OPEN RULEBOOK SYSTEM
for Computer Roleplaying Games (CRPGs)

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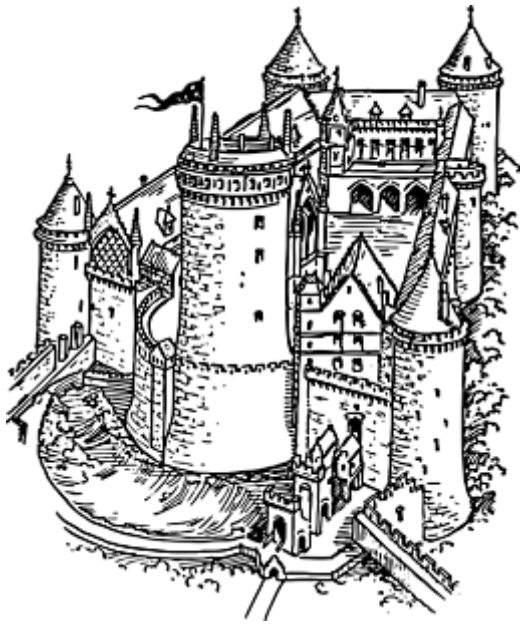

About

This rulebook system, called Open Rulebook System (ORS) is designed to be used by CRPGs games and it's completely free to use. The license applies always to current version so if you have a previous version of this rulebook, your version applies to your software, regardless of any newer version.

This rulebook is dedicated to provide a role playing system similar to pen & paper systems but completely free, simpler for CRPGs and outside of any legal concerns. This rulebook aims to offer a complete system than can be used exclusively in CRPGs.

Changes that made by others & applied on this material, can be used both personally & commercially by others as well, although the original content (the system) should be referenced in this case.

Contents

1. Planeverse

Our own world is just one plane of existence. There are many other planes, woven together into what called a “Planeverse”. A plane is just another reality in the same space that we call “Universe”. Therefore, the planes can overlap themselves in space. Most of these planes are materialistic, formed in one way or another by the prime elements of nature such as fire, earth etc.

Planes are vast, cosmic creations that require astonishing amounts of energy to create and even more to maintain, therefore only gods can form them. Most gods have created their own planes of existence.

1.1. Planes of existence

Name	Description
Natural Plane	The primary plane. Birth & death by nature is the base law on this plane.
Vortex	A foggy and lifeless plane that exists between the planes and it's used primarily to connect the planes together.
Fiery Plane	The Fiery plane is a vast sea of flames and smoke, interrupted only by gigantic burnt rocks and coal. Only parties with extreme resistance to fire can withstand this hell of a place.
Water Plane	The Water plane is just a vast sea of unmeasurable depth. There are silent regions with no waves and regions full of whirlpools and titanic waves. Not a place for walking parties.
Terra Plane	The Terra plane is a solid plane made completely out of stone, mud, soil and about any mineral in existence. Even the fact that you can walk through it is because it has been dug down by the plane’s inhabitants.
Aerial Plane	The Aerial plane is a vast, groundless and cloudy place. There's no gravity here and no sense of depth at all.

2. World

The **Planeverse** is a vast place, although not without rules, at least in the *Natural Plane*. The party can move, can get hungry, buy stuff, need to rest & there’s a day-night cycle like in real life. All this may sound too obvious & perhaps a time of waste to even consider, but in a CRPG, a set of rules will be required to restrict things in favor of common sense & balance.

2.1. Time

The time can be broken down into *minutes, hour, day, month & year.* There are no different rules than the ones already used in our reality, so **60 minutes** makes up an hour, **24 hours** makes up a day, **30 days** (strict) make up a month &

12 months make up a year. Time can be increased through the following ways:

- Time is increased by one (1) minute when the party **moves**
- Time is increased by one (1) minute when a player makes a **combat action**
- Time is increased by eight (8) hours when the party performs a **long rest**
- Time is increased by a period when party makes a **rest until fully healed**
- Time is increased by a period when party **travels** to another map

2.2. Lighting

There are various states of lighting in the world environments. Those environments can be either interior (interior) or exterior (etc. forest). Lighting can be modified either by *environment* (i.e. daylight) or *equipment/magic* (i.e. torch, spells).

Interior areas can provide the following lighting states:

- **None** – Usually encountered in interior areas, such as dungeons. Visibility is really low, allowing up to one **(1) visible square** before everything gets pitch black.
- **Normal** – Stronger lighting that *none*. An interior area can be lit for up **two (2) visible squares** & perhaps more but the rest remains pitch black.

Exterior areas can provide the following lighting states:

- **Day** – Very strong lighting.
- **Night** – Strong lighting.

2.3. Movement

Moving in the world is very context-related i.e. on *dungeon crawlers* the movement could be done **by grid**, one at a time, while on open *3D games* there's typically *free movement*. However, there are some simple rules:

- For **every movement** the party makes, there is also a movement for all monsters, NPCs etc. A creature might prefer to not move on its turn but it always takes a chance to do that. A non-move is also considered a move.
- Monsters, NPCs have an **initial position** i.e. their starting position. They can move randomly or chasing you down i.e. monsters, but they can't move

further from their initial position after some distance. This keeps monsters, NPCs population in certain places. See below for more information.

- Movement is not allowed through objects considered as **obstacles**. These objects includes trees, monsters, walls etc. General rule is, the party can't move through obstacles, under normal situations.

- Movement is not allowed when the party is **engaged in a fight** i.e. there are monsters in neighbor squares.

- Movement to **another area** is done by *traveling* (see **Traveling**). Traveling requires some time (see **Time**) & food to be completed, which is distance-based. For example, the party may travel to another neighbor area in one (1) day & consume one (1) food ration. If the party has no food left, the traveling can not be done.

- Monsters that are **far but still in range** (visible or not), they're not seeing you yet and will make random, patrolling moves around their *initial position*. In code that could mean an *80%* of your *draw distance*.

- Monsters that are **far from their initial position**, they stop following you and instead making moves that keeps them *in range* with their initial position.

- Monsters can **take one (1) up to four (4) squares** in each direction of the party; therefore, up to 16 monsters can surround the party.

2.4. Traveling

The world is divided into smaller **areas**. Each area is, usually, interconnected to a number of other areas. Traveling to an area takes *time* & consumes *food rations*, which are context-based. Those areas can be *traveled* by the party in a number of ways:

- The party can travel to a **neighbor** area on their own, **using the roads**. The time spent is *one (1) day* & food consumed is *one (1) ration*.

- The party can travel to **non-neighbor** area through a traveling service. In this case, the time spent & food consumed is **context-based**. One way to estimate the time spent is to *count the areas the party is traveling through*.

2.5. Food

A character needs to **eat** before getting a **rest** (see **Resting**), otherwise he won't be able to rest at all; therefore a well prepared party should be the first priority. Food rations can be obtained in several ways but they can usually be found in

civilized places such as taverns or traveling merchants. Food can be consumed, by user action or automatically, in the following ways:

- Food can be consumed by **resting**
- Food can be consumed by **traveling** to another map

2.6. Resting

Characters spends their entire day fighting though monsters and difficult challenges. Most of the times they end up wounded and tired. An easy (but expensive) way to restore hit points is to use magic or potions. The other way is through resting. A party has 2 options here:

- **A Long Rest:** The party rests for eight *(8) hours* or less if the party is healed, which may or may not heal the party to full extent. The party consumes *one (1) food* ration after the healing. Useful when the party needs some fast healing, consuming the least possible food rations.
- **Rest Until Fully Healed:** Here the party rests until all members have full hit points, as well as spell points (for caster professions). This might take more time, especially the more wounded the party is. The party consumes one *(1) food* ration for every *8 hours* the party is rested, round up. Useful when the party is severely wounded, but keep an eye on available food rations.

The procedure heals the *hit points* & restores the *spell slots* (for caster professions) in a single turn. This is context-based, since this is a timed procedure. A **turn** may last *5 minutes*, as an example or similar timed periods. The spell slots restored on single turn, are added to a single expertise slot at a time, starting from the lowest expertise (that is, initiate) and advance to next expertise when the current expertise spell slots are full! The exact hit points healed & restored spell slots for each character, in each turn, are the following:

```
int amount_hp = random(1, (ToughnessMod / 2));
int amount_sp = random(1, (IntelligenceMod / 2));
```

2.7. Currency

The **monetary system** in Planeverse is as simple and straightforward as could be; everything is traded through gold coins. The suffix for an amount of gold coins is simply a **g**, for example *350g* is a valid amount. However, this can lead to some problems if the amount is big enough for expensive objects i.e. selling a house could cost millions of gold. In this case there are two (2) possible solutions:

- **Format** the gold amount with commas i.e. *3420500g* becomes *3,420,500g*

- Use additional **suffixes** based on amount i.e. *150200g* becomes *150.2Kg*

Specifically:

Suffix	Name	In gold coins	Description
1Kg	1 Kilogold	1,000g	1 thousand gold coins
1Mg	1 Megagold	1,000,000g	1 million gold coins
1Tg	1 Teragold	1,000,000,000g	1 billion gold coins

3. Abilities

Capability is measured through seven (7) primary *abilities*, which are defining the magnitude of a skill for any entity, character, monster etc. These *abilities* are:

Name	Short	Description
Power	POW	The amount of force that muscles can exert against a target. It's used on **skill requirements**, **melee damage** and **bare hands damage**
Intelligence	INT	The ability to logically think & acquiring knowledge. It's used on **skill requirements** and **generating spells total**
Personality	PERS	The ability to verbally impose, persuade & cope with conversations.
Toughness	TOU	The ability to exercise and develop the muscular system. It's used on calculating **hit points**
Technique	TECH	The ability of handling difficult or highly sensitive tasks, by hand. It's used on **skill requirements**, **ranged damage** and **protective armor**
Quickness	QUI	The ability of moving fast & accurately for a short time. It's used on **combat order**
Perception	PERC	The ability of sensing & coherently interpreting the environment.

The above abilities can result to so called **static ability scores**. These numbers only provide a general representation of the ability's magnitude. Each static ability score can compute an **ability modifier value**, that is, the *actual* numbers applied to computations. Ability modifiers starts with negative values, indicating weakness on that ability and increasing as static abilities increase.

3.1. Relation to D&D attributes

D&D provides a number of attributes like *Strength*, *Intelligence* etc. A close interpretation of D&D attributes and ORS abilities is shown on the following table:

ORS ability	D&D attribute

Power The amount of force that muscles can exert against a target	**Strength** Measuring physical power and carrying capacity
Intelligence The ability to logically think & acquiring knowledge	**Intelligence** Measuring deductive reasoning, knowledge, memory, logic and rationality
Personality The ability to verbally impose, persuade & cope with conversations	**Charisma** Measuring force of personality, persuasiveness, leadership and successful planning
Toughness The ability to exercise and develop the muscular system	**Constitution** Measuring endurance, stamina and good health
Technique The ability of handling difficult or highly sensitive tasks, by hand	**Dexterity** Measuring agility, balance, coordination and reflexes
Quickness The ability of moving fast & accurately for a short time	**Dexterity** Measuring agility, balance, coordination and reflexes
Perception The ability of sensing & coherently interpreting the environment	**Wisdom** Measuring self-awareness, common sense, restraint, perception and insight

An easy way to convert D&D attribute values to ORS ability values is to simply multiply each D&D attribute value with 1.5, round up. This is only based to the fact that ORS allows larger ability values. For example:

D&D goblin attributes: STR (8), DEX (14), CON (10), INT (10), WIS (8), CHA (8)
ORS goblin abilities: POW (12), INT (15), PERS (12), TOU (15), TECH (21), QUI (21), PERC (12)

3.2. Ability modifiers

Static ability values by themselves are only used as a starting reference but they've to be converted before they be used in game mechanics, providing *bonuses & penalties* to a particular ability. A *static ability* score of **5** is not very useful to game mechanics, however it can be easily understood by humans as it represents steady improvement. Wherever an ability is referenced by its normal name i.e. **Intelligence**, it indicates its static ability score or the ability in general. When the special word **Mod** is applied as *suffix* i.e. **IntelligenceMod**, it indicates the ability modifier of that particular ability.

To compute the *ability modifier* from a *static ability* value, one *subtracts* **20** points from the *static ability* value, then *divide* by **2**, then *round down* the number to get the *ability modifier* value. If instead one prefers a limited table for the first **40** static ability values, the chapter **Initial computed values** can be used for quick reference. However, in a developed *CRPG*, the developer has to implement a computation mechanism.

3.3. Initial computed values

Static ability for 0...23	Ability modifier	Static ability for 24...41	Ability modifier
5-6	-7	**24-25**	+2
7-8	-6	**26-27**	+3
9-10	-5	**28-29**	+4
11-12	-4	**30-31**	+5
13-14	-3	**32-33**	+6
15-16	-2	**34-35**	+7
17-18	-1	**36-37**	+8
19-21	+0	**38-39**	+9
22-23	+1	**40-41**	+10

** static ability values can't go below 5 (*see **Character creation***)*

3.4. Generate static ability values

A character has to generate seven (7) values to be used as the starting (static) ability values. All (static) ability values are starting at **15** points. You are given **20** ability points at the start to distribute them freely to all abilities. Remember that you can't reduce a static ability value below **5**.

4. Races

Characters are sorted into races, which greatly shapes their appearance, code of law, spoken languages, lifespan and other. Those races are:

Name	Lifespan	Adulthood	Languages	Ability Bonus
Human	~100 years	18 years	English*	Intelligence +4
Dwarf	~400 years	60 years	English*, Dwarvish	Toughness +4

** English is a language that every race can speak; its not considered a skill*

4.1. Alignment

Characters have a personality that drives their actions, every decision & motive. Usually, it is directly connected to real player's alignment i.e. the one playing

the character. Alignment can be used to greatly change the outcome of a discussion, the course of a quest, the entire party goals and so on. In addition, alignment is not only a party's feature; it also applies to monsters, farmers & kings out there which can & will have further consequences on everything the party does. Those alignments are:

Name	Description
Good	Good characters protect the innocent, respect life and value dignity. They keep their word and have strong respect for the law and truth.
Neutral	Neutral characters are driven by their own causes and they're not get attached to other characters. They can be either Good or Evil on occasion if that helps their cause.
Evil	Evil characters hurt and oppressing others and have no respect or compassion for others. They strongly disrespect law and prefer lies and trickery, if that helps their causes.

4.2. Languages

Characters speaks their own languages based primarily on their race and secondly by choice for a reason i.e. trading, exploring or living in another place.
The languages are:

Name	Spoken by	Description
English*	Human, Dwarf	The most common and oldest language of Natural Plane
Dwarvish	Dwarf	The native language of the Dwarves

** English is a language that every race can speak; its not considered a skill*

4.3. Naming

Most races have vastly different culture and ancestry, so it's only logical they have their own naming conventions. One is free however to choose whatever name he thinks about. The following table present a recommended name list:

Race	Names	
Human	**Male**	Alphonsus, Arminel, Arthurus, Athelard, Azorius, Beroldus, Bertrand, Christofur, Emericus, Forthwind, Jacques, Jarin, Jeronim, Jesper, Galeran, Gerontius, Geffrey, Giffard, Gualterius, Hancock, Huggett, Humphrey, Maynard, Pawelinus, Percevale, Rainald, Reginald, Ricaud, Robertus, Rolph, Salemon, Sansonnet, Tamas, Searl, Warrenus, Wiscar
	Female	Adeliza, Aelesia, Alicia, Alyson, Anne, Arabella, Ariana, Ariel, Beatrice, Belle, Brigitta, Christina, Edelina, Elianora, Elisabetha, Elsa, Gisella, Gueanor, Hegelina, Isabella, Ivetta, Jacobina, Jaquelinne, Jeanette,

		Jennet, Joan, Joanna, Linette, Loreena, Magdalen, Mariana, Mariel, Rochilda, Rosaline, Rose, Sabeline, Sara, Selova, Seraphina, Simmonete
Dwarf	**Male**	Arathas, Baridouk, Betrac, Bhaznith, Bradal, Braddak, Dhuker, Folguk, Gimmod, Gizzog, Gladrag, Grolgron, Herdock, Jadrath, Jaggaed,Jolmaes, Jorreth, Kifrug, Kovrid, Krazzud, Kromir, Kromrok, Morgrud, Skognam, Snargat, Thafrim, Thaldrim, Thastut, Thobroum, Thrazzean, Throlgrik, Thughael, Thutreak, Umirhead, Urbak, Welgrid, Wegrus, Yurgen
	Female	Astelynn, Bezolda, Bozeline, Dakilsia, Danihilda, Daznelin, Devarra, Doraselsia, Dossomora, Dossorra, Erighelda, Fimwalda, Grozibella, Grundina, Herobella, Hilda, Homolsia, Jorbarika, Jossealynn, Jowathra, Kangrelda, Kherrana, Masgribela, Muzolynn, Notihilda, Nussira, Nuvealda, Olgebella, Sirfalsia, Thindroula, Thodwirra, Thubulda, Thuggulsia

5. Professions

Characters are also sorted into professions, which is simply their job, what they do. Some fight their way, other are traders and some unravel the mysteries of magic (more commonly, they're *casters*). In addition, they get different amounts of initial wealth when they start. These professions are:

Name	Caster	Initial Wealth	Description
Knight	No	120g	Knights offer their muscles and weapons for a payday. They can be mercenaries for hire, soldiers or guards in a King's court. Their numbers are always in need so while they're not living a rich life, they still manage pretty well.
Cleric	Yes	60g	Clerics are the natural defensive casters of Planeverse. They draw energy by praying to their deities and they can be found in holy places such as Abbeys. They are usually poor and don't have much in wealth.
Wizard	Yes	180g	Wizards are the natural offensive casters of Planeverse. They usually found in some laboratory studying spells or old enhanced items. Because they're dealing with expensive jewelry all the time, they usually live a rich life.

5.1. Hit points

The hit points is a number that defines the maximum life points i.e. how much damage you can take before getting knockout or worse. The **Profession** defines primarily a base for the hit points calculation while **Race** may or may not provide an additional bonus. The following table shows the starting hit points for every profession:

Profession	Base HP	HP / Level
Knight	40 + (5 * ToughnessMod)	+6
Cleric	28 + (3 * ToughnessMod)	+3
Wizard	28 + (3 * ToughnessMod)	+3

5.2. Spells points

Opposite to hit points, spells doesn't have *points*; instead a fixed number of spells slots (i.e. times to cast a spell) are provided. The ability **IntelligenceMod** defines the total number of spells a caster can use, sorted by skill *expertise*.

5.2.1. Expertise

The spells, like the weapons, requires some kind of experience or *expertise* to be used appropriately; the main logic is:

- the ability **IntelligenceMod** defines the total number of spells
- the total number of spells are allocated per **expertise** level
- the lower the expertise, the **fewer** & **weakened** spells a caster can use
- the higher the expertise, the **more** & **stronger** spells a caster can use

The base *expertise* levels, which can be used for everything that requires an expertise level i.e. *weapons*, are the following:

Initiate / Apprentice / Adept / Master / Grandmaster

Since the total points are divided per expertise level, a spell slot list for a player may look like *10 / 7 / 4 / 2 / 1.* This can be broken down to this:

- 10 *Initiate* spells
- 7 *Apprentice* spells
- 4 *Adept* spells
- 2 *Master* spells
- 1 *Grandmaster* spell

Obviously, a caster can only cast a spell of given expertise if he's trained in the required skill (see **Skills**). In addition, when there are no available spells to cast on an expertise, the caster requires some *resting* (see **Resting**) to restore his spell slots.

5.2.2. Generate spell totals

Initially, the spell slots are shared in the following allocation, provided the character belongs to a ***caster*** profession, such as a *Wizard*; if the profession is **not a caster**, the total number of spells will be zero **(0)**, as well their spell allocation. So, initially, the casters are provided the following **spell allocation**:

10 / 7 / 4 / 2 / 1

However, the value of **IntelligenceMod** (see **Abilities**) can be used to determine the final spell allocation to the different expertise levels. If for example, the **Intelligence** is **19**, this will gives as a **IntelligenceMod** of **0**. We then add that up to the first expertise *(Initiate)* in the above allocation, which is **10** and we get the total number of *Initiate* spells. To calculate the total spells of the remaining expertise levels, multiply the current number of spells for the expertise with *70%*, then round down to get the final value of the number of spells for the next expertise. The following steps can be used to compute this more easily:

- If **profession** is not a caster, give him an initial **0 / 0 / 0 / 0 / 0** spell allocation
- If **profession** is a caster, give him an initial **10 / 7 / 4 / 2 / 1** spell allocation
- Compute the *ability modifier* of **Intelligence**
- Apply any *racial / profession* bonuses to **IntelligenceMod**
- Add the final value of **IntelligenceMod** to the *first expertise* number
- Multiply remaining expertise numbers by **70%** of previous, rounded down

Another example, an **Intelligence** of **10** computes an **IntelligenceMod** of **-5**. Applying this bonus to Initiate starting number of **10** will give **5** and the following sharing (after using the above calculations):

5 / 3 / 2 / 1 / 0

The above indicates that this caster can *only* cast **11** spells at the moment, allocated from lowest to highest expertise. However, if he trains hard and raise his **Intelligence** to **24**, he'll get an **IntelligenceMod** of **2**, which it will change his allocation of spell slots to this:

12 / 8 / 5 / 3 / 2

If you instead prefer the spells slots for the first **40** static ability values of **Intelligence**, the chapter **Initial computed values** can be used for quick reference. However, in a developed *CRPG*, the developer has to implement a computation mechanism:

5.2.3. Initial computed values

Static ability for 0...23	Spell slots	Static ability for 24...41	Spells slots

5-6	3 / 2 / 1 / 0 / 0	**24-25**	12 / 8 / 5 / 3 / 2
7-8	4 / 2 / 1 / 0 / 0	**26-27**	13 / 9 / 6 / 4 / 2
9-10	5 / 3 / 2 / 1 / 0	**28-29**	14 / 9 / 6 / 4 / 2
11-12	6 / 4 / 2 / 1 / 0	**30-31**	15 / 10 / 7 / 4 / 2
13-14	7 / 4 / 2 / 1 / 0	**32-33**	16 / 11 / 7 / 4 / 2
15-16	8 / 5 / 3 / 2 / 1	**34-35**	17 / 11 / 7 / 4 / 2
17-18	9 / 6 / 4 / 2 / 1	**36-37**	18 / 12 / 8 / 5 / 3
19-21	10 / 7 / 4 / 2 / 1	**38-39**	19 / 13 / 9 / 6 / 4
22-23	11 / 7 / 4 / 2 / 1	**40-41**	20 / 14 / 9 / 6 / 4

5.3. Strong / weak Abilities

Professions have two (2) Abilities that are *best suited* for those characters. Those Abilities provide an *additional bonus* to the initial **Ability values** (static) when a character is created, specifically *seven (7) points*. There's also an Ability that is *unsuited* for that Profession, which causes an *additional penalty* to the initial Ability value for that Ability by the same amount. Keep in mind that the aforementioned bonuses / penalties are only applied (once) on **Character creation** procedure. The following table shows those abilities for each Profession:

Profession	Strong abilities	Weak abilities
Knight	Power, Toughness	Intelligence
Cleric	Intelligence, Personality	Power
Wizard	Intelligence, Perception	Power

6. Character progression

An adventurer's life is full of dangers, exploration and killing, which in turn provides the adventurer with experience. This experience can then be used to reach *milestones* for a character progression, more commonly named **levels** in the RPG world. Levels are the natural progression mechanism in the system. To advance in a level, one needs to reach the required *experience points* for that lever.

However, the way characters gains experience vary greatly in this dynamic world. The experience is always shared between *live / active members*. **Dead** or **paralyzed** characters wont get a share of the experience gained. This system uses a (somewhat) complex algorithm to compute the experience required for a given level, which is presented below in the *C++ programming language* (but can be converted easily to any language):

```
uint32_t experience_required_for_level(double level) {
   double exp = 0;
```

```
    for(double x = 1; x<level; x++) {
        exp += std::floor(x + (300 + (level * 100)) * std::pow(2, (x / 10)));
    }
    exp = (std::round(std::floor(exp) / 10) * 10);
    return (uint32_t)exp;
}
```

The above mechanism produces reasonable, yet *increasingly difficult* to reach, levels. At the 1st level you will advance pretty quickly by killing some monsters, but at the 2nd level the advancement will come harder and so on for every level. If instead prefer a limited table for the first **20** levels & experience required, the chapter **Initial computed levels & experience** can be used for quick reference. However, in a developed *CRPG*, the developer has to implement a computation mechanism.

6.1. Initial computed levels & experience

Level 1...10	Experience Required	Level 11...20	Experience Required
1	0	**11**	20960
2	540	**12**	25680
3	1340	**13**	31070
4	2420	**14**	37210
5	3820	**15**	44160
6	5580	**16**	51990
7	7720	**17**	60800
8	10280	**18**	70670
9	13310	**19**	81710
10	16850	**20**	94020

6.2. Advancing levels by quests

Level advancement can be done in various ways and not just by killing monsters. One of such ways is by **completing a quest**. The XP given may be a fixed value but this poses a balancing problem since characters can be either very weak or very strong for that fixed value & there's also the difficulty of computing a balanced experience value. The system uses a balanced approach, which is the following:

- take the **average level** of all *live / active* characters
- take the experience needed for **(average level + 1)**
- **multiply by 0.5** that experience
- **share** the final experience amount to all *live / active* characters.

Thus, the experience shared will *always be balanced*. In this case, if only a character is alive / active then he will advance in level by **completing two (2) quests**. Otherwise, if all characters are alive / active, the party will need to **complete eight (8) quests** to advance in level, just by completing quests without counting the intermediate killing of monsters or anything else providing XP.

7. Skills

Besides the character's profession, you will need to practice some skills to improve yourself and your party's survival chances. Those skills are sorted into *skill groups*, which are **Weapon, Armor, Magic** and **Misc** (miscellaneous). A character can choose as many skills as he wants, there's no restriction, except the time invested & the amount of money the party will need in order to progress on these skills. That is, advancing into a skill requires serious time & money and there's a standard procedure.

This procedure starts with you buying the *right* to practice a skill for a modest price. At this time you're basically an **Initiate**, which is not an official recognition of your skill level and therefore you won't be referred as such; it just means you have the right to start your skill progress and work under the wandering Masters, which you need to seek and find them, on your own.

This procedure is called *qualification* and must be done for every expertise you wish to reach in the skill. Each Master have some requirements before promote you to the next level of expertise. These are:

- provide a *fixed amount of gold*
- gain the required *skill level* (i.e. **Long Blade** of 5 skill points)
- gain the required *base ability* score (i.e. **Power** of 20 ability score)
- train a specific amount of time, along with Master

You can't expect to advance to a **Grandmaster** status at *1st* level of your skill just because you're rich, nor without months of intense training. Provided you have the gold, each Master requires to work with him for a fixed period of time; this is done automatically, the Master is just a member of your party and when the party walks, he's working with you and evaluates your progress. In the end of training, the character is trained to the next expertise level & the Master then leaves the party. The following table lists the expertise levels, with all the advancement requirements:

Name	Description
***Initiate**	You just bought a piece of paper, allowing you to practice a skill. Yawn. **Initial requirement:** Base ability 20, 100g cost, profession eligibiity **What to do next:** Seek out a trainer to start your training as Apprentice.
Apprentice	An Apprentice is learning a trade from a skilled master, having agreed to work for a fixed period at low wages. **Initial requirement:** Skill level 5, 500g cost, 1 week of training **What to do next:** Seek out a trainer to start your training as an Adept.

Adept	An Adept is a skilled apprentice who has successfully completed an official apprenticeship qualification. To further continue, the Adept needs to find a Grandmaster of his skill to start his Master qualification. **Initial requirement:** Base ability 30, Skill level 10, 2000g cost, 2 weeks training **What to do next:** Seek out a trainer to start your training as a Master.
Master	A Master is a seasoned Adept that shown great proficiency in his skill. He is now able to start his own business to further advance his skill to Grandmaster status. **Initial requirement:** Skill level 15, 5000g cost, 1 month of training **What to do next:** Seek out Guild headquarters to get assigned a quest.
Grandmaster	A Grandmaster is a veteran master that achieved the highest level in his skillmanship. **Initial requirement:** Base ability 40, Skill level 20, 10000g cost, assigned quest **What to do next:** Nothing, you've reached the maximum potential of your skill

** An initiate in a skill is not referenced as such*

7.1. Relation to D&D skills

D&D provides a number of skills, associated with an attribute. The D&D attributes relates to skills in the form of applied *restrictions*, that is, a character can't acquire / use a skill if he doesn't have the necessary D&D attribute score for the associated D&D attribute. The exact same mechanism applies to ORS as well. Furthermore, some events require some skill check:

- In **D&D**, challenges provide a *Difficulty Class* (DC) to be checked against a (related) skill score, which describes the difficulty of the challenge.

- In **ORS**, challenges require a specific *Expertise* to be checked against a (related) skill expertise, which describes the difficulty of the challenge.

In both cases, if the check passes, the challenge is overcome. The character with the highest expertise with said skill is always used. Those skills belong to the *Misc* group of skills i.e. *Lore* or *Dwarvish* (language) are such skills. A close interpretation of D&D DC and ORS expertise checks is shown on the following table:

ORS expertise	D&D Difficulty Class (DC)	DC to ORS expertise range (1-20)
Initiate	Very Easy (DC 5)	1-4
Apprentice	Easy (DC 10)	5-8
Adept	Medium (DC 15)	9-12
Master	Hard (DC 20)	13-16
Grandmaster	Very Hard (25)	17-20+

The *DC to ORS expertise range (1-20)* column is used to cap D&D DC ranges to an ORS range, which then maps to appropriate ORS expertise. ORS skill scores are not used for checks; only the mapped ORS expertise.

Some examples between D&D and ORS challenge checks:

D&D DC (*12*) on a related X skill → **ORS** *Adept* expertise on a related X skill
D&D DC (*19*) on a related X skill → **ORS** *Grandmaster* expertise on related X skill

An example of an ORS challenge check with a party of three (3) characters:

ORS challenge requires a check on **Lore** skill (Expertise required: **Adept**)

- *Merlin* (Have Lore Expertise at **Master** level)
- *Amon* (Have Lore Expertise at **Grandmaster** Level; Paralyzed)
- *Selina* (Have no Lore skill)
- *Percival* (Have Lore Expertise at **Initiate** level)

The ORS chooses the highest expertise among all *alive* (i.e. no dead) & *active* (i.e. no paralyzed, maddened etc.). Thus, the higher expertise of the party is that of *Merlin* (Master). We check his expertise against the expertise the challenge requires, that is, **Master** vs **Adept**. Since Master >= Adept, the challenge check is passed and the party overcome the challenge.

7.2. Mapping ORS skills to D&D skills

ORS provides fewer skills than D&D does but they do provide more context in general. A rough mapping of ORS skills to D&D skills follows:

ORS skill	D&D equivalent skill
Fitness (Power)	**Athletics** (Strength)
Dwarvish (Intelligence)	-
Lore (Intelligence)	**Arcana, History, Religion** (Intelligence)
Persuasion (Personality)	**Deception, Persuasion, Intimidation** (Charisma)
Taming (Toughness)	**Animal Handling** (Wisdom)
Quickhand (Technique)	**Sleight of Hand** (Dexterity)
Stealth (Quickness)	**Stealth** (Dexterity)
Awareness (Perception)	**Perception, Survival** (Wisdom)

7.3. Benefits and restrictions

A high expertise should provide some benefits in opposite to lower expertise. This is handled differently for each skills group (Weapons, Magic etc.). The following

table shows the benefits / restrictions for each expertise for each skill group:

Skill group	Benefits / Restrictions	
	Expertise	Description
Weapon	**Initiate**	Can use weapons of +0 only (no modifier at all)
	Apprentice	Can use weapons of +1 as well
	Adept	Can use weapons of +2 as well
	Master	Can use weapons of +3 as well
	Grandmaster	Can use weapons of +4 as well
Armor	**Initiate**	Can use armors of +0 only (no modifier at all)
	Apprentice	Can use armors of +1 as well
	Adept	Can use armors of +2 as well
	Master	Can use armors of +3 as well
	Grandmaster	Can use armors of +4 as well
Magic	**Initiate**	Can use Initiate spell scrolls only Can use Initiate spell books only
	Apprentice	Can use Apprentice spell scrolls as well Can use Apprentice spell books as well
	Adept	Can use Adept spell scrolls as well Can use Adept spell books as well
	Master	Can use Master spell scrolls as well Can use Master spell books as well
	Grandmaster	Can use Grandmaster spell scrolls as well Can use Grandmaster spell books as well
Misc	**Initiate**	Initiate expertise skill check
	Apprentice	Apprentice expertise skill check
	Adept	Adept expertise skill check
	Master	Master expertise skill check
	Grandmaster	Grandmaster expertise skill check

7.4. List

Everything you can wear, use or fight with is considered a skill on its own and making the best out of it will determine your fate. The following table shows the base skills, the expertise level that each profession may attain to and all the fine details that fully characterizes a skill.

Skills that have a **-** rather an expertise level are not allowed for this Profession. Some skills require another skill to be learned first. For example *Chained armor* can't be used unless *Leather armor* is learned to *Adept* expertise. This requirement is only used when you are trying to learn a skill. Finally, some

skills, especially of the *Misc* group, may have different rules for learning. For example, languages are either learned or not; only one trainer is required to advance you to the *Grandmaster* status. The list of skills follows:

Name	Profession*			Initial Requirement**	Group***	Advance****	Utilized by	Description
	KN	CL	WI					
Short blade	M	G	G	Technique 20	We	A	Dagger, Short sword	Small blades; physical
Long blade	G	-	-	Power 20 Short blade	We	A	Falchion, Long sword, Scimitar, Greatsword	Long blades; physical
Bow	G	M	-	Technique 20	We	A	Bow, Crossbow	Ranged weapons; physical
Bludgeon	G	M	-	Power 20	We	A	Club, Mace, Morning star, Flail, Hammer	Thick poles with heavy ends; physical
Short axe	G	M	-	Technique 20	We	A	Broad axe, Hand axe	Small axes; physical
Long axe	G	-	-	Power 20 Short axe	We	A	Battle axe, War axe	Long axes; physical
Poleblade	G	-	-	Power 20 Pole	We	A	Bardiche, Halberd, Spear, Scythe	Long sticks with edged ends; physical
Pole	M	G	G	Technique 20	We	A	Quarterstaff	Long sticks; physical, magical
Shield	G	M	-	Power 20	Ar	A	Shield	Protective plate; protection
Leather armor	G	M	M	Technique 20	Ar	A	Leather armor	Protective leather; protection
Chained armor	G	-	-	Power 20 Leather armor	Ar	A	Chain mail	Protective chains; protection
Scaled armor	G	-	-	Technique 20 Leather armor	Ar	A	Scale mail, Ring mail	Protective scales; protection
Plated armor	G	-	-	Power 20 Chained armor	Ar	A	Plate mail	Protective plates; protection
Fire magic	-	M	G	Intelligence 20	Ma	A	Fire based spells	Fire element spells; magical
Air magic	-	M	G	Intelligence 20	Ma	A	Air based spells	Air element spells; magical
Water magic	-	M	G	Intelligence 20	Ma	A	Water based spells	Water element spells; magical
Earth magic	-	M	G	Intelligence 20	Ma	A	Earth based spells	Earth element spells; magical
Energy magic	-	G	G	Intelligence 20	Ma	A	Energy based spells	Energy element spells; magical
Mental magic	-	G	M	Intelligence 20	Ma	A	Mental based spells	Mental element spells; magical
Soul magic	-	G	M	Intelligence 20	Ma	A	Soul based spells	Soul element spells; magical
Fitness	G	M	M	Power 20	Mi	A	Climbing, Jumping,	Environmental

							Swimming, Pushing	challenges
Dwarvish	G	G	G	Intelligence 20	Mi	B	Plaques, Books, People	Know the language
Lore	M	G	G	Intelligence 20	Mi	A	Glyphs, Plaques, Magic / Ancient objects	Knowledge on ancient stuff
Persuasion	G	G	G	Personality 20	Mi	A	Persuade, Intimidate, Influence others	Manipulate the will of others
Taming	G	M	M	Toughness 20	Mi	A	Wild monsters, Avoid fights, Acquire animal companions	Tame, drive off or calm down wild beasts
Quickhand	M	G	G	Technique 20	Mi	A	Quick hand reflexes, Pickpocketing	Actions involving quick hand actions
Stealth	G	G	G	Quickness 20	Mi	A	Conceal from enemies, guards, go unnoticed	Move unnoticed in an environment
Awareness	M	G	G	Perception 20	Mi	A	Sounds, Environmental signs, Observeness	Generic sense of the environment

** Maximum expertise (on Profession) is defined as: **M** = Master, **G** = Grandmaster*
*If Profession expertise gives **-** it means this skill is not allowed for this Profession*
*** If a skill requires another skill, that skill has to be taught on **Adept** level first*
**** Group is sorted into: **We** = Weapon, **Ar** = Armor, **Ma** = Magic* and *__Mi__ = Misc*
***** The procedure followed to advance the skill to Grandmaster status, they are:*
***A** = Advance from Initiate to Grandmaster; Multiple trainers*
***B** = Advance from Initiate to Grandmaster; One trainer*

7.5. Character progression in skills

Skills need to be developed by frequent use for the character to improve their use & efficiency. Characters gets **experience** in skills when they use them (mostly), the same way their **character level** progresses. A skill consists of:

- the **level**
- the **experience**
- the **expertise**

Initially, an acquired skill is set to level **1**, experience at **0** and expertise of **Initiate**. Each time a character **uses** an acquired skill through an *item* or *action*, the skill experience is advanced by **one** (1) experience point. Each skill belongs to a specific **group**, indicating their use method to gain experience. Those skill groups are:

- **Weapon** – Involves skills such as *Short Blade, Long Blade, Pole* etc.
  Experience comes by *using weapons in a battle*.

- **Armor** – Involves skills such as *Shield, Chained Armor, Plated Armor* etc.
  Experience comes by *getting hit / miss by a monster while wearing armor.*

- **Magic** – Involves skills such as *Fire Magic, Water Magic* etc.
  Experience comes by *using magic in a battle*.
  NOTE: Magic can used through *staffs, wands, scrolls* etc.

- **Misc**– Involves skills such as *Dwarvish* (language), *Lore* etc..
  Experience is here is very *context-based.* A convenient method of gaining experience on such skills is by utilizing items such as *Books* or similar methods. For example, reading a *Book on Lore* should improve one's skill experience, provided he's initiated on that skill.

If a skill reaches a specific level, the character might be eligible to *advance his expertise* on this particular skill. The chapter **Skills** shows the *skill requirements* for a character to advance his expertise. This system uses a (somewhat) complex algorithm to compute the experience required for a given skill level, which is presented below in the *C++ programming language* (but can be converted easily to any language):

```
uint32_t experience_required_for_skill_level(double level) {
   double exp = 0;
   for(double x=1;x<level;x++) {
      exp += std::floor(x + (150 + (level * 5)) * std::pow(2, (x / 10)));
   }
   exp = (std::round(std::floor(exp) / 10) * 10);
   return (uint32_t)exp;
}
```

The above mechanism produces reasonable, yet increasingly difficult to reach, skill levels. At the 1st level you advance somewhat quickly by using the skill, but at the 2nd level the advancement will come harder and so on for every level. If instead prefer the full table for the **20** levels & experience required, the chapter **Initial computed skill levels & experience** can be used for quick reference. However, in a developed CRPG, the developer has to implement a computation mechanism.

7.6. Initial computed skill levels & experience

Skill Level 1...10	Experience Required	Skill Level 11...20	Experience Required
1	0	**11**	3110
2	170	**12**	3650
3	370	**13**	4240
4	590	**14**	4890
5	840	**15**	5610
6	1130	**16**	6390
7	1440	**17**	7260
8	1800	**18**	8200
9	2190	**19**	9250
10	2630	**20**	10380

8. Combat

Planeverse is a very dangerous place & hostile encounters can show in literally every step. A battle occurs when hostile characters (humans, monsters, things etc.) gets too close to the party. The battle is progressing through mutual actions, based on specific statistical computation (see **Combat order**). The battle ends when either party or the hostile characters are dead.

8.1. Combat order

When you are next to monsters, a **combat order** must be computed i.e. in which order the combatants are taking actions. The ability used to determine the combat order is **Quickness**, which used for both party and monsters. The value of **QuicknessMod** is always used. The procedure of determining the combat order is quite straightforward:

- First verify that you're facing monsters in close encounter of some *direction* i.e. *front, back, left or right*. regardless of your orientation.
- Compute the **QuicknessMod** for all, both party and monsters.
- *Sort* combatants by their **QuicknessMod**, in descending order.

The combatants are acting based on combat order. They can use both items on their hands in one turn i.e. if you have 2 swords in your hands (single-handed), you can use both before ending your turn or you can just skip one or both hands to next combatant in order (which can be another party member or an enemy).

When a party member uses one of his hands, this hand *can't be used again* in current turn. In addition, item equipping is limited while you're engaged in a fight (see **Equipping items in combat**). When all combatants ends their turn, a **Movement** (see **Movement**) is initiated and combat order repeats itself.

8.2. Equipping items in combat

When the party is engaged in a combat, their number of actions are *limited*. One of such actions is equipping items. A character can only equip an item under the following conditions:

- It's his **turn** to act
- One of his **hand slot** has not been used

For example, if a character has a **Longsword** on his right hand and has used it to attack, he can not swap it with some other item while he is pondering the use of his (unused) left hand. However, an unused hand can be swapped with some other

item such as weapon, a healing potion or a spell scroll. The list is an example, any item can be swapped as long the basic rules of equipping apply i.e. a 2-handed weapon can not be equipped even if the other hand has already been used.

8.3. Damage

The damage is a measurement of how powerful is an offensive item, such a *weapon* or a *spell*. It is usually not fixed since damage can be affected by a number of factors, including simple luck. Another important point is that damage is hardly just a matter of muscle; there is a number of damage *types* and only some of them involve raw power. For each kind of damage a specific procedure is followed to compute the final damage:

8.3.1. Damage by Bare hands

If there's no weapon in hand i.e. the attack is made with *bare hands* (melee attack), then only **PowerMod** score is considered as a damage. The target's **Protection** is considered as defence. To ease the calculations below, we assume a target with no protection at all (**Protection = 0**). For example a *Wizard* with **Power** score of **14** decides to attacks with his bare fists. To compute the final damage:

```
PowerMod = compute_ability_bonus( 14 )  // PowerMod is -3 (Power 14)
finaldamage = PowerMod
finaldamage -= target_protection
if (finaldamage < 0) { finaldamage = 0 }
```

Thus, the resulted damage its **0.** That is, the target successfully absorbed the attacker's damage. Another example, a *Knight* with **Power** score of **24** (**+2**) attacks. To compute that final damage:

```
PowerMod = compute_ability_bonus( 24 )  // PowerMod is +2 (Power 24)
finaldamage = PowerMod
finaldamage -= target_protection
if (finaldamage < 0) { finaldamage = 0 }
```

That is, Knight deals a damage of **2**. Obviously, only very strong characters (or very weakly protected targets) would be able to cause decent damage with their fists or a character provided with strong enhancements.

8.3.2. Damage by Melee weapons

Melee weapons are any handheld weapons that can be used in hand-to-hand battle. Typical melee weapons include *swords* and *flails*. When attacking with a

melee weapon, the **Power** ability is primarily used, then the item's offensive capability is considered. Melee weapons usually provide their damage in a *from / to* range. The target's **Protection** is considered as defense. To ease the calculations below, we assume a target with no protection at all (**Protection = 0**). For example a *Knight* with **Power** score of **24 (+2)** decides to attacks with his *Long sword* (melee weapon, belonging to *Long blade* skill). To compute the final damage:

```
PowerMod = compute_ability_bonus( 24 )  // PowerMod is +2 (Power 24)
finaldamage = PowerMod
finaldamage += random(weapon_damage_from, weapon_damage_to)
finaldamage -= target_protection
if (finaldamage < 0) { finaldamage = 0 }
// if item is enchanted and cause elemental damage(s):
loop (item_enchantments) {
   if (enchantment_cause_elemental_damage) {
      damage = random(elem_dmg_from, elem_dmg_to)
      if (target_vulnerable_to_elemental_skill) { damage *= 2 }
      if (target_resistant_to_elemental_skill) { damage /= 2 }
      finaldamage += damage
   }
}
if (target_vulnerable_to_item_skill) { finaldamage *= 2 }
if (target_resistant_to_item_skill) { finaldamage /= 2 }
if (item_has_doubledamage_enchant_vs_monster_type) { finaldamage *= 2 }
```

Things to consider:

- A melee weapon can be *enchanted* (see **Named enchantments**), which may cause *elemental damage*(s).
- If the target is *vulnerable* to the melee weapon's skill, that is *Long Blade*, it will receive double damage.
- The damage will be *halved* if the target is *resistant* to weapon's skill.
- If the melee weapon is enchanted by **double damage vs type**, the target will receive double damage.

8.3.3. Damage by Ranged weapons

Ranged weapons are any weapons capable of engaging targets at a distance. Typical ranged weapons include *bows* and *crossbows*. When attacking with a ranged weapon, the **Technique** ability is primarily used, then the item's offensive capability is considered. Ranged weapons usually provide their damage in a *from / to* range. The target's **Protection** is considered as defense. To ease the calculations below, we assume a target with no protection at all (**Protection = 0**). For example a *Knight* with **Technique** score of **24 (+2)** decides to attacks with his *Bow* (ranged weapon, belonging to *Bow* skill). To compute the final damage:

```
TechMod = compute_ability_bonus( 24 )  // TechMod is +2 (Technique 24)
finaldamage = TechMod
finaldamage += random(weapon_damage_from, weapon_damage_to)
finaldamage -= target_protection
```

```
if (finaldamage < 0) { finaldamage = 0 }
// if item is enchanted and cause elemental damage(s):
loop (item_enchantments) {
   if (enchantment_cause_elemental_damage) {
      damage = random(elem_dmg_from, elem_dmg_to)
      if (target_vulnerable_to_elemental_skill) { damage *= 2 }
      if (target_resistant_to_elemental_skill) { damage /= 2 }
      finaldamage += damage
   }
}
if (target_vulnerable_to_item_skill) { finaldamage *= 2 }
if (target_resistant_to_item_skill) { finaldamage /= 2 }
if (item_has_doubledamage_enchant_vs_monster_type) { finaldamage *= 2 }
```

Things to consider:

- A ranged weapon can be *enchanted* (see **Named enchantments**), which may cause *elemental damage*(s).
- If the target is *vulnerable* to the ranged weapon's skill, that is *Bow*, it will receive double damage.
- The damage will be *halved* if the target is *resistant* to weapon's skill.
- If the ranged weapon is enchanted by **double damage vs type**, the target will receive double damage.

8.3.4. Damage by Magic

Magic damage can come from any item capable of casting *offensive* spells. Typical magical items include *staffs*, *wands* and *scrolls*. When attacking with a magical item, the **Skill level** of magic spell is primarily used. However, there are cases where the caster *isn't initiated* in the magic skill the spell belongs to. For example, a *Knight* may cast a *fire-based* spell by using a *wand*, without actually be initiated in *Fire magic*, which would be *impossible* for a Knight profession. Initially, the *non-caster* professions (such as *Knight*) have a *skill level of 0* when they cast a spell. However, internally they're provided by *skill level* of *1* to be able to cast, albeit with the lowest effect. The same happens when the profession is a caster but not initiated in the magic skill the spell belongs to. Magical items provide their damage in a *from / to* range. However, this damage is further modified by the caster's skill level in the magic *skill* the spell belongs to. The target's **Resistance** to the spell's skill is considered as defense. However, this is computed differently if the target is a *monster* or the *party*. Magical damage is also *capped* to the skill's *expertise* (i.e. Initiate, Apprentice…), which results in a *max* damage. Finally, some spells may cause a *non-elemental* damage as well. The target's **Protection** can be used as defense in this case. To ease the calculations below, we assume a target with no protection at all (**Resistance = 0**). For example a *Wizard* with **Fire magic** skill level of **1** decides to attacks with a *Firebolt* spell (a fire-based spell, belonging to *Fire magic* skill). To compute the final damage:

```
expertise = 0                        // 0 = Initiate, 1 = Apprentice...
if (not_a_caster) { skill_level = 1 }  // non-casters are always level 1
```

```
if (not_initiated) { skill_level = 1 } // casters missing the magic skill
starting_skill_level = (expertise = * 5)  // used to cap the magic damage
if (skill_level > starting_skill_level + 5) {
   skill_level = starting_skill_level + 5
}
finaldamage = 0
loop (skill_level times) {
   finaldamage += random(spell_damage_from, spell_damage_to)
}

   // target is a monster
   if (target_vulnerable_to_spell_skill) { finaldamage *= 2 }
   if (target_resistant_to_spell_skill) { finaldamage /= 2 }

   // target is a party's character
   finaldamage -= target_resistance
   if (damage < 0) { damage = 0 }

if (spell_causes_nonelemental_damage) {
   damage = 0
   loop (skill_level times) {
      damage += random(spell_nonelem_dmg_from, spell_nonelem_dmg_to)
   }
   damage -= target_protection
   if (damage < 0) { damage = 0 }
   finaldamage += damage
}
```

Things to consider:

- If the target is *vulnerable* to the ranged weapon's skill, for example, *Fire magic*, it will receive double damage.
- If the target is *resistance* to weapon's skill, for example *Long Blade*, it will receive half damage.
- Magic damage can also be *non-elemental*. In this case, *Protection* will be used as a defense.

8.3.5. Damage by Action

While party characters are usually act through their equipped items such as swords or staffs, monsters act through *actions*. A monster may have one or more actions to use on his turn against the party. Their effects are various and related to the monster in question.

For example, a **Goblin** may possess an action named *Broad Axe* (dealing physical damage) while a **Dragon** may possess an action named *Fire Breath* (dealing elemental damage). Some actions may look like they're dealing with an item (ex. *Broad Axe*) but they're not related to ORS items at or with an action with the same name of diffferent monsters.

For example, a **Dragon** may possess an action named *Bite* that deals X physical damage. However, a **Wolf** may also possess an action named *Bite* that deals Y damage. Just because they have the same name, doesn't mean they're dealing the same damage. Each action's properties are exclusive to its monster.

Actions can deal physical damage (against a character's *Protection*) or elemental damage (against a character's specific *Resistance)* or cause a condition. The current properties of an action follows (see **Monster List** for monster actions):
To compute the final damage of an action:

```
finaldamage = 0
variant = 0
if (action_cause_physical_damage) {
   dmg_from = floor(action_physical_dmg_from)
   dmg_to = floor(action_physical_dmg_to)
   // filter by monster's variant
   float perc = (1.0f + (float)variant * 0.15f);
   dmg_from = round(action_physical_dmg_from * perc)
   dmg_to = round(action_physical_dmg_to * perc)
   // final damage
   finaldamage += random(dmg_from, dmg_to)
   finaldamage -= target_protection
}
if (action_cause_elemental_damage) {
   dmg_from = floor(action_elemental_dmg_from)
   dmg_to = floor(action_elemental_dmg_to)
   // filter by monster's variant
   float perc = (1.0f + (float)variant * 0.15f);
   dmg_from = round(action_physical_dmg_from * perc)
   dmg_to = round(action_physical_dmg_to * perc)
   // final damage
   finaldamage += random(dmg_from, dmg_to)
   finaldamage -= target_resistance
}
if (finaldamage < 0) { finaldamage = 0 }
```

Monster variants

There are some monsters that have improved variants from the original monster, like *Goblin → Goblin Warrior* etc. These *improved* variants shows an *improved damage* on the same actions (when the action is offensive, like the action *Broad Axe* of Goblin). Not only these stronger variants have increased level and hit points, but they hit harder with the same actions.

The calculation is based on the original action, provided by the original monster (first). On the code above, **variant = 0** really means the original monster; replace with **variant = 1** (stronger than *original*), **variant = 2** (stronger than *variant = 1*) and so on. If a monster doesn't have variants, just leave it as *variant = 0.*

9. Conditions

A condition (mostly negative) is caused usually by a spell, environment or character choices. Its intention is to inflict direct or indirect damage to a character's statistics for as long the condition lasts or until its cured. The base conditions are:

Name	Description
Dead	A dead character's hit points has reached 0 or less and can't take actions (immobilized) until he's raised back to life. Rest of conditions are removed. **CAUSE:** hit points reduced to 0 or less. **CURE:** spells and temple visits.
Poisoned	A poisoned character has reduced Power, Personality, Toughness, Technique, Quickness, Perception by 25% and increased Earth resistance by 100%. *Each action loses 2% of maximum hp. Resting while poisoned leads to certain death. **CAUSE:** monster actions, traps, potions. **CURE:** spells, potions and temple visits.
Flamed	A flamed character has reduced Personality, Technique and Perception by 50%, increased Quickness by 50% and increased Fire resistance by 100%. *Each action loses 5% of maximum hp. **CAUSE:** monster actions, traps. **CURE:** spells, potions and temple visits.
Paralyzed	A paralyzed character can't take actions (immobilized). **CAUSE:** monster actions, traps. **CURE:** spells, potions and temple visits.
Frightened	A frightened character has reduced Personality, Quickness, Perception and Mental resistance by 50%. **CAUSE:** monster actions, spells, events. **CURE:** spells, potions and temple visits.
Maddened	A mad character has reduced Personality by 100%, increased Power, Quickness by 50% and increased Mental resistance by 100%. He also randomly attacks party members (*per-turn), causing a damage of 5% of his maximum hp. **CAUSE:** monster actions, spells. **CURE:** spells, potions and temple visits.
Exhausted	An exhausted character has reduced Power, Technique, Perception by 50% and reduced experience gained by 50%. **CAUSE:** party has not rested for a day. **CURE:** rest, spells, potions and temple visits.
Cursed	A cursed character can't restore his HP/SP (restless) while resting. **CAUSE:** monster actions, spells. **CURE:** spells, potions and temple visits.

** Actions are counted in per-turn basis. Such actions are party movement and combat turns. In addition, there's a 50% chance to cause those effects (per-turn).*

NOTE: if the entire party becomes one of:
Dead, Paralyzed, Maddened
the game ends.

9.1. Chance to inflict conditions

Computing the chance for inflicting a condition is straightforward and is used for

both **party** and **monsters**:

```
condition_chance = floor(chance + (attacker_level / 4))
```

For example, if a character casts a spell that have **10%** chance to inflict the **Flamed** condition, he will instead have **16%** chance if he is on level **25**.

9.2. Reduce the condition chance by Ability

Some conditions provide a way to reduce the chance to get inflicted by using an ability such as **Power** for example. In this case, the condition chance, set by both condition and attacker's level, is further subtracted by the provided **AbilityMod**, multiplied by **2**:

```
condition_chance -= (AbilityMod * 2)
```

For example, a character have a **Power** of **25 (+2)** and got hit by a condition-based attack, with a chance of **40%** of causing the condition, the **ability** to reduce that chance is **Power** and the attacker level is **25**. Based on attacker's level, the chance rises to **40 + (25 / 4) = 46%.** However, the **PowerMod** of defender is **2**, which updates that final chance to **46 – (2*2) = 42%**

9.3. Inflict conditions by items

Some enhanced weapons can cause conditions i.e. a special long sword may be infused with poison effect to cause **Poisoned** condition when it hits its target. In addition, the weapon must deal a damage before causing a condition as well.

9.4. Inflict conditions by spells

Some spells are causing conditions i.e. a the **Flamed** condition. The formula takes into consideration the caster's level only, therefore the higher the caster's level, the more his chance to cause conditions with his spells. Some spells have higher initial condition chances which leads to high chance if the caster is high leveled.

NOTE: if a spell causes damage as well, then a condition can only be caused if the spell actually caused some damage. If an offensive spell misses, there is no chance for a condition effect to be used. This is not a requirement for non-offensive spells.

9.5. Inflict conditions by actions

The formula used for spells is *also used* in actions to cause conditions. The only difference is that an action *must deal some kind of damage* for the condition to apply. If an action is supposed to deal some damage but it missed, either by target's protection or resistances, even a successful condition check can't be applied. For example, a giant rat's **Bite** action is supposed to cause the **Poisoned** condition and is supposed to deal damage. However, it won't be able to cause anything if it misses.

9.6. Resistances

There are many types of **damage types** out there: *physical, magical, elemental* and more. Furthermore, there are conditions that can get inflicted by absence of some resistance. A character may be strong enough to withstand raw power but can die in agony in few hours by getting **Poisoned** through a spider bite.

This kind of damaging, called **elemental damage**, requires more planning since the typical **Protection** of a character (usually provided by *armor, boots etc.*) wont help much against since they're only protecting against *physical* damage. Fortunately, there is a way to reduce the effects of such damage types; by improving the other kind of character protection; the *resistances*. They're specifically:

Resistance	Description
Fire	Protects against the element of fire i.e. dragon breaths, spells like *Firejolt* etc.
Air	Protects against the element of air such as cold, lightnings, thunders etc.
Water	Protects against water and ice related attacks.
Earth	Protects against earth based attacks such as poison, stone and acid.
Energy	Protects against pure non-elemental magical energy
Mental	Protects against attacks that cause mental effects such as confusion, insanity etc.
Soul	Protects against attacks that cause aging, divine spells etc.

9.7. Relation to D&D resistances

D&D provides a number of damage types such a *Fire*, *Cold* etc. A close interpretation of D&D damage types and ORS resistance types is shown on the following table:

ORS resistance type	D&D damage type
Fire	**Fire**

Air	**Cold** **Thunder**
Water	**Cold**
Earth	**Poison** **Acid**
Energy	**Force** **Lightning**
Mental	**Psychic**
Soul	**Radiant** **Necrotic**
Protection	**Slashing** **Piercing** **Bludgeoning**

10. Monsters

Monsters are the natural inhabitants of the wilderness. Some of them are intelligent, other are not but all of the them have a purpose and their location is never random. Some of them guard a fortress, others are hired for protecting some place, others are magically constructed by some mad wizard, others may came from another plane etc. Every monster has a specific set of attacks. Those attacks are defined by *weapons, spells* & *actions*.

10.1. D&D challenge rating to monster level

ORS system provides levels for monsters. However, D&D provides a **Challenge Rating (CR)** for its monsters, which is, as the name suggests, the difficulty to kill a monster. The maximum CR for D&D is 30, while the level cap in ORS system is 100. An easy way to convert a D&D monster's CR to ORS monster level is to multiply the CR with **3.3**, round up.

```
monster_level = std::ceil(CR * 3.3)
```

Some examples:

D&D Goblin (CR: ¼) → (¼) * 3.3 = **Level 1**
D&D Troll (CR: 5) → (5 * 3.3) = **Level 17**

10.2. Compute Hit Points for monster

To compute the hit points for a monster, two (2) need to be known, its level &

its toughness. First, multiply its level by **5** and add to initial hit points. Then, perform a somewhat complex formula add to **total hit points**:

```
hp = (monster_level * 5)
hp += ceil(0.4f + (floor(monster_level * (Toughness * 0.4f)) * 0.125f));
```

Some examples:

Goblin (Level **1**, Toughness **15**) → **7 HP**
Goblin (Level **5**, Toughness **15**) → **30 HP**

10.3. List

Notice that monsters doesn't have **skills** and, obviously, skill levels. As a result, they don't have an **expertise** as well. In any case an action requires a skill level or expertise i.e. spells, the monster's level is used as a skill level and the spell's base expertise is used instead. Monsters belong to a **type**, have a **Level** (which defines its *HP*), a fixed **Protection** (which is defined by either a natural armor or by equipped items), a **Toughness** (which adds to its *HP*), a **Quickness** (which defines its *initiative* in battle), a number of one-liner **Actions** (which can use in combat) and, optionally, a number of **Resistances** & **Vulnerabilities** (which can alter the *damage* they receive).
Actions that cause a condition provide all the necessary information (the condition, the chance of causing it and the ability to reduce that chance by the defender). Keep in mind that chance is further modified by attacker's level (see **Chance to inflict conditions**) and by defender's ability, related to this condition (see **Reduce the condition chance by Ability**). Actions are defined by a number of properties:

- **Target**
  This can be either **1** (one character) or **N** (all characters)

- **Reach**
  Either **S** (short reach; only when on *front-rank*) or **L** (long reach; on all ranks)

- **Damage**
  Can be either physical (**Ph**) or elemental (**eX**), where X can be one of the **F/A/W/E/N/M/S**, each one for an element, like **F = Fire**. Example: *Ph:1-2*
  NOTE: For the increased damage, dealt by *improved* monster variants (i.e. *Goblin Warrior*), see **Damage by Action**.

- **Condition**
  Condition can be defined by providing the first 2 characters, like **De** = Dead, **Po** = Poisoned and so on. There's also the chance to cause the condition (ex: **40%**), as well as the ability used to reduce that chance.

The base monsters are:

Name	Type	LV	HP	Pro	Tou	Qui	Actions	+ Res* - Vul*
Cube, Ooze	Ooze	7	46	3	30	7	***Jelly Slap*** (1,S,eE:3-18)	
Doppelganger	Magical	10	61	8	21	29	***Slap*** (1,S,Ph:5-10)	-
Goblin	Humanoid	1	7	6	15	23	***Broad Axe*** (1,S,Ph:3-8)	-
Goblin, Warrior	Humanoid	2	12	6	15	23	***Broad Axe*** (1,S,Ph:3-9) ***Bow*** (1,L,Ph:3-9)	-
Goblin Chief	Humanoid	5	30	8	15	23	***Falchion*** (1,S,Ph:4-10) ***Bow*** (1,L,Ph:4-10)	-
Snail	Animal	1	7	3	20	8	***Lick*** (1,S,Ph:1-2, eE:1-4)	+Earth
Snail Fire	Animal	3	19	3	20	8	***Lick*** (1,S,Ph:1-3, Ef:1-4) ***Erupting Flame*** (1,L, eF:2-12)	-Water +Fire
Snake Constrictor	Animal	1	7	5	18	23	***Bite*** (1,S,Ph:2-4) ***Grapple*** (1,S,Ph:2-5,Co:Pa,40%,Pow)	-

** Each resistance & vulnerability refers to a skill*

10.4. Experience

The monster's experience to give is computed by weighting all of its properties in a predefined way. Starting with its **Level**, we use the following simple formula:

```
XP = (Level * 25)
```

That is, a monster of **Level 14** will give an experience of **350**, at this point.

Next, we consider its **Protection** and **Quickness** with the following formula:

```
XP += (Protection * 2)
XP += (Quickness * 2)
```

As well, a monster with **Protection** of **10** will give **20** experience.
Finally, a monster with **Quickness** of **8** will give **15** experience.

Next, we consider its **Number of actions** with the following formula:

```
XP += (number_of_actions * 25)
```

That is, a monster with **Number of actions** of **2** will give **50** additional experience.

Finally, we consider its **Resistances** with the following formula:

```
XP += (number_of_resistances * 10)
```

That is, a monster with resistance to **Bludgeon** and **Earth Magic** will provide **20** additional experience.

11. Items

Items are very versatile and can be used differently by profession or not at all, for example a spell book item can't be used by non-casters such as **Knights** and a regular *Longsword* can't be used by a caster. However, all items have common elements such as name, body part to be worn and value.

In addition, most items have improved versions which are more efficient, as well costing more and are rarer to find; those items have a plus **+** symbol next to their name, for example an item named *Longsword +1* it's an improved version of *Longsword*.

11.1. Equipping

One needs to have an expertise in the weapon's skill before using it, otherwise the item can not be used / equipped. In addition, items belong to specific body parts; that is, most of the items have to be worn in a specific body part when they're equipped to be *used correctly*.

For example, a *Longsword* is a weapon that belongs to the *hand* and unless it's not equipped there, it can't be used. However, they can be placed anywhere in inventory, although not used then. In addition, you can't equip an item while you're engaged in a fight. The following table shows the body parts, some example items that belongs there and how many instances of that body part exist in a character:

Body part	Items	Number
Head	Helmet	1
Neck	Amulet	1
Shoulder	Cloak	1
Chest	Plate mail	1
Arm	Gauntlets	1
Hand	Longsword	2
Finger	Ring	4
Feet	Boots	1

11.2. Enchantments

Some items have magical features, called *enchantments*. Those enchantments are providing the wearer effects such as *Power* or *Hit Points* increase or decrease*,* as long as the wearer have those items equipped. Such items are the *staffs*, which provides the wearer i.e. a caster, with a permanent bonus of *Intelligence*, as long as they hold the staff. A rule of thumb is that an enchantment can increase / decrease *temporary* any of character's statistics.

11.2.1. Mode of calculation

The effects an enchantment provides to a statistic can be computed with the following modes. The same enchantment can work differently though item because the mode of calculation used is different. The following list shows the calculation modes, along with a description & the formula used:

Name	Description	Formula*
Fixed value	Applies directly to statistic	statistic = statistic + effect
Efficiency	Uses the efficiency bonus i.e. +1	statistic = statistic + (effect * (efficiency) + 1)
% of value	Uses % of provided value	statistic = statistic + ((effect / 100) * value)
% of stat total	Uses % of statistic total value	statistic = statistic + ((effect / 100) * stat total)
Name	Self-describes the enchantment	By context
Range	Random select from 2 numbers	Used supplementary with other modes
Double	Doubles the effect	Used supplementary with other modes

** statistic = the current & final value of character's statistic after the calculation,*
effect = the value indicated by the enchantment i.e. Power +2,
stat total = the total value of a character's statistic i.e. not current or filtered

11.2.2. Named enchantments

Enchantments can also be grouped under a *common name* that indicates their purpose. This named group may have *one or more* enchantments, providing an arsenal of enchantment effects to the wearer of item. Items may or may not be infused with a named enchantment. By default, only one *named enchantment* may infuse the item and inform players about. However, an item may further enchanted by *multiple enchantments.* In such case, the context of the game decides the correct way to present the item's various enchantments to the player.

All items can get infused by an enchantment except items that are defined by magic or have a single use such as *wands, books, scrolls* & *potions*. The following tables shows the named enchantments, along with the effects they provide, the mode which are using for calculating the effect & the list of item types on which can

be infused:

Name	Effect	Mode	Allowed
of Protection	+5 Protection	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Fire Resistance	+5 Fire Resistance	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Water Resistance	+5 Water Resistance	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Earth Resistance	+5 Earth Resistance	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Energy Resistance	+5 Energy Resistance	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Mental Resistance	+5 Mental Resistance	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Soul Resistance	+5 Soul Resistance	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Health	+10 HP	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Life	+1 HP / **turn	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Greater Life	+10 HP, +1 HP / **turn	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Power	+2 Power	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Intelligence	+2 Intelligence	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Personality	+2 Personality	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Toughness	+2 Toughness	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Technique	+2 Technique	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Quickness	+2 Quickness	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Perception	+2 Perception	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Fire Damage	1-4 Fire Damage	Range, Efficiency	Weapon
of Air Damage	1-4 Air Damage	Range, Efficiency	Weapon
of Water Damage	1-4 Water Damage	Range, Efficiency	Weapon
of Earth Damage	1-4 Earth Damage	Range, Efficiency	Weapon
of Energy Damage	1-4 Energy Damage	Range, Efficiency	Weapon
of Mental Damage	1-4 Mental Damage	Range, Efficiency	Weapon
of Soul Damage	1-4 Soul Damage	Efficiency	Weapon
of Knights	+2 Power, +2 Toughness	Efficiency	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Clerics	+2 Intelligence, +2 Personality	Efficiency	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Wizards	+2 Intelligence, +2 Perception	Efficiency	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Wizardry	+4 Intelligence, +4 Perception	Efficiency	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Cavalier	+2 Personality, +2 Technique	Efficiency	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Shadow	+2 Technique,	Efficiency	Weapon, *Armor, Cloak, Amulet,

	+2 Quickness		Staff, Ring
of Giant	+2 Toughness, +2 Protection	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Titan	+4 Toughness, +4 Protection	Efficiency	*Armor, Cloak, Amulet, Staff, Ring
of Hydra	+2 Toughness, +1 HP / **turn	Efficiency	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Scholar	+10% Experience gained	% of value	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Savant	+25% Experience gained	% of value	Weapon, *Armor, Cloak, Amulet, Staff, Ring
of Animals	x2 damage vs Animals	Double	Weapon
of Oozes	x2 damage vs Oozes	Double	Weapon
of Demons	x2 damage vs Demons	Double	Weapon
of Elementals	x2 damage vs Elementals	Double	Weapon
of Dragons	x2 damage vs Dragons	Double	Weapon
of Medicine	Immune to Poisoned	Name	*Armor, Cloak, Amulet, Staff, Ring
of Humidity	Immune to Flamed	Name	*Armor, Cloak, Amulet, Staff, Ring
of Mobility	Immune to Paralyzed	Name	*Armor, Cloak, Amulet, Staff, Ring
of Courage	Immune to Frightened	Name	*Armor, Cloak, Amulet, Staff, Ring
of Logic	Immune to Maddened	Name	*Armor, Cloak, Amulet, Staff, Ring
of Invigorate	Immune to Exhausted	Name	*Armor, Cloak, Amulet, Staff, Ring
of Blessing	Immune to Cursed	Name	*Armor, Cloak, Amulet, Staff, Ring

** Armor here includes the types: Armor, Shield, Gauntlets, Helmet & Boots*
*** Stat affections apply 50% of the time when applied on per-turn basis*

11.3. Worth

Some items are more expensive than other because are constructed by specific components, which can be either common or rare and require different expertise for their making. All item types have a *base worth* that shows how much this item is worth initially.

11.3.1. Worth by evolution

Evolved versions of item are built upon base worth to increase the item worth. The formula to calculate the worth of an evolved item is the following, *rounded up*:

```
worth_evolved = (base worth * (1 + (2.50 * evolved level)))
```

For example the weapon *Longsword* has a base worth of 50g; an evolved version of it like *Longsword +1* will increase its worth to *(50 * (1 + (2.5 * 1))) = 175g.*

11.3.2. Worth by property

The item can break down into its *properties* such damage on weapons, protection on armors, magic on amulets etc. Each property and amount of it increases the item's worth. Note that some items provides one or more of these properties; for that reason we don't deal with item types here rather properties themselves. The following table shows the worth per property type & amount:

Property	Worth	Example
+1 damage	2g	2-4 damage = 12g
+1 protection	2g	8 protection = 16g
+1 enchantment affection, valued	4g	+4 Power = 16g
+1 enchantment affection, named	15g	Potion of Cure Poison = 35g
+1 named enchantment	50g	of Protection = 50g

11.3.3. Worth by spell

If item contains a spell i.e. *wands*, the expertise of spell and also its number of charges are used to define the additional price. The formula to calculate the additional worth of a spell-contained item is the following:

```
worth_spell = (((expertise + 1) * 5) * number_of_spell_charges)
```

The above equation assumes that *expertise* is a number from **0...n**, where the first **(0)** means the *Initiate* expertise and gets increased from then. Since this rulebook is all about CRPGs, it's game developer duty to implement this mechanism.

11.4. List

In the following content, the *base* items are presented. *Base* means that those items are the basis for other, more *specialized* versions. Those specialized versions may differ in efficiency, including added effects. However, they will always share the basic properties of the item, the skill, the usable body part etc.

11.4.1. Weapon

Weapons are the primary tool to cause damage to your foes and there's a large variety of them. Each weapon has one or more improved variations that

increases damage as the **Efficiency** increases; that is, an improved version of a weapon is stronger that previous. Some weapons starts slow, then increased rapidly in much improved versions, others are already somewhat strong from the start but they doesn't improve a lot. Finally, some weapons are restricted to some professions. The base weapons are:

Name	Efficiency	Damage	Dmg Type	Num Hands	Body part	Used by	Skill	Base Worth	Price
Bardiche	+0	4-18	Melee	Two	Hand	Knight	Poleblade	70g	114g
Bardiche +1	+4	8-22	Melee	Two	Hand	Knight	Poleblade	70g	305g
Bardiche +2	+8	12-26	Melee	Two	Hand	Knight	Poleblade	70g	496g
Bardiche +3	+10	14-28	Melee	Two	Hand	Knight	Poleblade	70g	679g
Battle axe	+0	4-10	Melee	One	Hand	Knight	Long axe	40g	68g
Battle axe +1	+4	8-14	Melee	One	Hand	Knight	Long axe	40g	184g
Battle axe +2	+6	10-16	Melee	One	Hand	Knight	Long axe	40g	292g
Battle axe +3	+8	12-18	Melee	One	Hand	Knight	Long axe	40g	400g
Bow*	+0	6-12 / 1-6	Ranged	Two	Hand	Knight Cleric	Bow	65g	101g**
Bow* +1	+2	8-14 / 1-6	Ranged	Two	Hand	Knight Cleric	Bow	65g	272g**
Bow* +2	+5	11-17 / 1-6	Ranged	Two	Hand	Knight Cleric	Bow	65g	446g**
Bow* +3	+8	14-20 / 1-6	Ranged	Two	Hand	Knight Cleric	Bow	65g	621g**
Broad axe	+0	3-8	Melee	One	Hand	Knight	Short axe	35g	57g
Broad axe +1	+3	6-11	Melee	One	Hand	Knight	Short axe	35g	157g
Broad axe +2	+6	9-14	Melee	One	Hand	Knight	Short axe	35g	256g
Broad axe +3	+9	12-17	Melee	One	Hand	Knight	Short axe	35g	356g
Club	+0	1-4	Melee	One	Hand	Knight Cleric	Bludgeon	15g	25g
Club +1	+3	4-7	Melee	One	Hand	Knight Cleric	Bludgeon	15g	75g
Club +2	+6	7-10	Melee	One	Hand	Knight Cleric	Bludgeon	15g	124g
Club +3	+9	10-13	Melee	One	Hand	Knight Cleric	Bludgeon	15g	174g
Crossbow*	+0	4-14 / 1-6	Ranged	Two	Hand	Knight	Bow	60g	96g**
Crossbow* +1	+3	7-17 / 1-6	Ranged	Two	Hand	Knight	Bow	60g	258g**
Crossbow* +2	+6	10-20 / 1-6	Ranged	Two	Hand	Knight	Bow	60g	420g**
Crossbow* +3	+9	13-23 / 1-6	Ranged	Two	Hand	Knight	Bow	60g	582g**
Dagger	+0	1-3	Melee	One	Hand	Knight Cleric Wizard	Short blade	15g	23g
Dagger +1	+4	5-7	Melee	One	Hand	Knight Cleric Wizard	Short blade	15g	77g
Dagger +2	+7	8-10	Melee	One	Hand	Knight Cleric	Short blade	15g	126g

						Wizard			
Dagger +3	+9	10-12	Melee	One	Hand	Knight Cleric Wizard	Short blade	15g	172g
Falchion	+0	4-10	Melee	One	Hand	Knight	Long blade	40g	68g
Falchion +1	+4	8-14	Melee	One	Hand	Knight	Long blade	40g	184g
Falchion +2	+6	10-16	Melee	One	Hand	Knight	Long blade	40g	292g
Falchion +3	+8	12-18	Melee	One	Hand	Knight	Long blade	40g	400g
Flail	+0	3-8	Melee	One	Hand	Knight	Bludgeon	35g	57g
Flail +1	+2	5-10	Melee	One	Hand	Knight	Bludgeon	35g	153g
Flail +2	+4	7-12	Melee	One	Hand	Knight	Bludgeon	35g	248g
Flail +3	+8	11-16	Melee	One	Hand	Knight	Bludgeon	35g	352g
Greatsword	+0	6-20	Melee	Two	Hand	Knight	Long blade	90g	142g
Greatsword +1	+3	9-23	Melee	Two	Hand	Knight	Long blade	90g	379g
Greatsword +2	+7	13-27	Melee	Two	Hand	Knight	Long blade	90g	620g
Greatsword +3	+12	18-32	Melee	Two	Hand	Knight	Long blade	90g	865g
Halberd	+0	4-18	Melee	Two	Hand	Knight	Poleblade	70g	114g
Halberd +1	+4	8-22	Melee	Two	Hand	Knight	Poleblade	70g	305g
Halberd +2	+8	12-26	Melee	Two	Hand	Knight	Poleblade	70g	496g
Halberd +3	+10	14-28	Melee	Two	Hand	Knight	Poleblade	70g	679g
Hammer	+0	8-12	Melee	Two	Hand	Knight	Bludgeon	70g	110g
Hammer +1	+5	13-17	Melee	Two	Hand	Knight	Bludgeon	70g	305g
Hammer +2	+10	18-22	Melee	Two	Hand	Knight	Bludgeon	70g	500g
Hammer +3	+15	23-27	Melee	Two	Hand	Knight	Bludgeon	70g	695g
Hand axe	+0	4-7	Melee	One	Hand	Knight Cleric	Short axe	30g	52g
Hand axe +1	+4	8-11	Melee	One	Hand	Knight Cleric	Short axe	30g	143g
Hand axe +2	+6	10-13	Melee	One	Hand	Knight Cleric	Short axe	30g	226g
Hand axe +3	+8	12-15	Melee	One	Hand	Knight Cleric	Short axe	30g	309g
Long sword	+0	4-12	Melee	One	Hand	Knight	Long blade	50g	82g
Long sword +1	+4	8-16	Melee	One	Hand	Knight	Long blade	50g	223g
Long sword +2	+8	12-20	Melee	One	Hand	Knight	Long blade	50g	364g
Long sword +3	+10	14-22	Melee	One	Hand	Knight	Long blade	50g	497g
Mace	+0	2-8	Melee	One	Hand	Knight Cleric	Bludgeon	35g	55g
Mace +1	+3	5-11	Melee	One	Hand	Knight Cleric	Bludgeon	35g	155g
Mace +2	+6	8-14	Melee	One	Hand	Knight Cleric	Bludgeon	35g	254g
Mace +3	+10	12-18	Melee	One	Hand	Knight Cleric	Bludgeon	35g	358g
Morning star	+0	5-10	Melee	One	Hand	Knight	Bludgeon	50g	80g

Morning star +1	+2	7-12	Melee	One	Hand	Knight	Bludgeon	50g	213g
Morning star +2	+5	10-15	Melee	One	Hand	Knight	Bludgeon	50g	350g
Morning star +3	+8	13-18	Melee	One	Hand	Knight	Bludgeon	50g	487g
Quarterstaff	+0	2-6	Melee	One	Hand	Knight Cleric Wizard	Pole	20g	36g
Quarterstaff +1	+2	4-8	Melee	One	Hand	Knight Cleric Wizard	Pole	20g	94g
Quarterstaff +2	+4	6-10	Melee	One	Hand	Knight Cleric Wizard	Pole	20g	152g
Quarterstaff +3	+6	8-12	Melee	One	Hand	Knight Cleric Wizard	Pole	20g	210g
Scimitar	+0	7-9	Melee	One	Hand	Knight	Long blade	50g	82g
Scimitar +1	+3	10-12	Melee	One	Hand	Knight	Long blade	50g	219g
Scimitar +2	+6	13-15	Melee	One	Hand	Knight	Long blade	50g	356g
Scimitar +3	+9	16-18	Melee	One	Hand	Knight	Long blade	50g	493g
Scythe	+0	1-8	Melee	Two	Hand	Knight Cleric	Poleblade	60g	78g
Scythe +1	+5	6-13	Melee	Two	Hand	Knight Cleric	Poleblade	60g	248g
Scythe +2	+10	11-18	Melee	Two	Hand	Knight Cleric	Poleblade	60g	418g
Scythe +3	+15	16-23	Melee	Two	Hand	Knight Cleric	Poleblade	60g	588g
Short sword	+0	3-7	Melee	One	Hand	Knight	Short blade	25g	45g
Short sword +1	+2	5-9	Melee	One	Hand	Knight	Short blade	25g	116g
Short sword +2	+5	10-14	Melee	One	Hand	Knight	Short blade	25g	190g
Short sword +3	+9	14-18	Melee	One	Hand	Knight	Short blade	25g	269g
Spear	+0	2-12	Melee	Two	Hand	Knight	Poleblade	50g	78g
Spear +1	+4	6-16	Melee	Two	Hand	Knight	Poleblade	50g	219g
Spear +2	+8	10-22	Melee	Two	Hand	Knight	Poleblade	50g	360g
Spear +3	+12	14-26	Melee	Two	Hand	Knight	Poleblade	50g	501g
War axe	+0	5-7	Melee	One	Hand	Knight	Long axe	40g	64g
War axe +1	+4	9-11	Melee	One	Hand	Knight	Long axe	40g	180g
War axe +2	+8	13-15	Melee	One	Hand	Knight	Long axe	40g	296g
War axe +3	+12	17-19	Melee	One	Hand	Knight	Long axe	40g	412g

** Additional elemental damage (right side), if the item is of elemental type*
*** Prices are for non-elemental type items; they change if the item gets elemental*

11.4.2. Armor

The armor is what gets in between from any kind of attack out there. Without armor, you wouldn't go much further as you would literally take damage to its fullest. There are various armors for your chest and as in weapons, there are improved versions of the same armoring which adds a bit more protection to it. The base armors are:

Name	Efficiency	Protection	Body part	Used by	Skill	Base worth	Price
Chain mail	+0	9	Chest	Knight	Chained armor	100g	136g
Chain mail +1	+2	11	Chest	Knight	Chained armor	100g	394g
Chain mail +2	+5	14	Chest	Knight	Chained armor	100g	656g
Chain mail +3	+8	17	Chest	Knight	Chained armor	100g	918g
Leather armor	+0	4 + TechniqueMod	Chest	Knight Cleric	Leather armor	40g	56g
Leather armor +1	+2	6 + TechniqueMod	Chest	Knight Cleric	Leather armor	40g	166g
Leather armor +2	+5	9 + TechniqueMod	Chest	Knight Cleric	Leather armor	40g	276g
Leather armor +3	+7	11 + TechniqueMod	Chest	Knight Cleric	Leather armor	40g	386g
Plate mail	+0	13	Chest	Knight	Plated armor	200g	252g
Plate mail +1	+4	17	Chest	Knight	Plated armor	200g	768g
Plate mail +2	+8	21	Chest	Knight	Plated armor	200g	1284g
Plate mail +3	+12	25	Chest	Knight	Plated armor	200g	1800g
Ring mail	+0	7	Chest	Knight	Scaled armor	70g	98g
Ring mail +1	+4	11	Chest	Knight	Scaled armor	70g	289g
Ring mail +2	+8	15	Chest	Knight	Scaled armor	70g	480g
Ring mail +3	+12	19	Chest	Knight	Scaled armor	70g	671g
Robe	+0	1 + TechniqueMod	Chest	Knight Cleric Wizard	-	20g	24g
Robe +1	+1	2 + TechniqueMod	Chest	Knight Cleric Wizard	-	20g	78g
Robe +2	+2	3 + TechniqueMod	Chest	Knight Cleric Wizard	-	20g	132g
Robe +3	+3	4 + TechniqueMod	Chest	Knight Cleric Wizard	-	20g	174g
Scale mail	+0	7 + TechniqueMod	Chest	Knight	Scaled	80g	108g

					armor		
Scale mail +1	+2	9 + TechniqueMod	Chest	Knight	Scaled armor	80g	318g
Scale mail +2	+5	12 + TechniqueMod	Chest	Knight	Scaled armor	80g	528g
Scale mail +3	+7	14 + TechniqueMod	Chest	Knight	Scaled armor	80g	738g

11.4.3. Shield

A shield is armor worn in the hand and provides extra armoring if a character decides to use a shield. There are various shields for the hand and as in weapons, there are improved versions of the same shield which adds a bit more protection to it. The base shields are:

Name	Efficiency	Protection	Body part	Used by	Skill	Base worth	Price
Buckler	+0	1	Hand	Knight Cleric Wizard	Shield	20g	24g
Buckler +1	+1	2	Hand	Knight Cleric Wizard	Shield	20g	78g
Buckler +2	+2	3	Hand	Knight Cleric Wizard	Shield	20g	132g
Buckler +3	+3	4	Hand	Knight Cleric Wizard	Shield	20g	186g
Shield	+0	4	Hand	Knight Cleric	Shield	40g	54g
Shield +1	+1	5	Hand	Knight Cleric	Shield	40g	158g
Shield +2	+2	6	Hand	Knight Cleric	Shield	40g	262g
Shield +3	+3	7	Hand	Knight Cleric	Shield	40g	366g
Kite shield	+0	5	Hand	Knight	Shield	60g	90g
Kite shield +1	+1	6	Hand	Knight	Shield	60g	271g
Kite shield +2	+3	8	Hand	Knight	Shield	60g	452g
Kite shield +3	+5	10	Hand	Knight	Shield	60g	633g

11.4.4. Gauntlets

The gauntlets are providing yet another layer of protection and they're worn in

hands. The protection they offer is not as much as armors and shields but it could make a difference on difficult situations. They also do not require a skill to be used and can be used by all professions. The base gauntlets are:

Name	Efficiency	Protection	Body part	Used by	Skill	Base worth	Price
Gauntlets	+0	1	Arm	Knight Cleric Wizard	-	10g	14g
Gauntlets +1	+1	2	Arm	Knight Cleric Wizard	-	10g	43g
Gauntlets +2	+2	3	Arm	Knight Cleric Wizard	-	10g	72g
Gauntlets +3	+3	4	Arm	Knight Cleric Wizard	-	10g	101g

11.4.5. Helmet

The helmet provides basic protection for the head. They're more like supplementary armoring to the real thing, armors. However, as with gauntlets and shields they provide good protection in improved versions. They also do not require a skill to be used. The base helmets are:

Name	Efficiency	Protection	Body part	Used by	Skill	Base worth	Price
Helmet	+0	1	Head	Knight Cleric	-	10g	14g
Helmet +1	+1	2	Head	Knight Cleric	-	10g	43g
Helmet +2	+2	3	Head	Knight Cleric	-	10g	72g
Helmet +3	+3	4	Head	Knight Cleric	-	10g	101g
Mage hat	+0	0 + IntelligenceMod	Head	Cleric Wizard	-	20g	20g
Mage hat +1	+1	1 + IntelligenceMod	Head	Cleric Wizard	-	20g	70g
Mage hat +2	+2	2 + IntelligenceMod	Head	Cleric Wizard	-	20g	120g
Mage hat +3	+3	3 + IntelligenceMod	Head	Cleric Wizard	-	20g	170g

11.4.6. Amulet

The amulets are usually magically enchanted and the majority of them are expensive because of the jewelry they're covered with, as well the amount of magic they contain. They also do not require a skill to be used and can be used by all professions. The base amulets are:

Name	Efficiency*	Body part	Used by	Skill	Base worth	Price
Bone amulet	+0	Neck	Knight Cleric Wizard	-	100g	140g
Celtic amulet	+1	Neck	Knight Cleric Wizard	-	100g	350g
Stone amulet	+2	Neck	Knight Cleric Wizard	-	100g	600g
Crystal amulet	+3	Neck	Knight Cleric Wizard	-	100g	850g
Idol amulet	+4	Neck	Knight Cleric Wizard	-	100g	1100g
Pentagram amulet	+5	Neck	Knight Cleric Wizard	-	140g	1350g

** Efficiency on amulets should not be shown as they are self-described by name*

11.4.7. Cloak

The cloaks are worn above armors and usually give a small protection. However, the power of cloaks is often magical and they boost one or more abilities. They also do not require a skill to be used and can be used by all professions.
The base cloaks are:

Name	Efficiency	Protection	Body part	Used by	Skill	Base worth	Price
Cloak	+0	1	Shoulder	Knight Cleric Wizard	-	10g	14g
Cloak +1	+1	2	Shoulder	Knight Cleric Wizard	-	10g	43g
Cloak +2	+2	3	Shoulder	Knight Cleric Wizard	-	10g	72g
Cloak +3	+3	4	Shoulder	Knight Cleric Wizard	-	10g	101g

11.4.8. Boots

The boots, as well shields, helmets and gauntlets are serving supplementary role, providing similar protection to these armors, yet a worthy one if they're put all together. They also do not require a skill to be used and can be used by all professions. The base boots are:

Name	Efficiency	Protection	Body part	Used by	Skill	Base worth	Price
Boots	+0	1	Feet	Knight Cleric Wizard	-	10g	14g
Boots +1	+1	2	Feet	Knight Cleric Wizard	_	10g	45g
Boots +2	+3	4	Feet	Knight Cleric Wizard	_	10g	76g
Boots +3	+5	6	Feet	Knight Cleric Wizard	_	10g	107g

11.4.9. Staff

The staffs are the primary equipment for spell casters as it allows to channel divine and elemental forces in the form of a spell. Without it, casters won't be able to cast the spells they possess. Staffs are always magically enchanted. They also do not require a skill to be used. The base staffs are:

Name	Efficiency	Enchantments	Num Hands	Body part	Used by	Skill	Base worth	Price
Staff	+0	+2 Intelligence	One	Hand	Cleric Wizard	-	100g	108g
Staff +1	+2	+4 Intelligence	One	Hand	Cleric Wizard	_	100g	358g
Staff +2	+4	+6 Intelligence	One	Hand	Cleric Wizard	_	100g	608g
Staff +3	+6	+8 Intelligence	One	Hand	Cleric Wizard	_	100g	858g
Staff +4	+8	+10 Intelligence	One	Hand	Cleric Wizard	_	100g	1108g
Staff +5	+10	+12 Intelligence	One	Hand	Cleric Wizard	_	100g	1358g

11.4.10. Wand

The wands are practically staffs that cast one particular spell. Each wand contains a certain number of charges. In addition, wands are the only magical items that can be used by non spell-casting professions, such as Knights, although only wands of weaker power can be used by them. They also do not require a skill to be used. The base wands are:

Name	Effect	Num Hands	Body part	Used by	Skill	Base worth	Price
Initiate wand	Casts an Initiate* spell (12 charges)	One	Hand	Knight Cleric Wizard	-	50g	110g
Apprentice wand	Casts an Apprentice* spell (12 charges)	One	Hand	Knight Cleric Wizard	-	50g	**
Adept wand	Casts an Adept* spell (12 charges)	One	Hand	Knight Cleric Wizard	-	50g	230g
Master wand	Casts a Master* spell (12 charges)	One	Hand	Cleric Wizard	-	50g	290g
Grandmaster wand	Casts a Grandmaster* spell (12 charges)	One	Hand	Cleric Wizard	-	50g	350g

** a spell of an appropriate expertise must infuse the wand*
*** no spells yet for this type of wand (based on expertise)*

11.4.11. Ring

Rings are an important property of every adventurer because of flexibility, as well the fact that wearer can equip up to four (4) of them. In addition, they can be enchanted & equipped by every profession. They also do not require a skill to be used. The base rings are:

Name	Efficiency*	Body part	Used by	Skill	Base worth	Price
Bronze ring	+0	Finger	Knight Cleric Wizard	-	25g	25g
Iron ring	+0	Finger	Knight Cleric Wizard	-	25g	25g
Silver ring	+1	Finger	Knight Cleric Wizard	-	50g	175g
Golden ring	+1	Finger	Knight Cleric Wizard	-	50g	175g
Jewel ring	+2	Finger	Knight Cleric Wizard	-	75g	450g
Pearl ring	+2	Finger	Knight Cleric Wizard	-	75g	450g

Emerald ring	+3	Finger	Knight Cleric Wizard	-		100g	850g
Opal ring	+3	Finger	Knight Cleric Wizard	-		100g	850g

** Efficiency on rings should not be shown as the rings are self-described by name*

11.4.12. Book / Scroll

Books and scrolls are very versatile items in the sense that they can be the basic weapon of spell casters and at the same improve anyone's ability or knowledge permanently. They can contain both knowledge and magic powers and their effects varies. They are usable by hand. A scroll is also used for casting spells but only once and caster doesn't actually learn anything about that particular spell. They also do not require a skill to be used. The base books and scrolls are:

Name	Effect	Num hands	Body part	Used by	Skill	Base worth	Price
Initiate book	Teaches an Initiate spell	One	Hand	Cleric Wizard	-	100g	105g
Apprentice book	Teaches an Apprentice spell	One	Hand	Cleric Wizard	-	150g	*
Adept book	Teaches an Adept spell	One	Hand	Cleric Wizard	-	200g	215g
Master book	Teaches a Master spell	One	Hand	Cleric Wizard	-	250g	270g
Grandmaster book	Teaches a Grandmaster spell	One	Hand	Cleric Wizard	-	300g	325g
Initiate scroll	Casts an Initiate spell	One	Hand	Cleric Wizard	-	20g	25g
Apprentice scroll	Casts an Apprentice spell	One	Hand	Cleric Wizard	-	40g	*
Adept scroll	Casts an Adept spell	One	Hand	Cleric Wizard	-	60g	75g
Master scroll	Casts a Master spell	One	Hand	Cleric Wizard	-	80g	100g
Grandmaster scroll	Casts a Grandmaster spell	One	Hand	Cleric Wizard	-	100g	125g
Book of Power	+1 Power permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Personality	+1 Personality permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Intelligence	+1 Intelligence permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Toughness	+1 Toughness permanently	One	Hand	Knight Cleric	-	100g	100g

				Wizard			
Book of Technique	+1 Technique permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Quickness	+1 Quickness permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Perception	+1 Perception permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Fitness	+50 skill XP permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Lore	+50 skill XP permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Persuasion	+50 skill XP permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Taming	+50 skill XP permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Quickhand	+50 skill permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Stealth	+50 skill permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Awareness	+50 skill permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Fire Element	+1 Fire resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Air Element	+1 Air resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Water Element	+1 Water resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Earth Element	+1 Earth resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Energy Element	+1 Energy resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Mental Element	+1 Mental resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g
Book of Soul Element	+1 Soul resistance permanently	One	Hand	Knight Cleric Wizard	-	100g	100g

** no spells yet for this type of book / scroll (based on expertise)*

11.4.13. Potion

Potions are one of the most flexible items because their effects vary greatly and can be consumed by anyone. They are usable by hand. They also do not require a skill to be used. The basic potions are:

Name	Effect	Num hands	Body part	Used by	Skill	Base worth	Price
Potion of Healing	Restores 2-6 Hit points	One	Hand	Knight Cleric Wizard	-	10g	18g
Potion of Healing +1	Restores 4-12 Hit points	One	Hand	Knight Cleric Wizard	-	10g	43g
Potion of Healing +2	Restores 6-18 Hit points	One	Hand	Knight Cleric Wizard	-	10g	68g
Potion of Healing +3	Restores 8-24 Hit points	One	Hand	Knight Cleric Wizard	-	10g	93g
Potion of Cure Poison	Cures Poisoned condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Cure Flaming	Cures Flamed condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Cure Paralysis	Cures Paralyzed condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Cure Fear	Cures Frightened condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Cure Insanity	Cures Maddened condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Cure Exhaustion	Cures Exhausted condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Cure Curse	Cures Cursed condition	One	Hand	Knight Cleric Wizard	-	10g	35g
Potion of Poison	Causes Poisoned condition	One	Hand	Knight Cleric Wizard	-	10g	35g

11.4.14. Misc

Finally, there are items that couldn't be placed into any of the aforementioned categories, mostly because their **features** vary a lot. Most of these don't have any relation to each other but they still can be quite common in the world and/or provide common abilities, while on occasion share some some abilities with all common-

type items referred in previous chapters. Finally, such items are more open to interpretation, for example *Torch* has 24 turns before burning out. Such items are:

Name	Num Hands	Body part	Used by	Skill	Features	Base Worth	Price
Torch	One	Hand	*	-	Lighting (24 turns) Damage (1-4, Melee)	3g	7g

** Usable by all professions*

12. Spells

Spells are the workhorse of casting professions such as **Wizards** and **Clerics** i.e. **Knights** can't cast spells. A caster can cast a spell with various methods such as using his Staff (i.e. not quarterstaff), a Scroll or a Wand. For a caster to cast a spell using a staff, the spell must be learned first by using a spell book. In addition, caster is required to learn the particular magic skill first i.e. to even learn a fire-based spell one has to learn the Fire magic skill first. Some spells can't be used by some casting professions. They're sorted primarily by their expertise because of the varied amount of energy required for casting and secondly by profession.

12.1. Relation to D&D spell levels

D&D provides a number of levels, specifically nine (9) levels per casting class, which levels is a general indicator of how powerful the spell is. ORS uses descriptive expertise levels i.e. *Master*, rather numeric ones. A close interpretation of D&D spell levels & ORS expertise levels is shown on following table:

ORS expertise level	D&D spell level(s)
Initiate	**0 (cantrips), Level 1**
Apprentice	**Level 2, Level 3**
Adept	**Level 4, Level 5**
Master	**Level 6, Level 7**
Grandmaster	**Level 8, Level 9**

12.2. Duration

Spells may have an instant effect i.e. causing damage, while some may have a continuous effect on the target, for a predefined amount of **turns / skill level**. For

example, the spell **Light**, which it casts on caster himself, provides lighting for **24** turns / skill level. **One (1) turn** is equivalent to the following:

- 1 minute (on a **party move**)
- 1 minute (on a **combat turn**)
- 5 minutes (on a **resting turn**)

12.3. Capped effect by level

Some spells are using the caster's expertise level for their effect. These spells have a maximum limit of levels based on the expertise's starting level, **plus 5 levels**. If the caster has more than expertise's level **plus 5 levels**, the level used is limited to this number. Check the following formula:

```
expertise_level = (expertise_level > starting_expertise_level + 5 ?
                   starting_expertise_level + 5 :
                   expertise_level)
```

In game context, the starting expertise level can be easily computed if developer gives an index of *0..*n to expertise i.e. *Initiate = 0, Apprentice = 1* etc. Therefore, the starting expertise level can be computed with the following formula:

```
starting_expertise_level = (expertise * 5)
```

NOTE: Since monsters do not have an expertise level, their level is used instead. The following formula does this, shrinking the monster's level by 4 to normalize high levels:

```
monster_expertise_level = (monster_level / 4)
```

12.4. Casting a spell as a non spell-caster

There are cases where a character can cast a spell without being a spell-caster or simply not knowing the skill at all. One of such cases is casting a spell from a **Wand** or a **Scroll**, which doesn't take professions into account. In this case, the character may not have the skill of the spell contained in the wand, therefore his **expertise level** is simply zero (0). In such cases, the non-caster's skill level becomes **one** (1).

```
skill_level = (skill_level == 0 || not_caster ? 1 : skill_level)
```

12.5. List

Spells are the primary weapons of caster professions, such as **Wizards** & **Clerics**. They're sorted into the element they're drawing their power from, by which profession(s) can be used, the expertise level that is required and such. Wherever a **level** is mentioned, the caster's skill level is considered, not the caster's level. The base spells are:

Name	Skill***	Profession	Expertise*	Duration**	On	Action
Acid Bubbles	Earth	Wizard	IN	Instant	One	**1-2** Earth damage / level
Cure	Soul	Cleric	IN	Instant	One	**1-8** Hit points healing
Firebolt	Fire	Wizard	IN	Instant	One	**1-2** Fire damage / level **10%** Flamed condition
Freezing Spikes	Air	Wizard	IN	Instant	One	**1-4** Air damage / level **-5** Quickness (1 turn / level)
Holy Flame	Soul	Cleric	IN	Instant	One	**1-4** Soul damage / level
Iron Ward	Mental	Wizard	IN	4 turns	Self	**+3** Protection
Light	Energy	Cleric Wizard	IN	24 turns	Self	Normal **lighting**
Magical Armor	Energy	Cleric	IN	4 turns	Party	**+2** Protection

***** *Expertise:* **IN:** Initiate, **AP:** Apprentice, **AD:** Adept, **MA:** Master, **GR:** Grandmaster
*** Duration can be either instant or lasting a predefined amount of **turns / level***
*** The skill the spell belongs to i.e. **Fire magic**

13. Starting equipment & Spells

At the start of adventuring, the party characters require some basic equipment to get going, without getting killed in minutes. For spell casters, they're supposed to know some spells as well. The chosen *Profession* and *Skills* are used to define the character's starting equipment. The following tables provides a list of starting equipment, based on each character's properties:

13.1. By Profession

Professions may define a starting set of equipment. The following table lists all professions and the equipment they give to starting-out characters:

Profession	Starting equipment

Knight	Helmet, Boots
Cleric	Robe, Boots
Wizard	Robe, Boots

13.2. By Skill

The items & spells the character starts with are based primarily on starting *Skills*. The following table lists all the skills and the starting equipment & spells:

Skills	Starting equipment	Spells
Short blade	Dagger	-
Bow	Bow	-
Bludgeon	Club	-
Short axe	Hand axe	-
Pole	Quarterstaff	-
Shield	Shield	-
Leather armor	Leather armor	-
Fire magic	*Wooden staff	Firebolt
Air magic	*Wooden staff	Freezing Spikes
Water magic	*Wooden staff	-
Earth magic	*Wooden staff	Acid Bubbles
Energy magic	*Wooden staff	Light
Mental magic	*Wooden staff	Iron Ward
Soul magic	*Wooden staff	Cure

** one item, regardless the number of magic skills*

14. Character creation

Creating a character is straightforward, it just requires the right order of information. For example, it is wrong order to choose a Profession before choosing a Race because in most occasions a prior selection gives bonuses and/or penalties to the next one. Just try to follow the guide to arrive correctly on *1st level* of your character:

- Go to the **Races** and select a race

- Choose your gender & character name from **Naming** chapter or provide one

- Choose an **Alignment** for your character

- Choose a **Profession**

- Go to **Generate static ability values** to generate the seven (7) **Abilities**

- Go to **Races** and update the **Abilities** by racial *Ability Bonuses*

- Go to **Strong / weak Abilities** and update the affected *Abilities values*

- Go to **Skills** and choose three (3) allowed skills

- Go to the **Starting equipment** and pick up equipment *by Profession*

- Go to the **Starting equipment** and pick up equipment *by Skill*

- Update **Abilities** by picked up equipment

- Go to **Hit points** and calculate hit points

- Go to **Spell points** and calculate spell slots

- Set your character at *1st* level, experience points at *0* and an **Adulthood** age

- Repeat the procedure *3* times (a *4-member* party is required)

- Sum the *initial wealth* of each character's **Profession** to *party gold*

- Provide the party with *10* food rations

- Start the journey!