0+, 5/3+

Write down the statistics for this armour suit and use it as an alternative to the pre-generated mail hauberk found in the first part of this chapter.

Player Characters crafting armour

When crafting armour, you will normally not enhance it with Modifications, but rather experiment with weird materials and configurations, so the normal procedure given in the armour design section should be enough to compute the overall Value of the armour element that a Player Character wishes to create. The character follows the standard procedure for items and create the armour in a Crafting Conflict. The Narrator may allow you to craft armour one piece at a time, but this should not reduce its Value in a significant way.

Designing close combat weapons

This section will let you create weapons of your own invention with the same algorithms we used to create the sample weapons provided in the tables. To design a weapon, you must determine its type, its reach and the materials with which it is made.

A weapon's reach (abbreviated in R in this section) is the distance in decimetres from its tip to the point where the wielder usually keeps his or her grip on the weapon. Even if some weapons allow a change in grip (see the Stunt section in Chapter 4), there is usually a default or average position for that weapon. A weapon Reach is added as a bonus to Melee Strike Rank in Advanced Combat when. Once you have determined a weapon Reach and its type, the two sections and tables below will let you find its other attributes.

Weapon Category and Toughness

All weapons belong to one of the basic categories of light, heavy or two-handed. The Reach at which a weapon becomes heavy or two-handed varies according to weapon types. The table below specifies these Reach intervals and the Toughness a weapon of that type and category usually has, as well as the typical materials with which the weapon is made.

Weapon Category and Toughness table

	Light			Heavy			Two-handed		
Weapon type	Reach	Tough	Weight	Reach	Tough	Weight	Reach	Tough	Weight
Club/staff	1-3	6[w]	R/6 kg	4-5	8[w]	R/6 kg	6+	10[w]	R/6 kg
Sword-club	1-6	8[w]	R/5 kg	7-8	10[w]	R/5 kg	n/a		
Hafted weapons (axe, mace, hammer, etc.)	1-3	6[mw]	R/4 kg	4-5	8[mw]	R/4 kg	6+	10[mw]	R/3 kg
Flails	1-4	6[mw]	R/4 kg	5-9	8[mw]	R/4 kg	10+	10[mw]	R/3 kg
Spears and polearms	1-6	6[w]	R/6 kg	7-9	8[w]	R/6 kg	10+	10[w]	R/5 kg
Sword, ancient or medieval	1-7	8[m]	R/6 kg	8-9	10[m]	R/4 kg	10+	12[m]	R/3 kg
Sword, modern; dagger	1-8	8[m]	R/6 kg	n/a			n/a		
Shield	1-4	R*3 [w]	R*1.5 kg	n/a			n/a		

[w] wooden weapons [m] metal weapons [mw] – these weapons damage other weapons as if they were metal weapons, but take damage as if they were wooden weapons

Other weapon attributes

Consult the table below to find the weapon other attributes. Always round up when dividing. If two Values are listed for damage, the second one is used only for a two-handed version of that weapon (that is, a version that can be used only two-handed such as a polearm). The STR Value refers to the amount of Strength needed to use the weapon two-handed, unless the weapon is light. Add four to use a heavy weapon one-handed, and add two to the one-handed Value to use a weapon in the off hand.

Melee weapon category table

Weapon type	Typical Reach	Attack Cost **	Parry Cost **	Damage	STR	Parry	Wealth	Value ***	Notes
Axe, wood	3 to 5	R*2	R	1d(R*2-3)	R*2+1	R/2	Poor	R	+1 Might, Slash (advantage)
Axe, battle	4 to 8	R*2	R	1d(R*2-2) or 2d(R)#	R*2+1	R/3	Average	R*2	+1 Might, Slash (effect)
Club	2 to 8	R	R/2	1d(R) or 2d(R/2)#	R+1	R/4	Poor	R*2	+1 Might
Sword/club	4 to 8	R	R/2	1d(R)	R-1	R/4	Poor	R*2	+1 Might, Slash (advantage)
Staff	4 to 8	R	R/2-1	1d(R/2)	R-1	R/3	Poor	R	+1 Might
Mace/Maul	3 to 8	R*2	R	1d(R) or 2d(R/2+1)#	R*2-1	R/2	Average	R*2	+2 Might
Hammer	3 to 8	R*2	R	1d(R) or 2d(R/2+1)#	R*2+1	R/2	Average	R*2+2	+1 Might, Impale (effect)
Flail	4 to 8	R*2	R	1d(R-2) or 2d(R/2)#	R+1	R/3	Average	R*2+2	+1 Might, Entangle (effect), Penalty to Parry

Spear	6 to 18	R	R/2	1d(R/2+1)	R-5	R/5	Poor	R	Impale (effect), Keep distance (auto)
Polearm	8 to 12	R or R* 1.5 ##	R/2	2d(R/2) or 1d(R-2)##	R+1	R/4	Affluent	R	Impale (advantage), Keep distance (auto)
Sword/Dagger	2 to 12	R	R/2	1d(R) or 2d(R/2)#	R+1	(R+1)/4	Average	R*2	Impale (advantage), Slash (effect) ###
Shield	1 to 4	R	R/2	1d(R)	R*3	R	Average	R*2	Block, Coverage +(R-1)
Whip	5 to 6 (metres)	R*2	-	1d2	R	-	Poor	R*2	Entangle (effect), ranged attack

[*] - may require a Stunt.

[**] - minimum cost is 3 for attack and 2 for parry.

[***] - when Value goes beyond 20, halve it and increase the Wealth level by one.

[#] - for bludgeoning weapons, minimum 2d3 to have a double-die damage. For cutting weapons, minimum 2d6.

[##] - these weapons can be used to thrust or to cut. When two Values are given, the first one is for thrusting, the second for cutting.

[###] - weapons in the standard list have already been modified with special features to reflect the great variability of historical swords.

Modifications

The table below specifies the most common Modifications for weapons. Some are beneficial, and are used to improve the weapon performance, while others are detrimental and are used to decrease the weapon Modification rating when designing it.

Modification	Value	Notes
Increase/Decrease Occurrence of a combat effect	+2/-1 per effect per level of occurrence	Decreasing one level from “advantage” removes the effect altogether. A previously absent effect starts at “advantage”. Only one increase is possible, except for polearms, axes and hammers with a secondary head.
Increase/Decrease STR requirement	-1/+2 per STR point	Increasing STR requirements decreases the total Modifications score, and vice versa.
Increase/Decrease damage	+10/-4 per die step	
Increase/Decrease parry	+5/-2 per point	
Increase/Decrease toughness	+1/-1 per point	Double cost to increase Toughness of wood
Increase/Decrease SR cost for Attack and Parry	-2/+5 per SR	Attack and Parry costs are modified separately. Minimum cost is 3 for attack, 2 for parry
Increase quality of material	+2 per step	When upgrading from wood to metal this often represents a reinforcement, not a weapon with a haft made entirely of metal.

Many weapons have some specific feature that are so common that they are included as default to that type of weapon, or to that specific weapon in its type. Standard hammers used for war have a Modification that allows them to impale, so the improvement cost is included in the standard Value rating of a hammer. Similarly, the rapier is modified to become a primarily thrusting sword, so these Modifications are integrated in its Value and price.

Let us design a beaked axe. The standard specimen of battleaxe has a Value of 8. To add two levels of the Impale effect we need to add a +4, which brings us to a Value 12 weapon. This will bring the cost of our axe with an Impale (effect) attribute to 240 credits, more than a normal battleaxe.

A standard dagger has Value 9. To increase its Parry to the same levels as a sword (2) we need +5, which brings its Value to 14. We can increase its STR requirements by two to recover two points, bringing it to a STR 6 weapon with 12 Value. Given that it will require STR 8 to use it in the off hand, it is not convenient to increase STR requirements any more. Essentially, we have created a Main Gauche. What about going the Japanese way instead? By completely dropping the Slash effect we recover 3 points, and recover another point from increasing STR to 5 (7 in the offhand). Having dropped Value to 5, we can now add 1 to Parry (+5) and add the Entangle (advantage) attribute (+2) and we still have a Value 12 weapon that your average artisan can reliably craft. Ladies and gentlemen, let us introduce the sai, a favourite weapon of comic book assassins.

The Modifications you apply might bring the weapon Value beyond the threshold of 18-20, in which case the standard rule for Value recommends to halve the rating and increase the Wealth level of the weapon. However, this is only applicable when you try to purchase such an item. Crafting a non-standard weapon requires that the artisan faces the entire Value as opposition in a Conflict. The Narrator may even require that when Value goes beyond 20, the Conflict to craft a weapon or other item be against the full Value, but the Challenge Rating be modified as though the weapon were in fact of another Wealth level.

Designing ranged weapons

Grenades, Explosives and Molotov cocktails use the Throw trait, and the procedure for damage calculation is in the Science (as a Power System) section of Chapter 6, even for those that are the equivalent of a real world grenade. The same goes for energy weapons. Use the rules for Weird Science Gadgets to modify their energy clips or the weapon themselves.

Historical/Fantasy Ranged Weapons

Ancient projectile weapons are classified according to four basic types: sling, bow, crossbow, and flintlock/wheel-lock firearm. Some variations existed historically, particularly for later version of firearms, but in general only a few variants are available per setting. Modifications are more likely to be applied to ammunitions than to weapons.

The exception to this are bows, which might have a wide range of variants. More detailed rules for bows will appear in our medieval historical supplements.

The base attribute upon which the derived scores are based is the weapon typical STR (S), which is different from the user required STR. The weapon damage depends on the projectile, but the Might of the weapon depends on its intrinsic STR, and is usually calculated as if it was the might of a character with that STR using a thrown weapon, including the two-hand weapon use bonus. Some categories receive a further bonus to Might, as per weapon table.

Ranged weapon category table

Weapon type	Typical STR	Might	SR to fire	Projectile	Range	User STR	Reload Cost*	Wealth	Value	Notes
Sling	6	S/5	5	Stone/ Pellet	(S+4) *10	S+3	10	Poor	S/2	
Bow	6 to 11	S/5 -1	5	Arrow	S * 25	S+3*	5	Average	S+4	* S for composite, S+1 for longbow
Crossbow	11 to 16	S/5	3	Quarrel	(S-1) * 20	S-3	S/5 rounds	Average	S-1	Hand carried
Vintage Pistol	3 to 6	S/5	S/5+4	Bullet	(S-1) * 10	S+1	S/5 rounds	Average	S+1	
Arquebus/ Musket	11 to 21	S/5	S/5	Pellet/ Bullet	(S-1) * 10	S/2+1	S/5 rounds	Average	S-1	Hand carried
Revolver	6 to 10	S/5	S/5+3	Bullet	S*5	S+3	1 round/ shot	Average	S	Automatic
Pistol	6 to 10	S/5	S/5+3	Bullet	S*5	S+1	10	Average	S+2	Automatic
SMG	6 to 15	S/5	S/5+2	Bullet	S*20	S+1	10	Average	S	Burst Fire 3+
Rifle	11 to 25	S/5	S/5	Bullet	S*30	S/2+1	10	Average	S/2	Hand carried
Assault Rifle	16 to 25	S/5	S/5	Bullet	(S-1)*20	S/2+3	10	Average	S	Burst Fire 3+, Hand carried
Shotgun	11 to 20	S/5	S/5	“Slug”/ Shell	S*2	S/2+2	1 round	Average	S/2	Often double barreled
Beam weapon	2 to 4	S	S#	Energy	S+1##	S*2+ 1#	10	Average	S*5	

Ammunition

Ammunition for historical weapons present a wider variation. Apart from the wide range of historical variants for arrows, you may want to create some special types of projectiles crafted from peculiar materials present in your fantasy world. The following table lists the base attributes for the various types of projectiles.

Ammunition table

Ammunition type	Weapon	Damage	Range*	Value**	Notes
Pellet, stone	Sling	1d4	50 (S)	1	
Pellet, lead	Sling, Arquebus	1d6	80 (S)	2	
Arrow	Arrow	1d6	300 (M)	8	Impale (effect)
Quarrel	Crossbow	1d10	500 (L)	10	Impale (effect)
Bullet (vintage)	Firearms	1d6	300 (M)	12	Impale (advantage)
Bullet, 5mm+	Rifle	2d4	1000(XL)	16	Impale (effect), Burst
Bullet, 7mm+	Rifle	2d6	700(L)	14	Impale (effect), Burst
Bullet, 9mm+	Gun, Rifle	1d8	300 (M)	10	Impale (effect), Burst
Bullet .44-.45	Gun, Rifle	1d10	300 (M)	12	Impale (effect)
Slug	Shotgun	1d10	100 (M)	10	Impale (effect)
Shell	Shotgun	2d4	20(C)	2	Lose 1d4 per zone travelled
Energy cartridge	Beam weapon	Per energy	1000 (XL)	15	

[*] – The actual range is the shortest one between the weapon range and the projectile range.

[**] - Value refers to a set of 20 projectiles. Wealth level is always average.

[***] - Damage is per might.

Modifications

The Modification table below allows you to personalize ammunition, and we recommend that you add more features for fantasy worlds.

Modification	Value	Notes
Increase/Decrease Occurrence of a combat effect	+5/-2 per effect per level of occurrence	Decreasing one level from “advantage” removes the effect altogether. A previously absent effect starts at “advantage”. No effect can be increased beyond “effect”.
Add/Remove Burst	+4/-2	Also applies to weapon.
Increase/Decrease damage for kinetic weapons	+10/-4 per die step	Shells gain 1d4 instead.
Increase/Decrease Might for energy weapons	+15/-5 per Might	Only one Might possible, and the modification applies to the weapon, not the ammunition.
Add/Remove automatic	+4/-2 per Might	Modification applies to the weapon, not the ammunition.
Increase/Decrease range	+2/-1 per 50m	
Increase/Decrease clip size	+2/-1 per shot	Same price for adding/removing 2 Might to energy clips