

TomeNET Guide

Latest update: 9. Januar 2018 - written by C. Blue (c_blue@gmx.net)
for TomeNET version v4.7.1a - official websites are:
<http://www.tomenet.eu/> (official main site, formerly www.tomenet.net)
<http://muuttuja.org/tomenet/> (Mikael's TomeNET site)

IF YOU GOT THIS GUIDE WITH THE PROGRAM DOWNLOAD, IE IN A CLIENT ZIP FILE,
THEN FIRST THING YOU SHOULD DO NOW IS GO TO www.tomenet.eu AND DOWNLOAD THE
LATEST COPY OF THIS GUIDE TO MAKE SURE YOU AREN'T LOOKING AT OUTDATED INFO!

If your text editor cannot display the guide properly (needs fixed-width font
like for example Courier), simply open it in any web browser instead.

Welcome to this guide!

Although I'm trying, I give no guarantee that this guide

a) contains really every detail/issue about TomeNET and

b) is all the time 100% accurate on every occasion.

Don't blame me if something differs or is missing; it shouldn't though.

If you have any suggestions about the guide or the game, please use the /rfe
command in the game or write to the official forum on www.tomenet.eu.

Contents

- (0) Quickstart (If you don't like to read much :)
 - (0.1) Start & play
 - (0.2) Command reference & key sets
 - (0.2a) Text editing keys
 - (0.2b) Slash command reference
 - (0.2c) IRC bot commands
 - (0.3) Important inscriptions, Word of Recall
 - (0.3a) The auto-inscription feature
 - (0.4) Typical slang/abbreviations
 - (0.5) Some hints and warnings (READ!)
- (1) Introduction
 - (1.1) What is TomeNET? (Where can I get the latest sources?)
 - (1.1a) Where do I get in contact?
 - (1.1b) How do I set up IRC chat?
 - (1.2) What is a rogue-like game?
 - (1.2a) Where do I find more information about rogue-like games?
 - (1.3) Goal and progress of TomeNET players
 - (1.3a) Sauron, Morgoth and the Nazgul
 - (1.3b) How to encounter the final boss: Morgoth, Lord of Darkness
- (2) Installation & setup
 - (2.1) Installing/updating TomeNET
 - (2.1a) Installing sound and music packs
 - (2.1b) Audio controls and config options
 - (2.1c) Editing sound and music configuration
 - (2.1d) "Promoting" TomeNET on Steam ;)
 - (2.2) Starting TomeNET and getting to play on an internet server
 - (2.3) Client options
 - (2.3a) Client options configuration files
 - (2.4) Installing voice chat
 - (2.5) Fonts
 - (2.5a) Custom fonts
- (3) Creating a character & starting to play
 - (3.1) Creating a new character; character modes
 - (3.1a) Character names, collisions and reservations
 - (3.2) The display (user-interface)
 - (3.2a) The encumberment bar
 - (3.3) Behaviour, chat messages and chat modes
 - (3.4) Start-up equipment & how to use it
 - (3.4a) Item basics
 - (3.4b) Items that are always tradable
 - (3.5) Preparing the first time for fighting enemies
 - (3.6) Creating basic macros & inscribing items (IMPORTANT)
 - (3.7) Creating macros for ranged attacks & abilities (spells)
 - (3.7a) Ability codes [contained within (3.7)]
 - (3.7b) Quick'n'dirty macros

- (3.7c) The macro wizard
- (3.7d) Specifying directions and targets
- (3.8) Example macro sets
- (3.9) Macros with special keys
- (3.9a) Creating a chat macro for your party
- (3.9b) Alternative macros: Calling objects by their name
- (3.10) Experience, level-ups and skill points
- (3.10a) Experience point table
- (3.11) Death, ghosts and looting
- (4) The world
 - (4.1) Running, picking up items, fighting
 - (4.1a) Auto-retaliation
 - (4.2) Level and owner of items
 - (4.3) Dungeon and tower types
 - (4.3a) The jail
 - (4.4) Terrain
 - (4.5) Towns, shops, the dungeons
 - (4.5a) Shops and their services
 - (4.5a2) The casino
 - (4.5b) Towns & town dungeons
 - (4.5c) Dungeons
 - (4.5c2) Example dungeon depth relations
 - (4.5d) Dungeon bosses
 - (4.6) Pits and vaults
 - (4.7) Traps & trap kits
 - (4.8) Level & vault feelings
 - (4.9) Navigating on maps
 - (4.10) Houses
 - (4.10a) Player stores
 - (4.11) Malicious effects players can suffer
 - (4.11a) Drain effects
 - (4.12) Malicious effects monsters can suffer
 - (4.13) Extermination Orders, Events and Ironman Challenge
 - (4.14) In-game time system
 - (4.15) Swimming
 - (4.16) Teleportation
- (5) Item and monster details
 - (5.1) Melee weapons, brands
 - (5.1a) Melee weapon types
 - (5.2) Ranged weapons, brands
 - (5.2a) Fire-till-kill mode
 - (5.3) Slaying vs brands
 - (5.3a) Martial Arts, brands
 - (5.4) Application of attack-affecting item mods
 - (5.5) Weight of weapons and armour
 - (5.6) Resistances & caps, Immunities, Susceptibilities
 - (5.7) Qualitative classification of items, identifying & selling items
 - (5.7a) Types of Identification
 - (5.7b) The EASY_KNOW flag
 - (5.7c) Loot tables
 - (5.8) Special abilities of items
 - (5.9) What does item xxx do exactly?
 - (5.9a) Activatable items
 - (5.9b) Artifacts and artifact resets
 - (5.10) Destruction of items by elemental attacks
 - (5.10a) Equipment damage from elemental attacks
 - (5.11) Monsters
 - (5.11a) Monster flags
 - (5.12) Monster attack mechanism, Armour Class, damage caps
 - (5.12a) Monster attack types and brands
 - (5.13) Earthquakes
 - (5.14) Curses
 - (5.15) Vampirism
 - (5.16) Invisibility
 - (5.17) How abilities, resistances and boni stack
 - (5.18) Monster auras
 - (5.19) Experience-draining items
 - (5.20) Digging
 - (5.20a) Digging - Exact calculation
 - (5.20b) Digging - Common example values
 - (5.20c) Digging - Further information
 - (5.21) Recharging
 - (5.22) Wraithform
 - (5.23) Item sharing rules and exceptions

- (6) Character details
 - (6.1) Attributes
 - (6.2) Skills, opposed skills
 - (6.2a) Maiar skill modifications
 - (6.3) Abilities
 - (6.4) Races
 - (6.5) Classes/Professions, titles, melee blows/round
 - (6.5a) Start-up Blows/Round Table
 - (6.6) Sanity (or insanity)
 - (6.7) Mimicry details
 - (6.7a) Polymorph rings
 - (6.7b) Druid form details
 - (6.7c) Useful low-level humanoid forms for weapon-using mimics
 - (6.8) Magic spells and prayers
 - (6.8a) Mimic powers
 - (6.8b) Runes & Runemastery
 - (6.8c) Runespell tables
 - (6.8d) Spell failure rate
 - (6.9) Parties, Iron Teams, Guilds
 - (6.9a) Guild halls
 - (6.10) Magic devices, skill and ability
 - (6.11) Parrying and blocking
 - (6.12) Fighting/shooting techniques
 - (6.13) PvP mode
 - (6.14) Miscellaneous character properties
 - (6.15) Character sheet boni page
- (7) Tactics & strategy
 - (7.1) Preparing the inventory for diving into the dungeon
 - (7.2) Preparing the equipment for diving into the dungeon
 - (7.3) Surviving critical situations
 - (7.4) Spoiler files
 - (7.5) Monster tactics
 - (7.6) Town/dungeon related hints
- (8) Miscellaneous
 - (8.1) 'The Art Not To Die'
 - (8.2) Character dumps
 - (8.3) Golem creation
 - (8.4) Artifact creation
 - (8.5) Reward item creation
 - (8.6) Alternative ruleset 'Ironman Server'
 - (8.6a) Special server type 'Arcade Server'
 - (8.7) Game engine limits
 - (8.8) Troubleshooting

(0) Quickstart

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(0.1) Start & play

If you are using Linux, you will find additional information about how to compile the game under '(2.1) Installing/updating TomeNET'.

-Get the latest client from the project's main official site www.tomenet.eu. or from <http://muuttuja.org/tomenet/> (Mikael's site, which features a monster-search and other stuff).

If you're on Microsoft Windows, it is recommended to get the installer package instead of the zip archives.

-Either double-click 'TomeNET-direct.bat' to directly connect to official main server (recommended), or run TomeNET.exe and choose a server manually, for example enter 37.187.75.24 to connect to the official main server.

NOTE: The official main server's hostname is "europe.tomenet.eu".

(The Bat-file will always work properly, even if there are DNS problems which cause the server list not to show up properly.)

-Create a character, Half-Troll warrior is good for beginners.

The server should now allow you to manually choose your stats.

In case you chose a (Half-Troll) warrior, try this:

STR _at least_ 18/30 (to get a high number of attacks per round - the game client will even suggest 18/40 for minimum STR),
 CON as high as possible, INT as low as possible,
 spare points into DEX (especially!), WIS or CHR.

If you decided to play a paladin make sure you have at least DEX 10.

In case you can't reach STR 18/30, go for STR 18/20 instead, which should give you 2 attacks with a war hammer, your starting weapon. Then increase CON and WIS as high as possible, INT as low as possible, spare points (you shouldn't have any ;)) into CHR. (Paladins use WIS for casting spells.)

If for some reason you can't even reach STR 18/20, at least go for STR 18/10, again DEX not below 10, then right after spawning in town discard the war hammer you start with and instead go buy a whip from store '3' (weapon store) or '4' (temple). This should give you a solid 2 attacks per round.

If you decided to create a rogue, ensure that you have at least a STR of 15, and a pretty high DEX (the rogue's main stat) of 18/10. This will give you 3 attacks per round when dual-wielding your light starter weapons.

Rest goes into CON or INT (rogue's main stat for spell-casting).

If you made a druid, put couple of points into all, DEX, STR and CON, and keep your WIS relatively high since it's important for druidic spell-casting.

Some druids might value high starting WIS more than any of the other stats for that reason.

Explanation:

CON affects your hit points, more CON -> more HP.

STR (and DEX) determine your number of attacks per round. 18/30 in STR is enough for warriors to get 3 attacks per round with very light weapons (daggers or whips) regardless of how you modify your DEX.

To get the 3 blows per round (BpR) you'll need to sell your heavy sword and buy a light weapon (3.0 lb or less) like a dagger or whip. That is more efficient than 1 or 2 BpR with your original sword! Later on when your character becomes more powerful you can switch back to heavier weaponry.

Warriors don't really need INT so you should reduce it to spend the points on other attributes. WIS isn't really needed either, but it can be useful to endure sanity-reducing effects and increase your saving throw against certain detrimental effects.

Details about how STR and DEX affect startup blows/round are given in (6.5a).)

---- PLEASE NOTE: ----

If you are new to the game, it is NOT recommended to choose one of these: Istar, Priest, Shaman, Adventurer, Runemaster.

The reason is that these classes are hard to play in the beginning - compare introductory explanation in (6.5)!

Recommended for new players are:

Warrior, Rogue, Paladin, Druid and maybe Archer.

-Make sure you DO NOT chose 'PvP' mode. It's a restricted special thing that has nothing to do with the normal gameplay at all! (See (6.13) for info).

-It's strongly recommended to not choose 'fruit bat' body either :)).

Now you're in the game and should see the town of Bree.

-To chat, press the colon key ':' . Don't hesitate to ask other players if you have any problems with getting started.
(For details about chat features see (3.3).)

-To run, press SHIFT + <direction key> where direction keys are on the number pad 7,8,9, 4,6, 1,2,3. Running often requires that Numlock is turned off (press the 'Num' key above your number key pad on the right side of your keyboard, so the green light is off).
If SHIFT+<direction> doesn't work on your system, you can press the dot '.' followed by a direction key. (If you use rogue-like keys, see section (0.2)!)
You can also use the arrow keys to move, but the numpad is better since it allows you to move diagonally too, which is very important.

-You can wear/wield your armour/weapons by pressing 'w' and choosing them from your inventory which is displayed in the bottom right window.
To take off an equipped item, press 't'. The item will be returned to your backpack (aka your inventory).

-You can pick up items if you stand on them and press 'g'. Items that are especially valuable in the beginning are magic wands and staves, so make sure to pick those up, identify them with a scroll of identify, and sell them to the magic shop in town.

-You can drop items with 'd' or destroy items with 'k'.

- You can enter stairs down/upwards by standing on them and pressing the corresponding key '<' or '>'.
 - You can press '?' to get a short in-game help. The actual list of commands and further info are contained in this guide.
 - Nearby the starter town (Bree) there's often a 'training tower' which is a good place to start because if you die there nothing will happen except a slight loss of experience and gold. Ask people where the dark-green '<' symbol (the tower entrance) is found. Usually to the lower-right of the town centre.
 - If you die outside of the training tower you will usually turn into a ghost. This ghost can't wear any items, so it's a good idea to care about being revived. To get revived, either visit the temple in town (it's a green '4') or ask another player to read a 'Scroll of Life' while standing next to you. While you're a ghost you can freely float up/down by pressing '<' and '>'.
 - If you have any parchments like 'Guide to Middle Earth' or 'The Gazette' in your inventory (bottom right window) you can read those by pressing 'r' to read. They don't do anything, just a short read containing some information.
 - If your character gains a new level it also gains skill points. To distribute those, invoke the skill screen with SHIFT+G. (See (3.10), (6.2) and (7.5).)
 - If you don't like your character and want to delete it, you may commit suicide by pressing SHIFT+q or CTRL+k and double-confirming the following questions with 'y' and '@'.
 - To drop items, privately chat with other players, or advance beyond a certain level you will need an admin to 'validate' your account. Usually, all you have to do is to keep playing/stay online for a bit until an admin logs in, notices that you are new, and validates your account. If that doesn't seem to happen, just ask in chat openly. Some players have validation privileges too and can help you out.
 - Press '@' key to see a list of players who're currently online.
- A yellow '(I)' before a name stands for 'invalid', and means that this player is still awaiting account validation by an admin.
- A grey '(O)' is in front of a player name, it means that player is using an outdated client. It's very important to keep your client up to date!
- If another player's character level is displayed in light blue colour, that means he is within sensible level range of you to form a party! Press SHIFT+P for party menu. One of you has to create the party and add the other one.
- A name displayed in dark blue is an admin.
- A name displayed in purple is a 'winner', ie a player who managed to beat the game boss, Morgoth, the Lord of Darkness (and hasn't died since).
- A name displayed in red is a ghost, ie a player who died. :(
- A name displayed in dark grey is a player who is currently inside the special 'Ironman Deep Dive Challenge' dungeon.
- A few other important keys are:
 - ~ knowledge menu (all of your character's knowledge, plus artifact/monster spoilers under ~6 and ~7 respectively.)
 - = game options menu.
 - % macro menu ('macros' are hotkeys, allowing you to bind certain actions to a single key press). (More about macros in (3.6) up to (3.9b).)
 - SHIFT+P form a party with your buddies. You share experience in a party and you can always see each other on the map and your team mates' current world location in the player list (accessed with '@' key).
 - SHIFT+L look around the map. Very useful to locate team mates ;).
 - CTRL+U the audio mixer menu (the hotkeys for toggling master/music work outside of this menu too).
 - CTRL+Q quit the game. Safest way is to quit in a town, not in the dungeon!
- Note that your character's "speed" may change. Speed is the factor telling you how fast your character can move, fight or perform any other kind of action. If your character's speed gets increased (for example by drinking a potion of speed) you will see a green indicator (for example 'Fast +10') at the bottom line of the main window.
- If your character loses speed, for example by carrying around too many heavy

items in your inventory, you will see a light brown indicator (for example 'Slow -3') at the bottom line instead.

You could continue reading at (3.2) now, which explains the user interface, or glance at (7.1), (7.2) or (7.3) first which explain some basic strategy.

(0.2) Command reference & key sets

Can be different depending on OS / configuration.

This chapter consists of three subsections:

Command keys, Text editing keys, Slash commands.

Command keys

Key combinations with CTRL key can be entered in the macro menu by prefixing the key with a '^' symbol. For example, a swap-macro in normal key set could be 'x0', but in rogue-like key set (where swap is CTRL+A instead of x) it will be '^a0' instead (or with capital letter: '^A0', it's all the same for ^ codes).

Keys:

The first key is of the 'original Angband key set', the second key is of the 'rogue-like' key set. Some people prefer to use that one. You can change it in the options menu, which you invoke with '=' key.

Walk into a direction:

Original key set			Rogue-like key set			Rogue-like (running)		
7	8	9	y	k	u	Y	K	U
4		6	h		l	H		L
1	2	3	b	j	n	B	J	N

You can also use the arrow keys instead of the Numpad keys for movement. (Pressing '5' will make your character try and pick up an item, same as pressing 'g').

SHIFT+<direction key>

runs into that direction. Numlock must probably be turned off, depending on your system. (Numlock is the key labeled 'Num' above the number key pad on the right side of your keyboard. A green lamp usually indicates whether it is on or off.)

You can also run by pressing the dot '.' followed by a direction key.

.	.	Allows you to run (same as SHIFT+direction key).
;	;	The 'walk' command, it allows you to walk one step. This is not really needed for anything usually, since you can just press the directional keys given above instead for walking.
i	i	display your inventory. You can then press SHIFT + inventory slot letter to paste that item name into chat. You can also type \\<slot letter> shortcut in chat to paste an item right into some text you are writing, eg "\\a" for the item in your inventory slot 'a').
e	e	display your equipment. You can then press SHIFT + equipment slot letter to paste that item name into chat. You can also type \\<capital slot letter> shortcut in chat to paste an item right into some text you are writing, eg "\\A" for the item in your equipment slot 'a').
I	I	inspects an item, showing its special abilities in case it has some. To examine an item you must either have bought it from a shop or *identified* it. Mages can learn *ID* spell "Greater Identify", some shops offer *ID* service, or you can use a scroll of *identify*. If the item hasn't been *identified* yet, you will only see basic information. See (5.7) for more information about ID, *ID* and shops! If you examine weapons, it always tells you the weapon class (sword/blunt/axe/polearm) as well as if it's 1-, 2- or 1,5-handed.

w	w	wear/wield an item from your inventory (weapons, rings, amulets, light sources, armour, ammunition, tools).
W	CTRL+W	wear/wield an item, same as 'w', but tries to use the second available slot in case two inventory slots are both eligible.
t	T	take off an item.
x	CTRL+A	swap an item. This is basically like both "wear/wield" and "take off" in one command. This makes only sense if it is used with an item that has been <u>inscribed</u> accordingly, for example "@x4": When the item is currently in the inventory, it will be equipped. If it already is equipped though, then it will be taken off.
q	q	quaff a potion.
r	r	read a scroll.
E	E	eat food. Hunger can kill you, if you don't eat for a longer while, depending on your character. You will see a yellow 'Hungry' appear below the status bar on the left side in the main window, then it will change gradually to orange/red 'Weak' and you will start getting paralysed by the lack of food! Finally you will start losing hit points and eventually die from starvation. (Draconians can eat firestones to gain temporary special abilities, see (5.9). Players in dragon form can eat them too.)
F	F	fuel your light source. Use oil for lanterns, and torches to fuel another torch.
f	t	fire ammo from your quiver.
v	v	throw an item from your inventory.
b	P	browse (peruse) a book.
m	m	use an ability/skill (ie cast a magic spell, lay a trap, use a technique, polymorph into a monster form or back to normal, cast a monster-spell while polymorphed, enter a combat stance).
a	z	use (aim) a magic wand.
z	a	use (zap) a magic rod.
u	Z	use a magic staff.
,	,	or..
g	g	pick up an item from the floor. You have to stand on the item to do that. You can also pick up an item by pressing '5' on the number pad while numlock is turned off. Gold is always picked up automatically. If you stand on a pile of different items, the top-most type of item will be picked. Note that ',' key has by default a "reply to last private chat" macro on it, so you'll have to use 'g' key instead or delete the macro from the comma key, if you want to use it to pick up items.
CTRL+G	CTRL+Z	pick up exactly one piece from a stack of same type of items.
K	CTRL+C	forcibly combines a level 0 item in your inventory with other items of the same type that aren't level 0. Be warned, that this will change the level of all the items involved to 0.
C	C	see a character overview.
L	W	look around your current sector/floor (use direction keys).
M	M	display either the world map if you're not in a town or in a dungeon, otherwise display a minimap of the town or of your

currentl dungeon level.

If you want to see the world map while you're in town or in the dungeon, press ~ and choose "Wilderness map" there. You can scroll around the map via directional keys.

s	s	search adjacent fields, objects or walls for hidden traps or doors.
S	#	enter 'search mode'. You will search your adjacent fields once each turn. If you stand next to a room and you want to find its hidden door, turn this on and run along its walls until you find it.
V	V	<p>enter 'cloaking mode'. This can only be used by rogues. It will take a couple of turns to perfectly cloak your physical appearance and body warmth pattern, after which you will be completely invisible to monsters who use normal sight or infra-vision.</p> <p>Only a few monsters who are able to utilize ESP (telepathy) or have especially powerful detection will still notice you. Those are eyes, angels, Nazgul, nether guards, and unique monsters which are both smart and powerful at once. Taking damage (HP/sanity/experience), attacking, and some other actions will immediately break cloaking, while some actions such as drinking a potion will only temporarily weaken your cloaking: Your colour will go from dark grey to normal grey for a short time, during which you are not effectively cloaked. If you avoid taking damage or performing any action that breaks cloaking during this time, you will go back to being perfectly cloaked.</p> <p>The duration of cloaking being weakened will vary depending on which action you performed.</p> <p>Auto-retaliation is disabled while cloaked, except for the Stormbringer (which will break the effect of course).</p> <p>Taking damage from floor terrain will not affect cloaking. Cloaking will also increase your searching, greatly increase your stealth, but decrease your speed. Sneakiness skill may very slightly reduce the decrease.</p> <p>If you attack a monster while cloaked, it'll count as backstab, making full use of your 'Backstabbing' skill if you have trained it. See (6.2) for 'Backstabbing' details!</p> <p>Note: Cloaking has no effect on shoplifting; it breaks on entering any shop.</p> <p>Note: Although ESP is supposed to detect cloaked targets, for now it's still set to override ESP of other players for the sake of PvP usage, similar to invisibility.</p> <p>(Also see (5.16) for details on 'normal' invisibility.)</p>
A	A	activate an item. Usually an artifact, a dragon scale mail or a ring of polymorphing (shapechanging).
T or +	+	tunnel (dig) through an obstacle or a wall.
R	R	rest. Your hit points, mana and stamina will regenerate faster while resting.
o	o	open something.
c	c	close something.
c	while in a store:	<p>Paste an item name, its price and the store symbol into chat, in case you want to tell other players about it.</p> <p>You can also type \\<slot letter> shortcut in chat to paste an item right into some text you are writing, eg "\\a" for the first item on the store page you are currently looking at.</p>
d	d	drop an item.
\$	\$	<p>drop some gold. You can use 'k' and 'm' for thousands or millions, example: 3k -> drops 3000. 2m -> drops 2000000.</p> <p>You can also do things like 2m43 to drop 2430000 gold pieces or k6 to drop 600.</p>
D	D	disarm a trap. This yields experience points, depending on the

trap type. (Note that you won't get experience points for disarming traps via magic spells or magic devices.) Also see (4.7) for details about traps.

k	CTRL+D	destroy an item. (Note that artifacts cannot be destroyed this way.)
G	G	skills screen.
B	f	bash/force something (ie a stuck door). If the door crashes open, it softens the sleep of nearby asleep monsters somewhat (similar in effect to the /cough command).
l	x	look at a player/monster/object (use direction keys for targetting). Similar to targetting, while looking you can press 'p' to switch to manual cursor positioning, allowing you to look at a specific grid, then press 'l' again to confirm. (Unimportant side note: The look command also sets the entity you are currently looking at as your target, even if it would not make much sense because you are for example just looking at another player who isn't even hostile towards you. This means that you will aim at the entity you looked at in case the '*t' command is unable to acquire a new valid 'real' target when you use a ranged attack that requires a target. This behaviour has no real effect on gameplay though it just looks odd in those rare cases it happens :-p.)
j	S	attempt to steal from players (not recommended!).
U	O	use undead powers (use this if you died and became a ghost). Using these will drain your experience. If you ran out of experience points, your ghost fades away (= you character will be completely erased). NOTE: Undead powers are currently not available.
CTRL+S		spike a door (using iron spikes, the door will be jammed).
p	p	Concentrate on opening your mind for telekinesis. ("You open your mind.." and "You close your mind.") You need to open your mind in order to receive items from other players by telekinesis. If you are not concentrating, they will receive an according message, telling them that using telekinesis on you is currently not possible. Hit 'p' again to stop concentrating and close your mind. Certain spells of the mindcrafter class might also require players in the same party to open their minds in order to work or to affect them as intended. Having an open mind can make it easier for psi/confuse effects to affect you.
h	CTRL+E	sell/buy a house or change house parameters. See (4.10).
P	O	party screen. Form/disband/modify a party with other players here. In a party you will share experience points if you are within 7 character levels to each other and on the same dungeon/tower level respectively the same worldmap/wilderness sector. See (6.9) for details! For winners (queens/kings/empresses/emperors) the range is 11 levels instead of 7.
H	CTRL+G	re-apply client-side and (if 'auto_inscribe' option is enabled) server-side auto-inscriptions to an item.
CTRL+U	CTRL+F	Displays/exits the audio mixer settings. (Also see (2.1a).) Note: Mixer settings are saved automatically, provided you use CTRL+Q to quit. (Compare troubleshooting section (8.8), problem 21.)

Here you can set audio volume for sound effects and music or mute them separately. The hotkeys for muting work outside of the mixer screen too, during normal gameplay.

If you haven't installed a sound or music pack, you can do that by running the TomeNET-Updater or by downloading packs

manually (for download links see the 'download' page on the TomeNET homepage for official packs, or look in the forum for user-made packs).

CTRL+C CTRL+X Toggles music. Shortcut for toggling it in the mixer settings. This hotkey works outside of the mixer screen too.

CTRL+N CTRL+V Toggles audio. Shortcut for master toggle in the mixer settings. This hotkey works outside of the mixer screen too.

Note: If you press this while in chat prompt, you will instead cycle forwards through lines you previously typed - also see CTRL+P key, which cycles backwards.

SPACE Stop executing repeatable actions such as searching, tunnelling or disarming traps. Also stops active fire-till-kill shooting and any preparations for a shooting technique (flare missile, precision shot, barrage).

< or > go upstairs/downstairs. Press '>' to use a void gate (violet '+'). Void jump gates teleport you to their counterpart and vice versa giving you a message "You fall into the void. Brrrr! It's deadly cold.". Draconians can get harmed by using void jump gates, see (6.4). If you take staircases up/down, you'll receive the 'stair GoI' buff, see (0.4) for details on that.

{ inscribe an item.

If the first character is a backslash '\', then instead of overwriting an existing inscription the new inscription will either replace a part of the current one or otherwise be appended at its end. Replacing happens if the backslash is followed by either @<letter> or ! or # which indicate special inscription "parts".

Examples:

An inscription "abc !k @S- xyz" that is inscribed "\@S50k" will turn out "abc !k @S50k xyz". If it is instead inscribed "\!ds" then it will turn out "abc !ds @S- xyz".

When replacing the # part or an @P part, the whole rest of the inscription is replaced. For @P this is so because player names may contain spaces, so those cannot be used as reliable delimiters.

Instead of replacing a tag, you can also remove it by doubling the tag type character, examples:

"\@@S" will remove the price tag from an item.

"\@@" will remove the first @-tag of any type.

"\!!" will remove an "!" tag.

"\##" will remove the whole part that follows after the '#' character.

To simply append a new inscription to an existing inscription, enter '\\\' at the beginning of the new inscription.

} remove inscription from an item.

/ in general, use an item (combines q,r, etc..). This can be useful if you run out of macros for a specific action, for example if you already use @m0...@m9 and still have more spell books/scrolls in your inventory, you can inscribe the remaining ones @/0...@/9. Or you could create a macro *t/0- and bind it to a certain key, and then inscribe a useful wand or staff @/0 without having to pay attention to whether you're currently using a wand or staff there (or rod, of course), as a sort of 'special power button', for example a staff of slow monsters (very handy at low levels) or a wand of light to kill orcs, jellies, and other light-sensitive critters. Note that in the spell book example above, you could of course just use call-by-name instead so you won't need any inscriptions at all (3.9b) !

~ display further information of your (character's) knowledge. Point (2) and (7) here are especially helpful for mimics: In ~2, the number shown in round brackets before each monster name is the same they have to enter for their 'Polymorph self into..' ability! In ~7 you can check out all features of a monster.

@ displays a list of players currently on the server.

Note that a yellow '(I)' before a name stands for 'invalid', and means that this player is still awaiting account validation by an admin. Also, if a grey '(O)' is in front of a player name, it means that player is using an outdated client. It's very important to keep your client up to date! (Same command as ~a) If another player's character level is displayed in light blue colour, that means he is within sensible level range of you to form a party! Press SHIFT+P for party menu. One of you has to create the party and add the other one.

Additional info that may be shown in @ screen:

'Silent mode' Means the player has enabled the 'limit_chat' option, which restricts chat to players on the same dungeon floor as him, except for private/party/guild messages.
'Private mode' The player has used the '/ic' command to ignore all chat except for private or party messages.
'*Private* mode' The player has used the '/ic *' (or alias /dnd) command to ignore all chat except for party messages and private messages from party members.

If the server has specific PK-rules enabled, there are additionally:

'PK' Player participates in player-killing.
'SAFE' Player does not participate in player-killing.
'Newbie' Player cannot participate in player-killing.
'Killable' Player can get killed by other players.

To modify the PK status of your character, use the '/pkill' command.
Note: These PK-rules are disabled by default on our official server.

% edit your macros (see from (3.6) to (3.9b)).

& edit your auto-inscriptions (see (0.3a)).

= edit your preferences.
Most important entries here are..

User Interface Options:

"Rogue-like commands" will change your keyboard layout to the original Rogue key definitions.

"Flicker messages in recall" will allow you to see animated messages in the bottom left window (message history).

"Always show lists in item/skill selection" will always show a list of possible choices if you use commands that require you to make a selection from a list of choices.

A lot of audio options; note that on systems where the /page command won't produce a native beep sound, you can enable sound system paging instead here! (Of course you can also enable it on all other systems too, which might be nicer than the system beep).

Game-Play Options:

"Set 'AFK' mode automatically" will set you afk after some minutes of inactivity.

"Automatically open doors" makes your character try to open a door just by moving towards it.

"Automatically disarm traps" makes your character try to disarm a trap just by stepping onto it.

"Automatically tunnel walls" makes your character tunnel through a wall just by moving towards it.

"Scroll the screen more frequently" helps to avoid death by attacks that came from off-screen. However, this option can be a bit irritating.

: type a chat message. To whisper privately, enter <player>:<text>
eg: Gandalf:hi! - actually the first few letters of the target player's name are enough, like: Gan:hi!
You can also enter a slash command here.
Press TAB to cycle between different chat modes, such as party-chat.
For details about chat features see (3.3).
For details about slash commands, see further below in this paragraph.
There is also a /say command for talking to players nearby, and a /shout command for waking up monsters! See further below.

' lets you peek at the equipment of party members or players within sight.

displays the high scores (same as ~c).

(Note: If you press this while browsing any text you can jump to a line number of your choice.)

- | displays the unique monster list (same as ~1).
- X this key carries a predefined macro:
Quickly swap between two equippable items. They must be inscribed '@x0'. (It's basically just the macro 'x0' bound to shift+x key.)
You can remove this macro in the macro menu, just like any other macro, if you don't like it.
- , This key carries a predefined macro:
Reply to the last private message you received. It's simply the macro ':+: ' bound to a key.
You can remove this macro in the macro menu, just like any other macro, if you don't like it.
- _ Two uses, regarding a) fountains or b) item piles:

a) Main: Drink from a fountain. You must be standing on the fountain. Fountains can have good/bad/no effects. There is no fountain of death, neither one of detonations, so you won't get instakilled.
If you see a message 'You feel less thirsty' that means the fountain was just plain water. A message 'You have quenched your thirst' means that the fountain had no effect on you, although it wasn't water.
(Same as /sip command.)
Fountains cannot have effects of potions which are of higher level than the dungeon level where the fountain is. The duration of the effect is also the same as the actual potion would last.

b) Secondary: If you press _ while standing on an item or a pile of items, you will get a message what item is currently below your feet.
- ? invoke an in-game help screen
- ! look at the in-game bulletin board. Players can write lines of text to it by using the /bbs <text> command.
- CTRL+P view previous messages.
Note: You can also press this when in chat prompt, to cycle backward through lines that you previously typed (also see CTRL+N, which cycles forwards).
- CTRL+O view previous chat messages.
- CTRL+Q save your character & quit the game. (You should do this in town!)
This also automatically saves some settings, like window layout (the windows' positions and sizes) and mixer settings (CTRL+U to change, CTRL+F on rogue-like key map), and you will be asked if you want to save the chat log to a text file.
Note that if you exit the game just by clicking on the 'x' button in the game window's titlebar, these extra features will be skipped, and any changes in settings or window layout will be discarded.
- Q or CTRL+K lets your character commit suicide (permanently deletes it!).
Characters who suicide won't drop items except for artifacts (if the server has ANTI_ARTS_HOARD enabled then no item at all will be dropped), nor will they keep the level static as it happens on a normal 'final death' (see (3.11) for details about static levels).
- CTRL+R redraw the screen (do this if it's messed up for some reason).
(/refresh, /ref)
- CTRL+T take a screen shot. See /screenshot command below.
- TAB or CTRL+I displays lag-o-meter.
- ^ Allows to enter a CTRL character as command.
- \ Enter a command, bypassing the client's key map.
Also allows to enter ^ next to enter a CTRL character as command.

-) Clears the command buffer of pending key presses (used in macros).
- * Initiates targetting a monster, hostile player or location (used in macros).
- (Initiates targetting a friendly player (used in macros).
(Currently targets the most hurt player who is in your party, or the most wounded player in general if you aren't in a party.)

(0.2a) Text editing keys

When typing in a line of text (eg to chat), the following control keys are available for text editing:

- CTRL+P/N Cycle through your message history.
- CTRL+V/B Move cursor to beginning/end of line.
- CTRL+Q/W Move cursor back/forward by one word.
- CTRL+E Delete word before the cursor.

..and a special function:

Whenever a text input prompt appears which suggests a default text, you may press CTRL+E as the first key you hit. Then the default text will actually be used as if you entered it and it becomes editable.

The main purpose of this functionality is in the macro menu when manually editing macro actions: You can edit a previously defined action without having to completely retype it.

- CTRL+A/S Move cursor back/forward by one character.
- CTRL+D Delete character under the cursor.

(0.2b) Slash commands

There are also some commands that can be entered with ':' like a chat line. They all start with a slash '/' hence they're called slash commands:

- /help view a list of all command keys (same as pressing '?' key).
Also lists a few most commonly used slash commands.
- /afk toggle AFK (away from keyboard) mode if you have to take a quick break from playing.
Note that your character won't need to consume food while afk _IF_ you are not already 'hungry' or even 'weak' from a lack of food! All other timed effects will continue to be processed (like magical effects such as haste/slowness/hallucination, pseudo-ID or wearing off of temporary stat drain from traps) and eventually wear off.
Also, other players cannot switch places with you by moving into you, use teleportation or Word of Recall on you, infect you with black breath by bumping into you, steal from you, form a blood bond with you or attempt to polymorph you while you are afk.
An exception are grids in front of stores: If you block those, other players can switch places with you even when you're afk.
- /afk <msg> You can specify a reason that will be displayed to the other players, so they know why you are currently AFK or when you will be back.
- /autoret Sets up auto-retaliation with a mimic power.
(/ar) Usage: /ar [t]<power> or to disable: /ar -
If 't' is prefixed to the power, it will only be used while in a town. Example: /ar tg
This will auto-retaliate with mimic power 'g)' while in town.

(Note that you cannot auto-retaliate with 'polymorph into...' power aka 'c)', instead it will be treated like power 'b)' aka 'polymorph into next form with fitting extremities'.)
- /bed [*|<inscription>
(/naked) Opposite of /dress.
If no parameter is given, the character takes off everything from body slot to feet slot.

If '*' is given as parameter, the character will take off all equipped items.

If another parameter is given, the character will take off all items that have this parameter occur in their inscription.

/bbs <text>

Add a line of text to the in-game bulletin board system. Players can look at the board by pressing the '!' key.
(You can verify or compare the date with the /time command.)
If <text> is omitted, the current BBS contents will be shown, same as using the '!' key.

/convertexclusive Attempts to convert your current character into a slot-exclusive character (either PvP-mode or IDDC aka Ironman Deep Dive Challenge). Warning: This process is NOT REVERSIBLE! To attempt to convert your character, type:
/convertexclusive <your-character-name>
for example:
/convertexclusive Gandalf
If you still have a free exclusive character slot available then your character is moved to that slot, freeing up a generic character slot again.

/coin Flip a coin to get either heads or tails.
or /flip The result is random and can be seen by other players who stand nearby.

/shuffle [32|52 <jokers>]
Prepares a new deck of cards.
If you specify no arguments it will shuffle a deck of 52 cards without any jokers as default setting.
Valid arguments are either 32 or 52 to pick a deck size. When you specify a deck size you may optionally specify an amount of jokers to be added to the deck, which may range from 0 (default) to 12.

/deal [<name>]
Deals a random card from the player's current deck. (Use /shuffle to actually prepare a deck first.)
The card dealt can be seen by other players who stand nearby.
If you specify a player name the message will tell the others to whom you dealt that card.
If it's the final card of the deck, everyone around will be notified of that fact.

/draw <name>
Draws a random card from another player's deck. Basicall same as the /deal command, except for who actually picks the card (the dealer himself or one of the other participants).
If it's the final card of the deck, everyone around will be notified of that fact.

/dealer <name>
Hand over your current deck of cards to someone else. If that player already shuffled a deck of his own, that one will be erased aka overwritten by the one he receives from you.

/dice Roll some dice, you must specify a number of dice from 1 to 100. The result is random and can be seen by other players who stand nearby.

/d Rolls two dice, shortcut for "/dice 2".

/die Rolls one dice, shortcut for "/dice 1".

/roll and /r are same as /dice and /d respectively.

/dis DESTROYS every item in your inventory that has one of these (/dispose) inscriptions: terrible, cursed, uncursed, broken, worthless, average, good. Works only on items that actually can be destroyed. Skips 'flavoured' items that are not known to you yet (example: 'a blue potion {+,?}' or 'a malachite ring {+,?}'). Skips items which inscription contains more than a pseudo-ID tag. Also see /tag and /untag. Note that artifacts cannot be destroyed this way.
As a specialty, /dis (without parameters) will also destroy cheap (leather/metal) shield types that do not posses any special powers. As another specialty, /dis (without parameters) will skip dragon scale mails, leaving them intact.

/dis a DESTROYS items like '/dis', and additionally destroys all items

that have no inscription at all.
Also see /tag and /untag.

/dis b DESTROYS items like '/dis a' does, but skips identified ego items, provided they aren't cursed.
It also skips (non-cursed) exploding ammo, although it isn't really an ego item.

/dis f DESTROYS the item on the floor you're standing on provided it is not inscribed in any way, and tells you about the next item below that.

/dis fa DESTROYS an item like '/dis f', even if it has an inscription.

/dis fb DESTROYS an item like '/dis fa', but skips identified ego items, provided they aren't cursed.
It also skips (non-cursed) exploding ammo, although it isn't really an ego item.

/dis F[a|b] Same as '/dis f', also accepts optional parameters a or b, but this command destroys the whole ITEM PILE you're standing on.

/dr [tag] Without tag it equips all items in your inventory that are: not cursed, not {worthless}, not {broken}, not {terrible}, and that are known to you.
(/dress)
With tag it just equips all items that contain that tag in their name or inscription somewhere (even if they are cursed).
Opposite of /bed.

/dun Displays the name of the dungeon you're currently in.

/empty <inventory slot>
Empty a potion from your inventory, leaving an empty bottle.
Example: /empty c (if you have 'c) 3 potions of boldness', one will be emptied and 2 remain at 'c) 2 potions of boldness'.))

/evinfo Displays information about all ongoing events.

/evinfo <#>
Displays information about the specific event number #.
Note: If you log out, your sign-up is cancelled automatically.

/evsign <#>
Signs you up for the event number #.
Depending on the event, you might need to specify additional parameters after the number. If that is the case, you'll see a message telling you so and about which details what's missing.
NOTE: If you log out, your sign-up is cancelled automatically, so after logging back in you will have to sign up again.

/evunsign <#>
Signs you off from that event number #.

/ex or /examine or /extra
Gives you detailed information about your character's status, such as how many actions you may perform per turn.

A turn is a basic server timing unit, which for example is used to display the amount of fuel in your light source, or which will make you suffer poison damage each on each turn that passes if you're poisoned.
Turns pass slower on deeper dungeon levels to make up for increased monster and player speed, keeping the game playable in real-time, see (4.14) for details.
(Note that the server also has a type of internal turn counter, which counts a different sort of turns, one each frame. Usually, the server will run at 100 fps, so these turns pass much faster. It might be a bit confusing that both these units are just called 'turns' although they don't correlate, but you won't really have to worry about internal turns at any point, only the 'character turns' are of any importance and noticable by your character, for example, as mentioned above, when you're poisoned, suffering from a cut, waiting for your blacklist to run out, or any other matters.)

Additionally, /ex will also display the following information:

- how many resurrections you have left, if you are a normal-mode character;
- which of your auras are currently active (if you have points in the corresponding aura skills);
- extremities your current monster form possesses (if you're transformed into a monster form at the moment). This can be helpful to figure out what types of items you may equip while in this form.
- forms you have learned if you're a druid, and their according polymorph codes so you don't have to look them up in (6.7b) if you forgot them;
- pvp kills;
- the in-game time and date, and whether it is day or night. (Note: If you want to know the server real-life time, use /time.)
- how much more gold you may pick up before your character will automatically receive 1 experience point (to limit the amount of cash you can pick up before participating in certain events, such as Highlander Tournament or Ironman Deep Dive Challenge).

/exit Leaves the game, same as pressing CTRL+Q.
(/leave,/quit)

/fe Repeat the level feeling. See (4.8) for more information.
(/feeling) If you aren't eligible for receiving a floor feeling, you will instead get the message "You feel nothing special."

/fill fill an 'Empty Bottle' in your inventory with the water from a fountain. You must stand on the fountain to do this.

/ftkon or /ftkoff Enables or disables fire-till-kill mode (see (5.2a)).
Alternatively, you can toggle it in 'm' menu.

/gbbs <text> Same usage as /bbs, but only readable/writable for guild members. So it's a guild-internal BBS.
To read its contents, type /gbbs without any <text>.

/gleave Leaves your guild. Same as pressing 'SHIFT+P' and 'd'.
or /gquit

/gnote <text> Leave a note to the guild you own.
If <text> is omitted, it will display the current note.
If <text> is just an '*' char, it will erase the current note.

/guild_adder <name of another player> Allows that player permanently to add other players to the guild too. Use the command a second time to revoke his rights again.

/guild_cfg [<flag> [<value>]] Shows you your current guild configuration and allows you to change it.

/guildmembers Displays a list of all members of your guild.

/hou Displays your houses, same as ~9, but offers two optional
(/house) parameters to refine the search results:
/hou o will only show your own houses.
/hou l will only show houses in your current worldmap sector.
/hou ol both of the above.

/ig <player name> ignores all chat messages from the specified player. (Toggle)
(/ignore) Also silences all paging attempts from that player.
To un-mute the target again, retype the command with its name.
The blocked player will see a message about you ignoring him when he tries to send you any private message or page you.

/ic ignore all normal chat messages which are neither private messages
(/ignchat) nor party messages. ('Private mode' will be displayed after the player's name in the player overview screen which can be invoked by pressing '@', indicating that this player currently cannot read normal chat messages.)
(This is similar to 'limit_chat' option, which however still allows

all floor-chat occurring on the same dungeon floor and guild chat.)

`/ic *` Same as above, but also disables all private messages except from party members! (Will display `'*Private* mode'` after the player's name in the @ screen.)

`(/dnd)`

`/info <msg>` Sets an informative message that is displayed to other players in '@' screen, similar to an afk-message, except this message is displayed when you're not afk.
For example do: `/info Want to team up for Mordor!`
If you type `/info` without a message, it clears your info message.

`/kifu <email>` Use this command after you played Go in the casino in Minas Anor. It will send all your new Go game records as SGF files to the email specified. If you're using a Microsoft-related email address, eg outlook.com, note that Microsoft is notorious for blocking email from the email-provider used by TomeNET, so you might not get it. The `/kifu` command works per character name, not per account name, so you only get those kifus emailed that the character played on which you used the command. (SGF is the 'Smart Game Format'.)

`/leave` Leaves the game, same as pressing CTRL+Q.
`(/exit, /quit)`

`/lite a..w` Refills your light source with an item from your inventory. Usually it's easier to just press 'F' instead.

`/mar` Tells a holy-defense-user if he may use the prayer 'Martyrdom'.
`(/martyr)`

`/me` Write an emote. Example: `/me hides.`

`/mon <monster character>` Same as going to ~ menu and selecting 'Monsters':
Will show your kill count of all matching monsters.
Example: `/mon D ->` shows your greater dragons kill count.

`/motd` Shows the current server notes that are displayed at login.
`(/snotes)`

`/news` Shows the login screen, same as ~f, but in monochrome.

`/note <character/account name>:<text>` Leave a note to another player. The message will actually go to the player's account even if you specified a character name, so no matter which of his characters he chooses to logon, he always gets the note.

`/note <character/account name>` Delete all pending notes that were addressed to that player.

`/notes` Display all pending notes that you wrote to other players.

`/obj` Displays all objects known to you, same as ~4.
`(/object)`

`/page <player-name>` Sends beeps to that player to help you getting his attention. (Using `/ignore` on a player will also prevent getting paged by him.)
If you're on Linux and not hearing the page sounds, see problem 19 in the troubleshooting section (8.8).

`/paint` (Also available by pressing 'h' for house menu.)
Use a potion in your inventory to paint your house entrance in a similar colour. The potion is used up in the process. A potion of water removes the paint again.
Painting your house can be useful for example to mark it for others to see that you run a player store. Further, you could choose the colour to indicate the type of items you offer, for example red for magic items similar to the red '6' town store.
Note that players of incompatible character mode (everlasting vs non-everlasting) won't see each other's house paint.
(See (4.10a) for more information about player stores.)

`/partymembers` Displays a list of all members of your party.

/pbbs <text> Same usage as /bbs, but only readable/writable for party members. So it's a party-internal BBS.
To read its contents, type /pbbs without any <text>.

/pkill
or /pk Toggles the player's status regarding participation in 'PK' actions aka player-killing. PK rules must be enabled on the server in order to use this command. The PK status of each player will be displayed in the players-online-screen that you invoke by pressing @ key.
Note: PK-rules are disabled by default on our official server.

/play Join/leave a mini-game (such as rugby on the field in Bree).
Will at some point in the future be absorbed by /evsign and thereby become obsolete.

/pleave
or /pquit Leaves your party. Same as pressing 'SHIFT+P' and '5'.

/pnote <text>
Leave a note to the party you own.
If <text> is omitted, it will display the current note.
If <text> is just an '*' char, it will erase the current note.

/pstore (Also available by pressing 'h' for house menu.)
Attempts to enter a player store next to you, even if it's your own house. So this command is good for 'testing' your own store.
Usually you simply enter another player's store by trying to enter his house, which will preset you with the store screen.
(See (4.10a) for more information about player stores.)

/pvp Carries you into/out of the PvP arena. Only usable by pvp-mode chars. See (6.13) for details about PvP mode.

/roll and /r are same as /dice and /d respectively (roll some dice).

/sac Tells a hereticism-user if he may use the spell 'Blood Sacrifice'.
(/sacrifice)

/xo gives you an extermination order! It needs to be carried out before a certain period of time passes (continues to expire even while not logged on). Completing it yields a random item for reward. It will appear in your inventory and carry an inscription indicating it's the reward. (See (4.13) for more info.)
(/xorder) This command is only available in the Ironman Deep Dive Challenge dungeon and in the Halls of Mandos. Otherwise you have to visit the mayor's office in Bree to receive an extermination order.

/que Lists your currently pursued quests.
(/quest) Specify a quest number to drop a quest -- warning! You might not be able to acquire it again, depending on the quest and your quest progress.
If you specify '*' instead of a number, you will drop ALL quests.

/quit Leaves the game, same as pressing CTRL+Q.
(/exit, /leave)

/rec Uses an item inscribed "@R" that provides 'Word of Recall' to teleport you over a long distance, either into a dungeon, out of a dungeon or across the worldmap.
(/recall) See "(0.3) Important Inscriptions, Word of Recall" for more info about Word of Recall. Examples:
/rec -550 recalls you to -550ft, provided there is such a dungeon at your current worldmap location and you are not already inside.
/rec 32 32 recalls you to Bree (the town at (32,32) world map coordinates), provided you are on the world surface and not already in Bree.

/ref redraw the screen (do this if it's messed up for some reason).
(/refresh, or simply hit CTRL+R)

/bug report a bug to the admin(s).

/rfe Store a message/suggestion for the admin(s).

/say <text>

(/s) Speaks <text> to players who are currently nearby your position, instead of sending your message to everyone on the server.

/whisper <text>
 (/wh) Whispers <text> to players currently standing right next to you. Others won't be able to hear it.

/cough You cough noisily. Will disturb the sleep of monsters or at least make it less deep..

/shout <text>
 /yell <text>
 Shout <text> loudly, will wake up monsters.

/scream <text>
 Same as /shout, but also aggravates monsters in your current line of sight. (Same effect as scroll of aggravate monsters, see (5.9)).

/seen <name>
 Tells you when the character or account of the <name> you specified logged in the last time.
 If the name matches both, account and character, it will report the account if it's been used more frequently than the character of the same name on that account.
 (Same as IRC command ?seen.)

/shot or /shot <filename>
 (/screenshot)
 Takes a screen shot to a html file. If <filename> is omitted, it writes to 'screenshot?????.xhtml' by default, where ????? are increasing numbers. You may also use CTRL+T.
 You can view those xhtml files in most webbrowsers.

/sip drink from a fountain. You must stand on the fountain to do this. Fountains can have good/bad/no effects. There is no fountain of death, neither one of detonations, so you won't get instakilled. (It's easier to press '_' instead of using the /sip command. Also see '_' key above, for additional information.)

/snbar Cycles through available types of sanity bars to display. Which types are available depends on the 'Health' skill.

/stime Tells you the current date and time (of the server, not of your local timezone).

/tag [a..w]* [inscription]
 or /t Tags one specific or all uninscribed items in your backpack by adding a '!k' or a custom inscription. Helpful for looting in conjunction with /dis command.
 If a slot (a..w) is specified, it only tags the item in that particular inventory slot (if not yet inscribed already).
 If you want to specify a custom inscription instead of using '!k' you have to either specify an inventory slot (a-w) or write a '*' for all inventory slots.
 Examples:
 /t inscribes all uninscribed inventory items '!k'
 /t c inscribes uninscribed inventory item in slot c) '!k'
 /t * !* inscribes all uninscribed inventory items '!*'
 /t c !* inscribes uninscribed inventory item in slot c) '!*'
 Will not affect equipped items.
 Inscriptions can also be undone again with the /ut command.

/tar <x> <y>
 (/target) Allows you to target a specific grid specified by X,Y as offset to your current character position.

/testyourmight [rs]
 or shorter: /tym [rs]
 Displays damage and healing stats for your character, totals and averages over number of attacks and over time (# of seconds passed).
 Note: 'Numer of attacks' only counts successful attacks, ie not

attacks that missed, were blocked/parried/dodged or nullified by invulnerability, etc.

It however counts ALL attacks, for example aura hits too. Note that for characters moving at high speed and having a high number of blows per round, you might need to remove items giving +SPEED or +Extra Attacks for the test to be accurate, this is due to frame rate limits of the real-time engine, compare (8.7).

/time Tells you the current in-game time, same as /ex does.

/tip <player>

Tips a player who must be standing next to you:
You give him (yourlevel * yourlevel) gold pieces. Eg if you are level 10, you'll give him 10*10 = 100 Au. If you are level 50, you would give him 2500 Au.
If you carry less gold than that in your purse, then you only tip as much gold as you actually carry.

/trait Allows outdated Draconian characters to acquire a lineage trait. This cannot be reversed, so the player should pick carefully. See (6.4) for a list of traits and what they do.

/untag [<inscription>]

or /ut If <inscription> is omitted, it removes all inscriptions from items in your backpack which are exactly '!k' (as done by /tag command). Otherwise it removes inscriptions of all items which are exactly inscribed as specified by <inscription>.
Will not affect equipped items (except for '/untag *').
Note that some <inscription> parameters are special and therefore reserved, those are:

/untag * will remove all inscriptions from all items in your inventory.

/untag p will remove all pseudo-id tags from your inventory items.
Note: This will work on equipped items too!

/untag u will remove all unique-loot tags from your inventory items.

/at Apply auto-inscription settings to current inventory.
(/autotag)

/undoskills

(/undos) A skill reset function ("respec"), allowing you to undo the last couple of skill points you assigned in 'G' menu. Use this to correct points you accidentally put into a wrong skill.
NOTE: Logging off or gaining another level will reset undoskills, making it impossible to undo points spent previously.
Also, it can only be used ONCE per level, so make sure you get your skill point distribution right on the second attempt.

/version Displays the server version.
(/ver)

/who <character name>

Returns the account name that character belongs to, and basic info on race, class and level.

(0.2c) IRC bot commands

When in an IRC channel where the 'TomeNET' bot relays chat to and from a game server, you may enter these IRC commands:
(See (1.1b) on how to set up IRC chat.)

?help Displays a list of commands.

?players Will reply with a list of players online on this server.

?seen <name> Tells you when the character or account of the <name> you specified logged in the last time.
(Same as in-game command /seen.)

?who <character name>

Returns the account name that character belongs to, and basic info on race, class and level. (Same as in-game command /who.)

(0.3) Important inscriptions, Word of Recall

To inscribe an item, press the { key. To uninscribe, press }.
You can also mass-inscribe/uninscribe items by using the commands /tag or /t and /untag or /ut respectively (see (0.2b) for command details).

All items:

Inscribing an item with an '!' followed by a key will cause that key to cease working on the item anymore. You may also specify several keys. A space or other non-related character will end the '!'-sequence'.
Example: You inscribe a 'Scroll of Artifact Creation' this way: !kd
Now you cannot destroy or drop the scroll anymore (keys to destroy and to drop an item are 'k' respectively 'd').
You can inscribe an item by pressing '{' and uninscribe it with '}'.

The !* inscription:

'**' is a 'wild card' which stands for multiple inscriptions at once, inscribing an item '!*' will do ALL of these checks:

- !d Prevent dropping an item.
- !k Prevent killing (destroying) an item. (Note that '!k' on a torch also prevents using that torch to refuel another one.)
- !s Prevent selling an item to shop (!s).
For example, if you found an artifact and you want to avoid (d)ropping it, (s)elling it, or (v) throwing it away accidentally you could either inscribe it !dsv or just !* .
- !v Prevent throwing an item away.
- != Automatically pick the item up from the floor.
- (!h Prevent selling a house key. Keys usually aren't used anymore though.)

The !+ inscription:

Does the same as !* except that it does not prevent dropping an item, so it does not imply !d but just !ksv=h (with 'h' being obsolete).

A very useful inscription for (heavily) cursed items:

- !w Prevent wielding/wearing an item. This is very useful if you carry a cursed item in your inventory that you really don't want to equip by accident.

Useful for characters who wield a boomerang not for throwing it, but rather because it provides magical boni:

- !f Prevent firing an item (ie your equipped ranged weapon).

If you use a sling, bow or crossbow and rather worthless ammo that you don't intend to pick up again, you may inscribe the ammo to make it disappear:

- !g Makes ammo always break and never drop to the floor.

Other !-inscriptions:

- !T Prevent taking off a secondary item.
- !F Prevent using up this item to fuel your currently equipped light source. (Note that !k inscription implies this too.)
- !E Prevent eating this item.
- !q Prevent quaffing this potion.
- !r Prevent reading this scroll.
- !u Prevent using a staff.
- !a Prevent aiming a wand.
- !z Prevent zapping a rod.
- !A Prevent activating this item.
- !R Will prevent consuming the last rune in a stack for runespell.
- !L Can be used on an item that is the target of a scroll of Artifact Creation. The resulting randart will not gain +LIFE ('it affects your hit points') mod. So this is an inscription that only makes sense for winners to use, since non-winners cannot generate +LIFE on randarts anyway.
- !U This item will be displayed in dark grey colour in your inventory. Can be useful for sorting loot.

The # inscription:

This one makes all following inscription be appended directly behind the actual item name, instead of at the end of the item's full description. It can be especially convenient if the item has a very long name. Sometimes you can also use this to confuse your fellow players :-p

(The '...' inscription is no longer available since 'Thunderlord' ego weapons no longer have the TELEPORT flag.)

Items that 'can cause Earthquakes':

!Q Prevents the item from causing an earthquake. This usually only works on the artifact "The Mighty Hammer 'Grond'".
(Press keys ~d in the game to check server settings.)
See (5.13) for more information about earthquakes.

Weapons, devices and spells:

@O This and its variants control the 'auto-retaliator' which is a mechanism designed to make your character automatically attack targets that are standing directly adjacent to you.
For details about auto-retaliation and the different types of @O... inscriptions, see (4.1a)!

Rods only:

!C Will notify you when the rod finished recharging.

Wands and directional rods:

!K Will enable fire-till-kill mode for this item, provided that you have turned on fire-till-kill mode the usual way ('m' key).

Ammunition:

!= Will make your character auto-pickup the ammo from the floor.
!g Will make your ammunition break. Rather disadvantageous but maybe useful if you don't like littering the floor with it.
!M Makes ammunition stacks of same base type and same ego power stack even if +hit or +dam enchantments are not equal. Those will be averaged and rounded downwards. (Doesn't work for cursed or artifact ammo.) Wield the !M stack first, then also wield the stack you want to merge with the equipped ammo.
!L Inscribe stacks of ammo in your inventory !L to make them be automatically reloaded into your quiver as soon as the ammo you're currently using runs out.
Note that you can place ammo in your inventory in the desired order for reloading by dropping it/picking it up again!
The !L inscription also works for boomerangs.

Sling ammunition:

!R Prevents ricochetting.

Scrolls/spell books of Identify (except for bag-ID), Rods/Staves of Perception:

!X If you pick up an unidentified item, you will automatically read a scroll to identify it.
This inscription also works on 'The Stone of Lore'.
It does not work for Arcane Lore, since that is purely a bag ID spell.
Note that it will attempt to re-cast the ID spell until it succeeds or you're out of mana. Use with care.
See (5.7) for more information about identification.

An item that can be activated:

@A1 Pressing the keys 'A' and then '1' will activate that item.

A potion:

@q3 Pressing 'q' then '3' will quaff that potion.

A magic scroll:

@r0 Pressing the keys 'r' and '0' will read that scroll.

etc.. you get the idea. :)

You can also inscribe items just to remember their abilities. For example if you find an armour that is an artifact, and you found out it resists fire and acid, you might inscribe it {ResFire,ResAcid} so that you will remember what it does just by looking at it and reading the inscription. It can make your life easier if you wear lots of items that have different resistances or abilities. A shortcut is the...

Item power inscription (added in 4.7.1):

@@ Will automatically inscribe an item with codes representing its special powers. Only works with *identified* items.

The @@ part must always be in the beginning of the inscription, after it you can append more things if you like to.

@@@ Redux version. Avoids stats, extra might since it's obvious, infra-vision, searching, and mods that are obvious because they can only come from base item type (disarm, digging, luck), light radius, slays and brands except for kill-flags, and partial ESPs.

Resulting inscription details:

_S	sustain stat (S/I/W/D/C/H, where H is cHarisma)
+S	increase stat
^S	increase and sustain stat
Xm/Xs	extra might/extra shots (ranged weapons)
HP/MP	+hit points/+mana
Spd/Att/Crt/Stl	+speed/+extra attacks/+critical hits/+stealth
Src/IV/Dsr/Dig/Lu	+searching/+infra-vision/+disarm/+digging/+luck
Eq/Cht/Va/Vo	earthquakes/chaotic/vampiric/vorpal
F/C/E/A/P/W/N	immunity to an element (fire,cold,electricity,acid,poison,water,nether)
Base	resistance to the four base elements (same as 'fcea')
f/c/e/a	resistance to a base element (fire,cold,electricity,acid)
Resistances to high elements:	
Po/Wa/Nt/Nx/Ca/Di	poison/water/nether/nexus/chaos/disenchantment
So/Sh/Lt/Dk/Ti/Ma	sound/shards/light/darkness/time/mana
Further resistances:	
Bl/Cf/RT/FA/HL/Fe	blindness/confusion/teleport/free action/hold life/fear
Other flags:	
SI/Lv/FF/SD	see invisible/levitation/feather falling/slow digestion
Rg/Rgm	regenerate hit points/regenerate mana
Refl/Inv/AM/Bless	reflection/invisibility/anti-magic shell/Blessed
ID	auto-ID
Climb/Swim/Wraith	climbing/swimming/wraithform
AE/AC/AF	aura of fire/cold/electricity
BE/BC/BF/BA/BP	brand of fire/cold/electricity/acid/poison
+oTPaWUDevil	slay orc/troll/giant/animal/undead/demon/dragon/evil
*WUD	kill undead/demon/dragon
~oTPaWUDevil	ESP orc/troll/giant/animal/undead/demon/dragon/evil
SDRAgUni	spider/dragonrider/angel/nonliving/unique
ESP	telepathy (full ESP)
Tele/NT	induces random teleportation/allows no teleportation
Dr/Drm/Drx/Aggr	drains hp/mana/experience / aggravates
Exploding ammunition will have its explosion type added in parentheses.	

If you want an inscription starting on @ to follow a @@ inscription, add a space or some other character as separator in between, to avoid it being wrongly treated as @@@ inscription. For example like this:
 "@@ @S" or "@@-@x0"

"Word of Recall", provided by items (scrolls and rods) or spells:

If you use these without inscription, they will just teleport you back into the dungeon you came from, to the deepest possible floor. If you use them on the world surface without inscription and there is no dungeon at your location that you have previously visited, they will instead teleport you back to the last town you visited.

@R500	will teleport you to depth 500ft (tower).
@R-350	will teleport you to depth -350ft (dungeon).
@RW32,32	will teleport you to sector 32,32 on the worldmap (Bree).
	World map ranges from 0,0 to 63,63.

or even better..

@R	This inscription makes the above versions sort of obsolete.
	If you have inscribed a Word of Recall item like this then you can just type the command /rec into chat to invoke the Word of Recall. Examples replacing above inscriptions:
	/rec 500
	/rec -350
	/rec 32 32 <- notice: No komma between the coordinates!

NOTES:

- 1) You must've already been at that depth or deeper in order to teleport there via WoR!
- 2) In order to recall to a place on the world map, you need to have been there before, NOT while you were dead (ghost), but while you were

- alive! Temple priests actually won't revive ghosts either who have not been to this place alive previously. So don't try to travel to Gondolin as a ghost, the priest over there will reject you and you won't remember the place when you return and revive in Bree.
- 3) You can recall either across the world map or into/out of a dungeon, but not both at once. So if you want to go from Bree into the Orc Cave, you need two scrolls, first to go from Bree to the Orc Cave entrance located on the world surface, second to teleport down into the Orc Caves.
 - 4) Note that Word of Recall has a maximum range when used to travel across the world map. So if you want to recall from town A to town B you might require more than one recall spell depending on the distance.
 - 5) If you cast another Word of Recall while you're still waiting for one to kick in, the effect will be cancelled! That way you can change your mind if you suddenly spot a monster you want to go and kill after you already read a scroll of WoR.
 - 6) After being recalled the player will receive 'stair goi' (a temporary extra protection from taking damage) for a short amount of time, see (0.4) for details.

EXAMPLE:

A player is in Bree (32,32) and wants to recall to Orc Cave -300ft which we assume is located at (31,25) and he has already been there before, so he can use Word of Recall to get there. He has his WoR scrolls inscribed '@R' and now types the following chat commands in order:

```
/rec 31 25
(he waits until that kicked in and transported him to Orc Cave surface)
/rec -300
(this will bring him to the desired depth, from the surface).
```

(0.3a) The auto-inscription feature

Since it can be annoying to keep inscribing newly bought items again and again, there is an auto-inscription feature which you can access with '&' key. Remotely similar to the macro menu, a list of auto-inscriptions appears (which by default is empty).

Press 'e' to edit the first auto-inscription. A cursor will appear, allowing you to input a partial item name. For example type in 'of Healing' (without the quotes). Hit ENTER key to confirm. Now the cursor will allow you to enter an inscription, a little bit further to the right on the screen. For example type in '@q1' (again without the quotes) and confirm with ENTER key again.

Now you have just set up an auto-inscription that will automatically inscribe '@q1' whenever any item is added to your inventory which has a name containing 'of Healing', ie 'Potions of Healing'.

Note that auto-inscriptions are case-sensitive, and only the first one in the list that actually matches an item is applied to it.

You can use '?' as wildcard in the search string. For example if you want to distinguish between Rod(s) of Healing and Potion(s) of Healing, you can use 'Rod?Healing' and 'Potion?Healing' respectively. ('?' stands for any number (including zero) of any characters.)

If you put a '!' as first character of a search string, it will force the inscription to overwrite existing inscriptions in any case (usually it only overwrites trivial inscriptions such as price discount tags).

Auto-inscription files can be saved and will be loaded automatically in the same manner as macro files, if the filename matches your race, class, account or character name.

If multiple matching files are found, the game will attempt to merge them accordingly.

To immediately apply an auto-inscription that you just added or modified, use the /at command.

NOTE: In addition to this user-defined client-side auto-inscription list, there is also a server-side auto-inscription feature that can be enabled via client option 'auto_inscribe'. This option will add a predefined set of auto-inscriptions that might be generally useful for all types of characters, see (2.3) for details.

(0.4) Typical slang/abbreviations

Art	Artifact. Those can be 'Static artifacts' from the a_info.txt file, also called 'True Arts'. Or they may be 'Randomly generated artifacts' also called 'Randarts'. In game you can press ~ 6 to search for any static artifact. (See (7.4) for more info about spoiler files.) Winners who beat Morgoth, Lord of Darkness will usually not be able to use static artifacts, but rely on randarts instead. Depending on the server settings, fallen winners might also not be able to use static arts. See (5.9b) for more information about artifacts.
Auto-ID	A special ability of some items. If you equip an item that grants you 'Auto-ID' all items you touch will automatically be identified! Items who grant their wielder Auto-Identification are highly sought after. Randart helmets or gloves sometimes have it. See (5.7) for more information about identification.
BM	Black Market (Store '7').
BpR/SpR	Blows per round, shots per round. The number of attacks you get in melee (BpR) or with your ranged weapon (SpR). For melee characters BpR depends on weapon skills, magic buffs and items that give you 'Extra Attacks' and (unless you use Martial Arts) on your weapon weight vs your STR and DEX stats. You should pick the recommend STR/DEX values on character creation to ensure that you start with at least 2 BpR and if possible buy a lighter weapon right away to upgrade your BpR from 2 to 3. For martial arts or ranged weapons, STR and DEX stats (or any other stats) have no effect on BpR or SpR respectively.
Cheeze	Questionable action, not quite cheating but close to it. This can be transferring items to a store character (mule) or exploiting weaknesses in the game design instead of reporting them to the forum.
DEW	Dark-elven warlock. A very deadly monster that comes in packs and shoots high-damage mana bolts, glass cannon style.
Dive	A trip into the dungeon, usually quite deep compared to the diver's character level.
DSM	Dragon Scale Mail. Legendary pieces of armour.
Excellents	Items that pseudo-identified as 'excellent'.
EA	Extra Attacks. Rings, gloves or weapons which increase your number of blows per round (BpR) with melee weapons. Quite expensive.
FA	Free Action (immunity to paralysis).
FF	Feather falling.
GoI	Globe of invulnerability. This only exists as 'Stair GoI', see further below.
Gorth	Room in the dungeon, divided into 4 chambers, similar to a pit. Also see 'Room', 'Pit' and (4.6).
GV	Greater Vault. (See (4.6))
GCV	Greater Checkerboard Vault (looks remotely like a checkerboard).
ID, *ID*	Identify and *Identify* magic respectively, which is used to reveal magic properties of unknown items. Scrolls of ID can be bought in store 5. See (5.7) for more information about identification.
Iron Team	A special type of party which can only be formed with newly

created characters. Its members only gain experience if all members are online and on the same dungeon level. Also, members can only trade items and money with other members.

kinging The process of beating Morgoth, the game boss, and thereby acquiring a royal title (king/queen/emperor/empress). Such player characters are also referred to as 'winners'. A player must be at least level 40 to get credit for beating Morgoth.

rekinging Fallen winners, ie players who beat Morgoth but later on died and thereby lost their royal title again, can attempt to regain it by teaming up with someone who has not yet defeated Morgoth. If that person lands the killing blow, everyone in her/his party on the same floor will gain winner status again, even fallen kings. A player must be at least level 40 to get credit for beating Morgoth. A new (experimental) way to obtain a lost royal title again is to donate and pray in 'The Mirror' in Lothlorien, see (4.5a) for details.

klevel, olevel

Somewhat more technical terms, these stand for the exact type of item level that is meant in a certain context:
k-level is the 'object kind level', which is given in k_info.txt. This is the object's base level and describes from which minimum dungeon floor level or minimum monster level you can expect to start getting that item type.
The o-level is the 'real' object level that you'll see on an item you pick up. This can vary from the klev, depending on the dungeon floor depth and monster level you got the item from.
Example: According to k_info.txt an Amulet of the Serpents has a klev of 25, so you can expect to start seeing this drop on dungeon level 25 (1250ft) or from level 25 monsters respectively. However, when you find such an amulet on say a dungeon floor at 4000ft, which equals dungeon level 80, an actual amulet you find might have a level requirement (olev) of 30.
(Note: This is similar to mlevel vs rlevel for monsters.)

Loot Items that have been dropped by dead monsters or players and are waiting to be picked up by someone. :)

LV Lesser Vault. (See (4.6))

mlevel, rlevel

Somewhat more technical terms, these stand for the exact type of monster level that is meant in a certain context:
m-level is the 'real' monster level that you'll also see when you have your character look at it. This level may actually be boosted and therefore be higher than you'd expect. This happens when you meet the monster on a floor that is far deeper than the level the monster usually starts to occur on.
r-level is the base monster level (race level), which you can see in game if you press ~ 7 and search for a particular monster. It describes the minimum floor level a monster is usually found on (although 'out-of-depth' occurrences may be possible).

Example: According to ~7, Ancient Red Dragons have a base level of 41. That means you'll usually start seeing them on dungeon floors of level 41 (2050 ft) and deeper, although there's always a slim chance that you meet a monster earlier than its base level (called OoD encounter, "Out of Depth").
So we know now that the r-level of Ancient Red Dragons is 41. However, if you meet an Ancient Red Dragon on a much deeper dungeon floor, say 2450 ft, which would be the equivalent to level 49, when you look at the dragon you'll see it says level 42 instead of the expected 41. This means the dragon's level was actually slightly boosted because the dungeon floor's level was that much higher than the dragon's. So while the rlev of this dragon is still 41, its real level, the mlev, is 42.

Monsters that are on dungeon floors 8 levels or higher above their base level will get an increase in levels of +1 for every 3 floors, so +1 level at 8 dungeon levels above their r-level, +2 at 11,

+3 at 14 etc..

Monsters randomly gain hit points, speed, AC or damage dice/sides for their melee attacks on each level-up. To find out in what way a particular monster has been boosted you can use a rod of probing.

Some formulas used by the game use mlev, some use rlev.
(Note: This is similar to klevel vs olevel for items.)

Morgy Morgoth, Lord of Darkness. Final boss enemy in TomeNET.
See (1.3) for details.

Nazgul weapon or RW weapon

An artifact weapon that doesn't really excel, but since it's an artifact it can still be put to good use as a weapon for killing nazgul (the nine ringwraiths, see (1.3a)). Since nazgul still have a 1 in 1000 chance to destroy an artifact weapon on hit, you don't want to put your best weapons at risk. So using a mediocre artifact instead that you'd otherwise just sell to a store seems like a good idea, since it won't be much of a loss if it breaks, and it will usually still get the job done as long as its weapon class fits the type of your trained mastery skill.

Nest Originally also just called 'pits', nests only differ from pits in the monsters in them being strewn around in a randomly mixed manner while pits contain 'organized' rings and circles of monsters. The monsters in a nest are not completely random but follow certain schemes. For example all monsters in a 'clones nest' are exactly the same type. Also see 'pits'.

olevel see klevel.

OoD Out-of-depth. Means a monster or an item encounter that happened at a surprisingly shallow level, opposed to the base level for that monster (shown in ~7) or item (given in k_info.txt) where you would usually start expecting to find it. Vaults often containing OoD monsters and items, increasing threat and reward for the brave. Note: OoD is limited to at most +40 levels (happens in high-level vaults); unique monsters can actually only be up to 20 levels OoD (even in vaults) and, as a specialty, Great Wyrms of Power can only ever occur up to 10 levels OoD.

Party A group of players who fight together and share experience. In a party you will share experience points if you are within 7 character levels to each other and on the same dungeon/tower level respectively the same worldmap/wilderness sector. You can invoke the party menu with shift+p key. See (6.9).

Phase Door A short-range teleportation.

Pit Pits contain monsters of a certain type, for example 'demon pits' or 'orc pits', with the monsters in them being placed in a somewhat 'organized' manner of rings and circles. Also see 'Nest' or 'Room'. Pits are often confused with special rooms.

Post-King The life of a character within the level range above level 50.
Pre-King The life of a character within the level range 1 to 50.

Pseudo-ID If a player keeps an unidentified item for a longer time he might 'feel' if the item is average, good, cursed or special. The item will automatically receive a 'pseudo-id inscription' then. Pseudo-id intensity and speed depend on the 'Combat' skill. It does not matter whether the player is acting, afk or idle. See (5.7) for more information about identification.

PvP Player vs player. Describes the act of player characters fighting each other. If you want to fight other players to death, create a new 'pvp-mode' character. It's an option during the character creation process, much like 'everlasting mode' or 'normal mode'. For more information about pvp mode, see (6.13).

Randart Randomly generated artifact. As opposed to 'Truearts' which are
Randy also called 'Static arts' from the file a_info.txt (you can search static arts by pressing ~ 6 in game). See 'Art' at the top of

this section for more information.
See (5.9b) for more information about artifacts.

Res	Resistance.
Room	The dungeon contains many rooms connected by passages. Some of the rooms are of special shape. Especially rooms containing a further, inner room similarly to pits are thereby often confused with those, mostly 'Gorths' (rooms divided into four chambers containing a lot of monsters), 'Checkerboard-Rooms' (rooms containing a checkerboard-like maze structure and a lot of monsters).
rlevel	see mlevel.
Scumming	Repeatedly using staircases up/downwards to make a level become recreated. Usually in hope of finding a specific monster on that depth. ('I scum 450..500 ft for Wormy'.)
SI	See invisible.
Specials	Items that pseudo-identify as 'special'. These are true arts or randarts.
Static	A level that is static will not change if you leave it but stay the same, permanently until it is unstaticed. All levels remain static for a short period of time after the last player leaves them to prevent scumming. Also, levels remain static if a player ghost-died (meaning he died ultimately without possibility of resurrection) for a longer while depending on the dungeon level, see (3.11) for details about static-by-death levels.
Static Art	See 'Art' at the top of this section.
Stair GoI	Stair-Goi is a very short-lasting globe of invulnerability (usually 2 to 3 turns). It is a magical protection effect that any player who takes a staircase up or down or uses Word of Recall will automatically receive: A temporary buff of +100 armour class and 40% chance to deflect any attacks that hit him. Attacks that aren't deflected still get their damage halved. When an attack is deflected, you get a message saying: "The attack is fully deflected by a magic shield."
True Art	See 'Art' at the top of this section.
Unique	<p>A monster that is named and exists only once. Although it can respawn for another player who hasn't defeated it yet, each player will receive loot only once from it. So if you engage a unique monster while playing together with a team mate, check if you have already killed it and if so let your team mate inflict the killing blow, so he will get the kill credited and the monster will drop loot accordingly.</p> <p>To verify whether you have already killed a unique, you may..</p> <ul style="list-style-type: none">-check the unique monster list in '~' menu.-l'look at the monster, the name will be shown in dark grey if you already got kill credit for it.-watch the damage messages when you attack it, they will be shown in dark grey if you already killed it.-turn on the option 'unique_kill_credit' in '=' menu: It will beep if you hit a unique monster that you have already killed. <p>It is good etiquette that you don't touch the (inscribed) loot a unique monster drops if it wasn't you who killed it in the end. That's precisely because every player can only get kill credit for each unique monster once.</p> <p>Uniques often have large escorts.</p> <p>Note that a unique monster cannot occur in two or more different places in the whole game world at the _same time_ - with the only exception being the IDDC (Ironman Deep Dive Challenge) which is a closed ecosystem and has unique monsters spawn independently from the rest of the game world.</p> <p>So if you are desperately looking for a unique monster and can't seem to make it spawn, ask in chat if someone else sees that particular monster on his current dungeon level. Then wait till</p>

they have left that level or killed the unique so it will be ready to spawn again for you, or maybe they will tell you that you can come over to kill it there in place.

Unique monsters will randomly respawn for winners, ie Kings, Queens, Emperors and Empresses. That means: The game will "forget" that you already defeated them, allowing you to defeat them once more. There are some exceptions though, the following monsters will never respawn: The Nazgul, Sauron, Michael, Morgoth, and all super-uniques that come after Morgoth, starting with Tik'srvzllat.

This respawning happens (albeit very slowly) while you are logged on with your winner character, except while you're in town or in the area around a town (housing zone).

WoR Word of Recall (teleports you into the dungeon and back or on the world map). See "(0.3) Important inscriptions, Word of Recall" for more info.

Wormy Wormtongue, Agent of Saruman. He drops great items.

(0.5) Some hints and warnings (READ!)

- To report a bug use the /bug command in the game. It allows you to type a line of text to explain the bug or problem you encountered. You can use the /bug command multiple times if one line is not sufficient for the amount of text you want to write.
Alternatively, you can use the bug report section of the official forum at www.tomenet.eu.
Please DO NOT write bugs in chat in the game.
- If you have a suggestion, use the /rfe command instead. It's used the same way as the /bug command (see above).
Alternatively, use the forum at www.tomenet.eu.
- Starting at version 4.4.5, TomeNET supports audio, that is, sound effects and background music. To find out more, read (2.1a).
- Usually characters expire (that means they are automatically deleted!) after 366 days of inactivity. Empty accounts (ie accounts that don't hold any characters) usually expire after 62 days.
- Items on the ground (especially in towns) often disappear automatically after a while. So don't use the town or the wilderniss to 'store' loot.
If you don't own any houses, you can use public houses that are accessible to everyone. Risk is of course that someone takes your items.
- If you press CTRL+Q to save&exit the game, you should do that in a safe town. Dungeons might change while you are logged off, and the next time you log on you might find yourself in a nasty place if unlucky.
Another problem is that if you don't leave in a town (or the housing area around a town), your character will stay for another 20-30 seconds in the game before it finally disappears from the dungeon (or world surface)! If monsters were around, you might get killed easily during that time.
- The items you find don't depend on your race or class but on monster level and depth and luck.
- Don't drop artifacts inside houses if the server doesn't allow artifacts to be dropped inside player houses, or you will simply lose the artifact!
- Items on the floor within a house don't form piles! If you drop too many items and space in the house runs out the dropped item may just disappear!
- The massive iron crown of Morgoth must not be worn by non-Kings/Queens!
Wearing it otherwise will kill you in a mighty blast.
- Some special shops' features may currently not be available.
- Some monster abilities are currently not available/implemented:
BO_POIS, HAND_DOOM, RAISE_DEAD.

-Some item abilities are currently not available/implemented:
LEVELS.

-Monsters that pick up an item have a 30% chance to NOT drop it again on death.

-The dungeon floor/world sector you are in, be it on the world surface, in town or in the dungeon, has a chance of slowly spawning new monsters over time. Those will always be awake.

The rules are the same as for when a dungeon level gets generated:

Everything that fits the dungeon's theme (if any) is allowed, the monster level might occasionally spike out-of-depth, up to 40 levels above the floor level. This can be especially nasty because these spawns will not change the floor feeling, so you won't notice it except when you spot the monster.

(1) Introduction

=====

(1.1) What is TomeNET? (Where can I get the latest sources?)

TomeNET is an extremely advanced online multiplayer rogue-like role-playing game, derived from MAngband (Multiplayer-Angband). It's based on the stories of J.R.R. Tolkien mainly, hence the name "the Troubles of Middle Earth" or alternatively "the Tales of Middle Earth".

The final goal in TomeNET is to destroy the fallen god Melkor who is known by the name of Morgoth, Lord of Darkness. The official websites are mentioned in the first couple of lines of this guide.

Note that ToME and TomeNET although both coming from similar roots are actually quite different games that are maintained by different persons/teams.

If you want to download the source code, you can get it from www.tomenet.eu in the download section.

(1.1a) Where do I get in contact?

Apart from downloading the game client and playing, you can also get in contact with other players and developers via the following media:

-The forum at <http://www.tomenet.eu/>.

-IRC: Channel #tomenet on server irc.freenode.net (port 6667)

(For help on Internet Relay Chat visit www.irchelp.org).

The channel #tomenet relays chat from and to the game server, allowing you to read what's going on in-game, and to chat with players simply with any IRC client.

See below (1.1b) for how to set up IRC chat in detail.

See (0.2c) for commands you can send to the TomeNET IRC bot.

-Voice chat via mumble, get it from <http://mumble.sourceforge.net/>.

IP is 'europa.tomenet.eu', port is '23348', password is 'tomenet'.

For details see "(2.4) Installing voice chat".

(1.1b) How to set up IRC chat

Easiest method: Use the official webclient provided by the 'Freenode' IRC server. Start your internet browser and enter this URL:

<https://webchat.freenode.net/?channels=%23tomenet>

You will be prompted to enter a chat name of your choice and to click the box saying "I'm not a robot", then you can click the "Connect" button and voila.

(The channel name "#tomenet" should have already been filled in for you.)

If you prefer to use a stand-alone IRC chat client instead of using a browser-based chat, here are some suggestions:

Windows: Most popular client is probably mIRC.

Linux: Popular IRC clients for Linux are Pidgin (actually rather a multi-protocol messaging tool, pretty nifty), x-chat (GUI), Konversation (KDE GUI) or irssi (command-line).

Mac OSX: For example Colloquy, X-Chat Aqua or Linkinus.

After installing your preferred IRC chat client, enter an username of your

choice and set it up to connect to the "Freenode" IRC network.
(For detailed help on Internet Relay Chat visit www.irchelp.org.)

After you established a connection to Freenode, have your client join the so-called "channel" (all chat channels on IRC networks are denoted by a hashtag in front of them) named:

#tomenet

Joining a channel will relay chat from and to the TomeNET server, allowing you to read what's going on in-game, and to chat with the players.

(Note that not all kinds of messages are actually relayed, for example AFK messages are not.)

See (0.2c) for commands you can send to the TomeNET IRC bot.

Usually all IRC clients offer a possibility to configure them to connect a specific network (Freenode) and to join specific channels (#tomenet etc.) automatically on startup, so you don't have to do it manually each time you start the IRC client.

Most clients also allow you to setup auto-reconnect, which is useful if you experience frequent disconnections from the IRC network. Although in that case you should rather check why that happens - make sure you aren't trying to connect to a very far away Freenode server but to one that is close to your location, compare: http://freenode.net/irc_servers.shtml

(1.2) What is a rogue-like game?

Rogue was a game basing only on alpha-numerical characters, like letters and numbers. It didn't have any graphics. Thus it could run on basically every simple computer. However it was not a text-adventure. Its game engine provides a grid for turn-by-turn movement and combat that the user looks at from high above. Here is a small "screenshot":

```
.....  
...#####...  
...#$.....#...  
...#..@...'.  
...#.....#...  
...#####.p..  
.....
```

The @ is usually the player, the dots are empty fields. The # are walls. Here the player seems to be inside a building. In the upper-left corner some money is deposited. The ' is an open door. Outside of the building there is a p, which is usually some townsfolk. They are not always friendly and some tend to steal! Rogue was the first game of this kind, hence all games working with similar graphics and game engine are called rogue-likes.

Other well-known rogue-likes are Nethack, Larn, Moria, Angband.

(1.2a) Where do I find more information about rogue-like games?

Links:

<http://www.thangorodrim.net/>

Newsgroups:

rec.games.roguelike.*

(1.3) Goal and progress of TomeNET players

The final goal that a brave adventurer could possible seek in TomeNET is to become King respectively Queen. To acquire this he or she must destroy the fallen god Melkor who is known by the name of Morgoth, Lord of Darkness.

Morgoth is said to reside deep within the dungeons at around 5000 feet down in the earth. Getting there will be an extraordinary journey bearing unbelievable dangers but also fantastic treasure. Players on the same server can also play together by forming parties and sharing their experience! Players will acquire new ranks as their experience grows, allowing them to learn new abilities and to become stronger. Morgoth is said not to show up until his servant Sauron, the Sorceror has been defeated. (See (1.3a) for details about Morgoth.)

On their journey through wilderness and remote towns, towers and dungeons, characters will gain experience points that increase their level up to 50. After defeating Morgoth, they will be able to advance further up to level 99.

Players who defeat Morgoth, become 'winners' and get the title of King and Queen respectively, or Emperor/Empress if their character is of unworldly or hellish mode. A player must be at least level 40 to get credit for this.

When you win the game, an automatic chardump is generated in /lib/user called '<charname>-victory.txt' (see (8.2)) which you can view with any text editor. Also, a screenshot is made automatically, displaying your situation, saved to '<charname>-victory-screenshot.xhtml'.

(You can view xhtml files in most webbrowsers.)

(1.3a) Sauron, Morgoth and the Nazgul

Morgoth, Lord of Darkness commands nine Ring Wraiths, called 'Nazgul'.

These corrupted souls of former ring-wearers are named..

Uvatha the Horseman, Adunaphel the Quiet, Akhorahil the Blind, Ren the Unclean, Ji Indur Dawndeath, Dwar Dog Lord of Waw, Hoarmurath of Dir, Khamul the Black Easterling and The Witch-King of Angmar.

Morgoth has the ability to summon these, so you should destroy them all before facing him.

Morgoth is also able to summon other powerful unique beings, so one of your tasks to prevail against him will be to kill off as many of the powerful unique foes as you can before facing him.

Morgoth, the god of destruction, has reinforced his surroundings to be especially devastating to all living beings:

If you get killed on a level where Morgoth, Lord of Darkness walks, your ghost will be destroyed too, even if you are everlasting! Beware!

If you team up against him, he will grow stronger for every additional player who enters his dungeon level. Growing stronger in fact means that he gains a hit point and speed bonus. If a player leaves his level, he will weaken again. See the following paragraph (1.6) for more information.

When a player lands the killing blow on Morgoth, everyone else who is in her or his party and also on the same dungeon floor will get credit for winning the game too and receive a royal title accordingly. Even 'fallen winners' (players who have beaten Morgoth already but lost their royal title to death) can regain their title this way - by teaming up with someone who hasn't defeated Morgoth yet and making sure that that player lands the killing blow. Each player must be at least level 40 to get credit for beating Morgoth. A new (experimental) way to obtain a lost royal title again is to donate and pray in 'The Mirror' in Lothlorien, see (4.5a) for details.

Morgoth always drops his crown and hammer. If he is defeated by a party, those two items will drop multiple times so that everyone can actually pick up one of each.

A very dangerous thing about Nazgul is that weapons get quickly destroyed if they come in contact with these corrupted beings.

If you are a spell-caster who doesn't use his weapon to fight but just to profit from its magical abilities then it's strongly recommended to inscribe the weapon @Ox to avoid auto-retaliation, see (0.3) about inscriptions and (4.1a) about auto-retaliation.

If you rely on melee weapons you must try to get your hands on an artifact since these resist Nazgul greatly! The Stormbringer also resists like an artifact. (It doesn't matter if the artifact is a random or a static one.)

If your weapon gets destroyed you'll receive a warning message:

"Your weapon *DISINTEGRATES*!" or "Your weapon is destroyed !"

(The permanently cursed weapon 'Mighty Hammer of Grond' cannot be destroyed. See (5.9b) for more information about artifacts.)

Your weapon itself will not damage the Nazgul if it doesn't have one of the mods SLAY_EVIL, SLAY_UNDEAD or KILL_UNDEAD and if it isn't a Morgul weapon. However, you will still be able to damage the Nazgul, if your raw to-dam bonus is high enough. Enchantments from rings, gloves or other items and the damage bonus from your skills and strength will be the only factors which decide the damage you deal, in that case.

For weapons which damage dice and to-dam bonus will not be counted (ie non-

SLAY/KILL EVIL/UNDEAD or Morgul weapons) you'll see the message:

"The Ringwraith is IMPERVIOUS to the mundane weapon."

The same is true for Martial Arts, which style boni will be nullified if you don't have one of the slay-undead/slay-evil flags.

Note: For weapon attacks, having those slay/kill mods on gloves (or other items) instead of the weapon does not help! They will not count.
For martial arts/bare-handed attacks, having the slay flags on other items (for example gloves) WILL count!

However - the 'slay undead' bonus received from Holy Offense school at a skill of 30.000 will infuse your weapon (and bare-handed combat too of course) and will make its dice and damage count again, as if the weapon itself had the slay mod!

Martial Arts users can fight relatively efficiently against Nazgul since they don't have to worry about their weapon breaking, but their chance to receive Black Breath is higher than for weapon users.

If you come in contact with a Nazgul or a very powerful undead creature there is a chance that you will be infected by the Black Breath. This dark aura is able to infect other players if you come too close to them. It will drain your stats and permanently drain your experience. Slowly, but steadily. There are several possibilities to cure Black Breath, for example Sprigs of Athelas. Players cannot infect other players with Black Breath if they are in Bree or in the Training Tower, those are safe zones.

Each Nazgul will drop a ring of power, which is a random artifact ring bearing the Nazgul's name. These rings have a lot of random mods (ie abilities) and will always provide invisibility (5.16) and experience drain (5.19). They are also always heavily cursed, cannot be dropped while cursed, and can re-curse themselves (5.14).

In order to find Morgoth, players have to defeat Sauron, the Sorcerer first. For more information about encountering Sauron and Morgoth, see next paragraph (1.3b).

It is noteworthy that Sauron is able to boost his own spell-casting speed for as long as he finds himself or the area around his target blocked by Glyphs of Warding (also called Runes of Protection).

Also, he might try to avoid going into melee range of players who he deems good at close quarters combat. In general, do not underestimate Sauron's power!

(1.3b) How to encounter the final boss: Morgoth, Lord of Darkness

- Morgoth is found only at dungeon level 100 or deeper.
- He won't show up until you defeated Sauron, the Sorcerer, who is found at the bottom of Mt Doom (which is dungeon level 99).
- Morgoth does not necessarily spawn on each fitting dungeon level, sometimes you have to search for him, like for all other monsters/uniques.
- If a player who hasn't defeated Sauron yet or who has already beaten Morgoth enters a dungeon level where Morgoth is currently on, Morgoth will instantly teleport to a different dungeon level.
- If there's already another player on that level who has beaten Sauron but hasn't acquired the title of a King or Queen yet, the 'intruder' player will be teleported to town instead and Morgoth will remain on the level.
- If more than one player is on his floor, he will be a bit tougher than he appears to a solo player, depending on the number of players facing him.
In details, for each additional player besides the first player joining his level, Morgoth gains +20000 hit points and +6 speed. So if a team of three challenges him, he will have $30000 + 2 \cdot 20000 = 70000$ HP and $30 + 2 \cdot 6 = 42$ speed. Everyone who is at least level 40 and on the same dungeon floor and in the same party as the player who lands the killing blow will get credit for winning the game and receive a royal title accordingly.
- There are no obstacles that can hold Morgoth back for long.

See (1.3a) for more information about Morgoth.

There are rumours of even more powerful beings than the Lord Of Darkness. Kings and Queens who seek new challenges shall try to enter the Nether Realm, a dungeon with dangers beyond imagination. Only those who destroyed Morgoth may enter. The Nether Realm can be very rewarding in terms of experience but also very deadly. Terrible foes are said to dwell there which aren't seen in the mundane world. See (4.5c) for more information about the Nether Realm.

(2) Installation & setup

(2.1) Installing/updating TomeNET

Updating:

Starting with version 4.5.7a, TomeNET comes with an updater tool that should work on most platforms. If it doesn't on yours, please contact us and provide details about which operating system you are using.

To update your TomeNET client or the sound pack or music pack, just run the 'TomeNET-Updater' and click on the according button. The only prerequisite is that you must have '7-Zip' installed, a great, free, open source archiver that beats WinRAR and WinZIP easily. You can get it from www.7-zip.org.

Important: You should exit the game before attempting to update it!

Note for LINUX:

The Linux version of the TomeNET-Updater no longer requires 7zG (the graphical user interface of 7-zip), so you do not need to compile it yourself if your repository packages don't provide it. If you want to compile it anyway then see (2.1a) and there "a) Automatic audio pack installation - LINUX". That paragraph has short instructions on how to compile 7-zip from source in Linux.

Installation from scratch:

(Covered are Windows, Linux, OSX, FreeBSD.)

Go to <http://www.tomenet.eu/> (or one of our personal pages) to download the latest client. Extract it to a new directory, preserving the pathnames.

(Note: If you decide to download the 'test client' instead of the client of the latest stable version number, be aware that it might stop working correctly unexpectedly because it's undergoing development, possibly forcing you to redownload it.)

Windows:

To extract the TomeNET zip package you downloaded, 7-zip is recommended. It's a free and open source zip-tool of outstanding performance that works on all platforms. Grab it from <http://www.7-zip.org/>.

After extracting, you're good to go. If you're already tired of reading, just double-click TomeNET.exe, pick the first official server in the list, make up an account and character and start to play.

There is also a manual in your TomeNET folder, the file is called "TomeNET-Guide.txt". Double-click to read it. It is recommended to not open it in Wordpad, but either in Notepad or in any web browser of your choice, because Wordpad tends to warp the layout badly.

Alternatively you can find the latest version of the manual online for browsing and easy searching, on the TomeNET homepage (<http://www.tomenet.eu/>).

If you're tech savvy, you could decide to edit the game configuration manually, but that is not really required. Continue reading below if you want to do that.

Otherwise, you could skip forward to (2.1a) now, where you find an explanation on how to install the music pack.

When you're done with everything, you can continue reading at (2.1d) if you are using Valve's Steam, and then at (2.2) to find how how to actually connect to the TomeNET game server, create an account, create a character, and play the game!

Windows - Manually editing the configuration file (if you're tech savvy):

You may edit the file "TomeNET.ini" and do some changes to your likings, like

setting up window positions (note that the game will remember window positions changed via dragging the windows around, which is an easier way), or choosing font size (look into lib/xtra/font directory to see available fonts). Further you can specify an account name and password to be filled in automatically, and various other things.

Last but not least, you may use the following command-line options:

-p<Port>	for example -p19348
-l<Account> <Password>	for example -lGandalf geheim
-N<character name>	for example -NDruidor
<ip address>	for example 37.187.75.24
-q	turns off loading/initializing of audio ('quiet mode')
-w	disables weather effects
-u	disables automatic LUA script updating
-k	don't disable numlock on client startup
-m	skip motd (message of the day) on login
-v	automatically save chat log on exit

(Skip down to (2.1a) to continue reading.)

Linux (using pre-compiled client):

Make sure that ncurses and crypt libraries are installed, package names are usually libncurses5 and libgrypt11.

Enter the 'tomenet/' folder and type:

```
./tomenet
to start the game.
```

Linux (compiling from source):

There are additional distribution-specific information on Mikael's website at: <http://muuttuja.org/tomenet/installation-linux.php>
(It's linked on www.tomenet.eu -> "Links".)

You can get the source from www.tomenet.eu, also see (1.1).

How to compile the game binary:

Go into '/tomenet/src' where the file 'makefile' is located.

Dependencies, that you must make sure you have installed:

C-devel, X11-devel, ncurses, ncurses-devel and crypt libraries.

The package names are usually:

build-essential, xorg-dev, libncurses5, libncurses5-dev, libgrypt11, libc6-dev.

Since version 4.4.5 which supports music and sound via SDL, you also need libSDL-mixer-devel, libSDL, libsmpeg. Usual package names (SDL version 1.2): libSDL-mixer1.2, libSDL-mixer1.2-dev, libSDL1.2debian, libSDL1.2-dev, (preferably libSDL1.2debian-pulseaudio, eg under Ubuntu), libsmpeg0, libsmpeg-dev.

If you don't want to use audio, edit the makefile and compare the two paragraphs titled 'Without SDL' and 'With SDL' and edit the makefile accordingly, to compile it without SDL audio support.

NOTE: If you are compiling the above packages yourself, make sure that you install the specific audio format libs (smpeg, ogg..) before you install libSDL-mixer, so its configure script will recognize those formats and enable support for the according file types.

Enter these two lines:

```
make clean
make tomenet
```

and the binary 'tomenet' will be created in this folder 'tomenet/src'.

IMPORTANT NOW: You need to move the binary 'tomenet' that was just created one level upwards, so it's placed in the 'tomenet/' folder!

Go up one level into your 'tomenet/' folder. There type:

```
./tomenet
to start the game.
```

Configure TomeNET on Linux by editing config files or setting environment vars: (This is not really required. Most things can be configured by in-game menus or by dragging/positioning the game windows with the mouse.)

To configure which windows are visible and what font they use and all sorts of other options, edit the file ".tomenetrc" which should be in your home folder (or specify alternative location via -f command-line option, see below).

Note: If the game client's positioning of windows doesn't work on your system, you can use other means such as KDE's native window positioning (right-click the windows and modify the "special window settings" or "special application settings") or the tool Devilspie (should be in your default repository) if you're on Gnome or Xfce or anything else. 'gdevilspie' may also be available, which is a graphical version of devilspie.

Alternatively to using the .tomenetrc file for window configuration, you can also set environment variables. These settings will override .tomenetrc:
TOMENET_X11_FONT_SCREEN (height and width of main window cannot be changed)
TOMENET_X11_WID_MIRROR, TOMENET_X11_HGT_MIRROR, TOMENET_X11_FONT_MIRROR
TOMENET_X11_WID_CHOICE, TOMENET_X11_HGT_CHOICE, TOMENET_X11_FONT_CHOICE
TOMENET_X11_WID_RECALL, TOMENET_X11_HGT_RECALL, TOMENET_X11_FONT_RECALL
TOMENET_X11_WID_TERM_4, TOMENET_X11_HGT_TERM_4, TOMENET_X11_FONT_TERM_4
TOMENET_X11_WID_TERM_5, TOMENET_X11_HGT_TERM_5, TOMENET_X11_FONT_TERM_5
TOMENET_X11_WID_TERM_6, TOMENET_X11_HGT_TERM_6, TOMENET_X11_FONT_TERM_6
TOMENET_X11_WID_TERM_7, TOMENET_X11_HGT_TERM_7, TOMENET_X11_FONT_TERM_7
Use the 'export' command to set them, eg:

```
export TOMENET_X11_FONT_SCREEN=8x13
export TOMENET_X11_WID_TERM_4=80
export TOMENET_X11_HGT_TERM_4=24
```

TOMENET_X11_FONT sets one font globally for all windows. It's overridden by the window-specific font variables listed above though.

Depending on your system, some possible fonts are usually:

4x6, 5x7, 5x8, 6x9, 6x10, 6x12, 7x13, 7x14, 8x13, 9x15, 10x20, 12x24.

Last but not least, you may use the following command-line options:

```
-c          force command-line interface instead of X11 etc.
            Use it if you want to run the client within a terminal.
-e          Create file 'tomenet.log' instead of displaying
            error messages in the terminal
-f<config file> use a different config file than ~/.tomenetrc
-i          ignore the ~/.tomenetrc config file
-l<Account> <Password> for example -lGandalf geheim
-m          skip motd (message of the day) on login
-N<character name>    for example -NDruidor
-p<Port>          for example -p19348
<ip address>        for example 37.187.75.24
-q          turns off loading/initializing of audio ('quiet mode')
-u          disables automatic LUA script updating
            (You should NOT use this option!)
-v          automatically save chat log on exit
-w          disables weather effects
```

Full command-line example:

```
./tomenet -p19348 -lGandalf geheim -NGandalf 37.187.75.24
```

If your name contains spaces, it is necessary to put a '\' in front of each.
Example:

```
./tomenet -p18348 -lIron\ Man geheim 37.187.75.24
```

..if your account name is 'Iron Man'.

(Skip down to (2.1a) to continue reading.)

Mac OS X (using pre-compiled binary; tested with Snow Leopard 10.6.6):

Run the file 'TomeNET.run' to start the game.

If you're tech savvy and want to manually edit the TomeNET configuration file, see "Configure TomeNET on Linux" further above.

Otherwise skip down to (2.1a) to continue reading.

Mac OS X (compiling from source; tested with Snow Leopard 10.6.6):

Basically use the same instructions as for Linux above. Additionally:

-To actually install gcc you will need to install the 'xcode' package, which contains gcc. Download the correct xcode version for your Mac OS X version from developer.apple.com. For this you will first need to create a developer account (choose the free account version of course).

-Download the required packages (tar.gz/tar.bz2 files from ftp.gnupg.org, ftp.gnu.org/pub/gnu and www.libsdl.org) listed in the Linux installation instructions above and extract, compile and install them each via the usual
./configure
make clean
make
sudo make install

command chain from a terminal window.

Note: libsdl_mixer can be found on www.libsdl.org too, by clicking on the "Libraries" menu and searching for "mixer".

If you have trouble installing those source packages, you could try to simply use MacPorts to fetch them, at <http://www.macports.org/>.

Dependencies:

- libgcrypt depends on libgpg-error, which you will need to install too.
- libsdl_mixer may complain about missing dependencies (at least Ogg Vorbis is required for TomeNET, since it's the official audio format - the rest is only needed if you add custom audio files in the according file formats):
 - Ogg Vorbis library (www.xiph.org -> libogg and libvorbis) for OGG file support, which is what the official TomeNET audio files are.
 - SMPEG library (icculus.org/smpeg) for MP3 file support. (libsdl_mixer's configure script May also list additional notes regarding the environment variable SMPEG_CONFIG, don't miss them.)
 - MikMod library (mikmod.raphnet.net) for various module music support.
 - FLAC library (flac.sourceforge.net) for FLAC file support.

-If you mess with compiler-related environment variables and paths and for whatever reason get a 'compiler cannot create executables' error when trying to ./configure packages, just close the terminal and re-open it, to reset all vars.

It is recommended to use the makefile called 'makefile.osx' for compiling. If for whatever reason you try to use an unmodified Linux makefile to compile then you might run into the following problems:

-ncurses starts hiding some internal properties at v5.7+ which causes a dereference error when trying to compile main-gcu.c. This seems to be a Mac OS X specific problem since only the ncurses shipping with Snow Leopard has NCURSES_OPAQUE set to 1 while the Linux version has not.

To fix it, add

-DNCURSES_OPAQUE=0

to CFLAGS compiler options in the makefile.

-For preprocessing LUA files the 'cpp' variant does not work, the 'gcc' variant must be used instead: Edit the makefile, locate 'cpp' and comment out the two cpp-related lines and uncomment the two gcc-related lines, if it's not already like that by default.

-If the LIBS linker flags in the makefile say '-lcrypt' that will cause an error about library not being found. Change it to '-lgcrypt' to fix it.

-If the LDFLAGS are empty the linker will throw a not-found error 22. Fix this by moving (or copying) the -L... library search-folder parameters from LIBS to LDFLAGS so it contains all lib paths.

Configure TomeNET on Mac OS X:

Most things can be configured by in-game menus or by dragging/positioning the game windows with the mouse, and do not require manual editing.

See 'Configure TomeNET on Linux' above, it's basically the same.

Mac OS X also uses the ".tomenetrc" configuration file which should be in your home folder, same as Linux.

TomeNET on FreeBSD:

Should be same as on Linux, except that the "8x13" standard font might not get found, preventing TomeNET from starting. A fix according to "N der Fuenfte":

```
root% cd /usr/ports/x11-fonts/xorg-fonts
root% make install clean
root% # restart X server, if in doubt, just reboot PC.
```

(2.1a) Installing sound and music packs

Starting with version 4.4.5, TomeNET features a new SDL-based audio system, which provides sound effects and background music.

To make use of it, all you have to do is download a sound and/or music pack and then install it. For downloading, go to www.tomenet.eu and then click on 'Downloads'.

Read on for instructions how to install those once you downloaded them. There are two ways, automatically (client does it for you) and manually (you unzip them to the correct location yourself):

a) Automatic audio pack installation

(See paragraph above for where to download audio packs.)

Starting with client version 4.4.9, there is an automatic installer for sound and music pack:

Step 1:

WINDOWS/OSX:

Make sure you have 7zip installed. It's a free, powerful multi-platform archiving tool (fit to replace WinRAR, WinZip etc).
Get it from www.7-zip.org.

LINUX:

Make sure you have 7zip installed. The package name is p7zip.
Note that some Linux distributions (Ubuntu) have another package called p7zip-full and the package p7zip is lacking certain parts. In that case install p7zip-full.

UPDATE: Ubuntu seems to no longer provide the graphical user interface of 7zip 7zG in either of these packages, so you'll have to download the source instead directly from the project page (on sourceforge) and compile it yourself:

<http://sourceforge.net/projects/p7zip/files/p7zip/>

pick the folder with the latest version and download the 'src_all' source archive, not the 'linux_bin' binary archive (it doesn't contain 7zG!).

Short compilation/installation instructions:

Extract the source archive and enter its directory.

For 32-bit Linux, do:

```
cp makefile.linux_x86_asm_gcc_4.X makefile.machine
```

For 64-bit Linux, instead do:

```
cp makefile.linux_amd64_asm makefile.machine
```

Then do:

```
make all4
```

And last but not least:

```
sudo make install
```

That's it. Try entering '7zG' into the terminal to verify that it worked.

Step 2:

Download the files 'TomeNET-soundpack.7z' and/or 'TomeNET-musicpack.7z' and put them into your TomeNET folder. The automatic installation only recognizes these two file names. If you download audio packs that are named differently, simply rename them before attempting to auto-install them.

Step 3:

Launch the game, press '=' to enter the configuration menu, and press 'I' to invoke the auto-installer.

Step 4:

After it's done it should tell you to restart your client. (You might also get disconnected automatically, if the auto-installation takes a while. That is fine.) Just restart the game and press CTRL+U to look at the audio mixer (or CTRL+F if you're using rogue-like key map).

It should tell you that sound and/or music pack have been installed.

In case you want to install the packs manually instead of using auto-install, read on.

b) Manual audio pack installation

(See first paragraph of (2.1a) above for where to download audio packs.)
Instead of automatic installation explained above you can also just manually unpack audio packs to your TomeNET/lib/xtra/ folder. Make sure the game isn't running while you do.

Note: Some people have reported that the program 'WinRAR' seems to cause problems in some cases, giving them "file corrupted" errors.
This might also happen with WinZIP, but we don't know really.
A powerful free and open source program that is guaranteed to work is '7zip' (a sourceforge project at the time of writing) downloadable at:
<http://www.7-zip.org/>

You can get the official sound pack on <http://www.tomenet.eu/> in the download section, and also look for player-made sound or music packs in the forum!

On Microsoft Windows, the easiest way to do this after you downloaded a sound or music zip file is to:

-
1. install 7zip, a free zip/unzip tool, if you haven't installed one already.
 2. open a Windows Explorer window and navigate to your TomeNET folder. Then double-click the 'lib' folder to enter it. You should now see a folder named 'xtra' being shown.
 3. quit TomeNET if it's still running, just to be on the safe side (sometimes MS Windows may prevent files from getting overwritten if they are still in use by a running program).
 4. double-click your downloaded sound or music pack zip file to open it in 7zip or whatever you use, and its contents should be displayed:
Either a folder named 'sound' or a folder named 'music', depending on what kind of pack you just downloaded.
Use the mouse to drag that 'sound' or 'music' folder over to the Windows Explorer window you prepared, right onto the 'xtra' folder, and let go.
7zip will now extract the sound or music folder into the xtra folder (while preserving the path structure).
If you were extracting a sound pack or if you already installed a music pack previously then you will be prompted to overwrite files - choose "yes".
Wait for the extraction process to finish.
 5. Start or restart TomeNET and press CTRL+U (or CTRL+F on rogue-like key map) in the game to view the audio mixer screen. If everything went smoothly it should say that a sound or a music pack or both have been found.
If you don't have sound, make sure that your TomeNET.ini file (it's in your TomeNET folder, double-click it to view, can be opened with any normal text editor) says 'Sound=1' which it should by default if you haven't modified it earlier.

Alternative instructions (Linux/Mac OS X/in general):

After you downloaded a sound pack or a music pack, extract it to your lib/xtra/ folder, preserving the archive pathname structure. You should end up with a folder lib/xtra/sound/ and lib/xtra/music/ respectively, which contain config files and further subfolders for either sound effects or background music.

Important: If you extract it via command-line via '7z' command, make sure to use '7z x ...' and not '7z e ...'! x will extract with correct path names.

Now start or restart the game, and you should have sound.

If you don't have sound, press CTRL+U for audio mixer (or CTRL+F if you're using rogue-like key map):

It should say that sound and music pack have been detected if everything went alright, otherwise you see a red error message.

Also verify that your config file ("TomeNET.ini" on MS Windows, ".tomenetrc" in your home folder on Linux or Mac OS X) has 'Sound' set to '1'.

(2.1b) Audio controls and config options

You can control mixer settings with CTRL+U key on normal keymap and CTRL+F on rogue-like key map (or use CTRL+C to toggle music and CTRL+N to toggle the master mixer on/off, CTRL+V instead of CTRL+N on rogue-like key map).

Note: Mixer settings are saved automatically, provided you use CTRL+Q to quit.

(Compare troubleshooting section (8.8), problem 21.)

Also be sure to press '=' key to have a look at the audio options.

If you want to temporarily disable all loading/initializing of audio then instead of editing the config file's 'Sound' entry you can just use the '-q' command-line option.

If you want to use your own sound and music, and create audio packs for other players, read (2.1b) below.

(2.1c) Manually editing sound and music configuration

You can easily replace or disable certain sound effects or music, or even create your own sound and music packs.

All audio files are in the sub-folders 'sound' and 'music' in the folder TomeNET/lib/xtra/. You can just delete or replace the sound files and it'll apply as soon as you start/restart the game. To convert your own sound files to the appropriate format of already existing files, when you overwrite them, use an audio editor, for example:

'Goldwave' is a good sound editor for Windows OS, which is free to use (although it asks for registration, but that's just optional.) Alternatively, the free open source audio editor 'Audacity' is available for Linux, OSX and Windows.

For more specific editing, open the files 'sound.cfg' (in the sound folder) or 'music.cfg' (in the music folder, if a music pack has been installed) in any text editor that supports unix line breaks (Notepad++ for example) and start fine-tuning your audio. Both cfg files actually begin with some instructions on what file types are supported and about the structure of the files aka how to modify/add entries correctly.

For example if you want to disable a certain sound effect temporarily, open sound.cfg in your text editor, locate the sound effect, and just put a ';' symbol at the beginning of the line - that will effectively disable the whole line. (Of course you could also just rename the actual sound file instead of editing the cfg file; that way it cannot be loaded by the game anymore. However, you shouldn't use '#' to disable sounds, because this might make the server think that you are using an outdated audio pack and send you wrong audio codes, resulting in hearing the wrong music in a particular dungeon for example. So it's preferable to use ';' to disable songs or sound effects.)

If you want to edit sound or music configuration files in detail, you will probably be starting off in one of these two situations:

A) You already have the official sound/music packs installed.

In this case you can just happily edit the files sound.cfg and music.cfg (found in sub-folder TomeNET/lib/xtra/sound and TomeNET/lib/xtra/music respectively) if you want to change the actual filenames.

B) You have no packs installed. In this case, you will have pretty bare example configuration files in these two folders mentioned in 'A)', which are named sound.cfg.default and music.cfg.default.

What you have to do in this case is:

- 1) Do not edit these default files. Instead, make a copy of each, and call those copies 'sound.cfg' and 'music.cfg' respectively, and edit these!
- 2) Since they're still pretty empty, you will have no ideas of the sound and music event names, save for the sound effects 'page', 'warning' and 'greeting' which are specified by default.

So to find out all the other event names, open the file 'audio.lua' in any text editor. This file is found in folder TomeNET/lib/scpt/.

Now you can just add new lines to your sound.cfg and music.cfg files using the event names you see in audio.lua, in the same manner as the three already existing entries in sound.cfg.

MAKE SURE you read the instructions written in the beginning of the files sound.cfg and music.cfg. They also tell you which audio formats you can use.

Note: Do not MODIFY the file audio.lua, it has nothing to do with editing your

sound or music. Don't worry though if you accidentally modified it, it'll be automatically restored next time you log on to the server.

(2.1d) "Promoting" TomeNET on Steam ;)

In Steam's "Games" menu choose "Add a non-Steam game to my library".
Browse for the TomeNET.exe file and check it.
Click on "Add selected programs".

Now you can start TomeNET from your Steam library of games like any other game, and if you do so then your Steam status will show that you are playing TomeNET!

(2.2) Starting TomeNET and getting to play on an internet server

To start the TomeNET client, run 'TomeNET.exe' or 'TomeNET-direct.bat'.
(If you run the '.bat' file, the meta-server steps will be skipped and you will be directly connected to the official main server instead.)
Now TomeNET tries to connect to a meta-server which contains a list of all available TomeNET internet servers.
After the meta-server has been queried, the list of available servers will appear in the main window. Choose a server that is near to your location to avoid high latency.
(This step is reported to sometimes cause problems on Windows OS. If you don't see that list, or if other problems occur, see (8.8) for possible solutions.)

Now you will be prompted to enter your account name and password. You can choose these freely, the server will save that information and use it to remember which characters belonged to you the next time you log on.
IMPORTANT: If you get kicked out with an error message after entering account and password, it's likely because that account name is already in use by someone else so your password was recognized as 'incorrect' since it was most likely different from that user's password. Just try a different account name. A player usually has exactly one account that can hold up to 8 characters. In most cases newly created accounts have to be "validated" by a server administrator to enable you to use the whole functionality of TomeNET. For example it is common not to allow unvalidated players to drop items or money to the ground. This is done to prevent certain cases of abuse.
If you accidentally chose an account name or character name which was already taken by another player, you will be disconnected with an error message. In that case, try again with different names.

Now that you have logged in you can create a new player character which will represent you in the virtual world of Middle Earth!
To do so, press 'N' key in your character overview screen (showing you empty character slots, since you haven't created any characters yet) and then enter a name for your character. You may use the same name as your account name, if you like.

Players logged on to the game are identified by 3 names:

- Nickname (character's name)
- Realname (account name)
- Hostname (The hostname of the connecting computer)

The hostname is not really important. However, make sure that all of these 3 names may only consist of letters, numbers, spaces, and all other characters with an ASCII code between 32 (SPACE) and 122 ('z').

The realname and hostname must not be empty. The nickname (character name) needs to start with a letter ('A'..'Z' or 'a'..'z').

Newly created accounts are marked as 'not yet validated' and have certain limitations, which are:

Cannot drop items or chat privately with other players, or advance beyond a certain level.

You will need an admin to 'validate' your account.

Usually, all you have to do is to keep playing/stay online for a bit until an admin logs in, notices that you are new, and validates your account.

If that doesn't seem to happen, ask an admin directly, when you see one chatting (Admin's names are displayed in dark blue in the chat).

If the server's intro screen mentions to send an email to an admin, try that and specify your account name in it.

You may continue reading at (3.1), which explains details of the character creation progress.

(2.3) Client options

By pressing the '=' key in game, you can access the options menu where you can tweak your client in some ways. Some of these options that aren't self-explaining or that are especially important are listed in detail here:

(1, 2, 3) User Interface Options

Rogue-like commands (rogue_like_commands)

Toggles between normal key set and traditional rogue-like key set.

Double height of the map shown in the main window (big_map)

Definitely enable this to see if you prefer it: It doubles the size of the game-play area displayed in the main window.

Suppress server messages as far as possible (taciturn_messages)

Will prevent some of the not-so-important server messages to be shown, for example 'You have <item>' when picking up an item.

Don't display 'flavours' in item names (short_item_names)

A 'Black Potion of Speed' will just be shown as a 'Potion of Speed'.

Show experience bar instead of a number (exp_bar)

In the main window at the 'XP' label your experience is displayed as a progress bar instead of showing the numerical value, much like in common MMORPGs where each bar segment is often referred to as 'bubble'.

This bar has a resolution of 5% steps and displays..

a dark blue '#' to indicate 5%,

a light blue '#' to indicate 10%,

a full bar of dark blue '#' to indicate 95%+.

This is especially recommended for high-level characters who require several dungeon dives to gain a level-up. This way, you can keep track of your progress during the current dive, eg "I want to make at least 30% experience progress (aka '3 bubbles') before I recall out of this dungeon".

Examples for the bar (dark blue '#' are written as '+' here just for illustration purpose):

----- You have made less than 5% XP since your last level-up.

###----- You already made 30% (or a bit more) XP this level.

####+----- You made 45% (or a bit more) XP towards next level already.

+++++++ You have 95% (or up to 99%) XP and are therefore very close to level-up! Might just as well keep diving till ding! :-p

Hide unusable skills (hide_unusable_skills)

Skills that your character cannot use will not be displayed in the skill menu invoked by 'G' key.

Flash own character icon after far relocation (flash_player)

Whenever your character teleports, recalls, takes a void jump gate or phases in such a way that your current view panel changes, your character icon will flash quickly and brightly for a moment, to help your eyes ascertain your position.

Useful for example if there are many monsters around and you're a mimic in monster form, or just in general when you're in big_map mode.

Alert on taking damage while you are AFK (alert_afk_dam) and

alert on taking damage while looking around the map via 'locate' command (alert_offpanel_dam). (The locate command is invoked with SHIFT+L on normal key map and SHIFT+W on rogue-like key map.)

A bunch of options for special visual effects and lighting.

These options change how lighting is applied to lamp light and walls, lamp light colour and how walls are displayed depending on the font:

font_map_solid_walls (depending on font displays walls as solid blocks)

view_animated_lite (fire-based light sources flicker yellow-orange)

wall_lighting (generally enables lighting/shading fx for walls:)

view_lamp_walls (your light source lights up certain wall grids)

view_shade_walls (darkens wall grids out of sight)

floor_lighting (generally enables lighting/shading fx for floors:)

view_lamp_floor (your light source lights up certain floor grids)

view_shade_floor (darkens floor grids out of sight)

view_lite_extra (lights up a few additional wall/floor types)

(4) Audio Options

(See (2.1a) for more information about sound and music.)

A bunch of stuff here, mostly you might want to look at attack-sound effect frequency. Some people don't like to have those be played on each single attack, so you can tweak them here.

no_shriek_sfx and no_house_sfx might be especially interesting too.

(5, 6) Game-Play Options

Use old target by default (use_old_target)

If this is on, a ranged attack via *t5 or *t- will not pick a new (ie closer) target if the previously acquired target is still okay.

Set 'AFK mode' automatically (auto_afk)

Prevent floating for a short while after death (safe_float)

For a few turns after your character dies you cannot float up or down with the '<' or '>' key. This prevents accidentally leaving the floor in case you were just trying to take a staircase right the moment you died, which would result in losing your items since the dungeon level would probably regenerate if you left it.

Abort macro execution if an action fails (safe_macros)

If any sub-action in a macro you execute fails then the whole macro/key queue will be discarded and cleared.

This is useful if you for example have a spellcasting macro that would just do something weird in case you lost the according spell book and then tried to cast it anyway, accidentally.

This only affects magic spells and monster traps.

Automatically open doors (easy_open)

Your character attempts to open a door just by you moving into it.

Clear @-inscriptions on taking item ownership (clear_inscr)

When you pick up items that belonged to another player, any '@...' inscriptions will be rendered effectless by replacing the @ by a space. This is a security feature that is intended to prevent the inscriptions from interfering with the inscriptions on your own items.

For example, your potions of healing might be inscribed @q1. If you now pick up a potion of heroism that someone else also inscribed @q1, it will be used the next time you press your 'q1' macro, because heroism potions are sorted in in the inventory before healing potions, which might cost your life if unlucky.

Alternatively if you have this option turned off, you can just use the '}' key to uninscribe the items you get from someone else.

Use additional predefined auto-inscriptions (auto_inscribe)

Will provide a predefined (on server-side) set of item-inscriptions that will be applied automatically to some selected items, which are Word of Recall items, various scrolls and a few potions.

(These inscriptions are applied independantly of the custom auto inscription feature you can access with '&' key.)

The server-side auto-inscriptions are currently:

Scrolls of Phase Door:	@r1
Scrolls of Teleportation:	@r2
Scrolls of Word of Recall:	@r3@R
Rods of Recall:	@z3@R
Scrolls of Identify:	@r5!X
Scrolls of Trap Detection:	@r8
Scrolls of Magic Mapping:	@r9
Scrolls of Satisfy Hunger:	@r0
Potions of Healing:	@q1
Potions of Speed:	@q2
Potions of Resistance:	@q3
Potions of Restore-L-Lev:	@q4

Note: Already inscribed items are not touched.

Thin down screen flush signals to avoid freezing (thin_down_flush)

Enabled by default, this discards all 9 of every 10 flush signals, so it reduces the animation delays to 10%.

See below for an explanation of flush signals.

Disable delays from flush signals (disable_flush)

Completely disables the delay flush signals cause. Flush signals are signals sent by the server to make the client wait for 1 ms, which is used mainly to draw animations when casting spells or shooting, like the arrow flying or the balls of explosions.

If you have a slow network or are lagging a lot, you may try to disable this. Certain animations might visually suffer from doing so.

Scroll the screen more frequently (wide_scroll_margin)

Should always be enabled! Will reduce probability for off-screen kills, since the screen scrolls much earlier when you come close to a border!

Get kicked out automatically by the game when starving and idle for 30 seconds. (idle_starve_kick)

(8) Check Server Options

Displays a list of the server rules and configuration.

(A) Account options

Here you can see if your account is valid. Invalid accounts are also indicated by a yellow 'I' in the players list you get with '@' key.

Also, you can change your password here!

(W) Window flags

Here you can configure each of the program windows in detail.

It is recommended that you have one dedicated window for 'Display chat', so you don't miss important messages during combat.

(2.3a) Client options configuration files

Don't forget to save options to a file after you changed them, so the change becomes persistent and will be remembered next time you log on.

The following files will be automatically processed by TomeNET:

global.opt	global client options, will be loaded on all characters
global-<operating system>.opt	client options for specific OS, can be used to have different options depending on whether a Linux client is running in X11 mode or as GCU terminal application. The file names would be global-x11.opt and global-gcu.opt.
<character name>.opt	client options file that will be loaded for a particularly named character only, if you log on with it, eg "Gandalf.opt".

(2.4) Installing voice chat

While chatting in TomeNET is usually fine to communicate with other players and party members in particular, using a real voice chat via headset (headphones + microphone) can be much more effective, easier and more fun.

To support voice chat, there is actually an official TomeNET 'Mumble' server running, Mumble being the name of the voice chat software. (The server part is actually called Murmur, Mumble is the name of the client part and the project name in general.)

Mumble provides excellent voice quality at low bandwidth usage, and is a free open source program, hence it is free of charge (both server and client). It also allows sending text messages in case you don't have a microphone, those can be automatically converted to speech, which is then read to the recipient. (This feature can be turned off in the menu 'Configure' -> 'Text-To-Speech'.) And same as Ventrilo or Teamspeak, Mumble allows for custom channel structures.

Mumble is available for all major platforms, ie Windows, Linux and Mac OS X.

Instructions to join the TomeNET Mumble server for voice chatting:

- Plug in a headset.
- Download the Mumble client from <http://mumble.sourceforge.net/> and install it.
NOTE: If you are looking for the Linux version, it should be in your package repository. No need to visit the sourceforge project website in this case.
- Go through the audio configuration (Audio Wizard) and possibly set up a key to push when you want your voice to be transmitted (or just select voice-activation, which will automatically transmit your voice when you speak).
- Go to menu 'Server' -> 'Connect' -> 'Add New..' and enter this server information to add the official TomeNET Mumble server:
Label: Choose any name you like, eg "TomeNET Voice Chat".
Adress: europe.tomenet.eu
Port: 23348
Username: Choose any name you like, it's your nickname on the Mumble server.
Click 'Ok', select the newly added server in the list and click 'Connect'.

That's it. To change to a certain chat channel, simply double-click it.
You can only hear people in the same chat channel (or in a parent channel).

Troubleshooting Mumble:

PROBLEM: You could connect fine, but after reinstalling Mumble you cannot connect anymore.
SOLUTION: Go to "Settings" -> "Certificate Wizard", create a new certificate.

PROBLEM: You get a message "the remote host closed the connection".
SOLUTION: Can be caused by some firewalls interacting with mumble's quality of service optimizations. You can disable QOS in mumble:
Windows/Linux:
-click "Configure" -> "Settings".
-look down to the bottom left corner and activate "Advanced".
-click on "Network" on the left side panel.
-deactivate/uncheck "Use Quality of Service".
OS X:
-in the top menu bar click "Mumble" -> "Preferences".
-look up to the top right corner and activate "Advanced".
-click on "Network" tab.
-deactivate/uncheck "Use Quality of Service".

(2.5) Fonts

The Windows client comes with a few default fonts of different size, located in folder lib/xtra/font.
If you aren't happy with the text size in the game, try switching the fonts used for the main window and the other subwindows: Press '=' to enter the options menu. Now you can either press 'f' for the fonts menu where you can change all fonts in detail, or you can hit 'c' to automatically cycle through predefined font sizes for all windows at once. (You could also enter them directly in your TomeNET.ini config file, if you wanted. This is obviously the least flexible solution though.)

Fonts can also be pseudo-graphical, some such fonts might come shipped with the client. Again press = f and then use + and - keys to switch the main window font. These two keys allow you to switch through all fonts available in the lib/xtra/font folder.

For the Linux/OSX client, the game doesn't use the lib/xtra/font folder but instead assumes that some standard fonts are provided by your system and tries to select those when cycling with 'c' key in the fonts menu.
You can also set fonts manually with = f if you want to choose specific fonts available in your Linux/OSX installation.

(2.5a) Custom fonts

For the Windows client it is possible to create your own custom fonts for the game. You can use "Fony" for example: <http://hukka.ncn.fi/?fony>
(Up to client 4.6.1a it was not possible to use characters of numbers 128-255

but this has been addressed, so the full range of characters is available now.)

Since you might need/want to use mapping files to remap terrain features to the characters in your font, you can create font-preference files that contain mapping information.

The default font mapping file is lib/user/font-win.prf. If it exists, this file will automatically be loaded by the game client.

However, the client first checks for the existence of a specific, custom font mapping file that has a filename: lib/user/font-custom-FONTNAME.prf and loads this instead of attempting to load font-win.prf.

This allows you to have a custom mapping file for each of your fonts.

Example:

You go to the fonts menu by pressing = f and switch to a font named 10X16X.FON. Now the client will automatically try to not only load the font from the font folder lib/xtra/font/10X16X.FON but also a mapping file to go with it, named lib/user/font-custom-10X16X.prf.

(On switching fonts, the client will automatically discard all mapping info it loaded for the previously used font.)

Note that this mapping file loading only happens if you switch the font for the main window, not when you switch fonts of the subwindows.

Font mapping files have the following syntax for mapping lines:

F:index:attribute/character

R:index:attribute/character

with 'attribute' and 'character' being optional.

F-lines:

The 'F' stands for 'feature', meaning a specific terrain tile such as floors, walls, doors. You can see all of these in the file lib/game/f_info.txt, the index of each feature is the number located right after 'N:'.

R-lines:

The 'R' stands for 'monster', meaning a specific base monster type. You can see all of these in the client's in-game monster lore (~7) or in the spoiler file lib/game/r_info.txt. The monster index is the number located right after 'N:'.

These mapping lines will remap the specified feature or monster to the symbol with the number 'character' in your font, which may range from 0 to 255, and display it in the colour 'attribute' which may range from 0 to 55 (up to 4.6.1a client) or 57 (in later clients), with colours 0 to 15 being static colours and the higher ones being animated.

Problems have been reported for mapping characters 2 and 16 to 27, there is currently no further information available regarding this issue. If those don't work for you, just pick different ones.

Examples:

F:56:2/127

Maps the terrain feature 'granite wall' (#56 in f_info.txt) to the font symbol #127 and the colour 2 (which is 'slate').

R:862:/255

Maps the monster 'Morgoth, Lord of Darkness' (#862 in r_info.txt and in ~6) to the font symbol #255, leaving its colour at its normal value (the one given in r_info.txt) without changing it.

When using a custom font you probably want to turn off the option 'font_map_solid_walls' in = 1, as it interferes with the mapping of various wall tiles: It will force-remap all affected wall tiles to character 127 for Windows clients and to character 1 for Linux/OSX clients and all treasure veins ('*' symbol in the game, aka walls with treasure to mine) to character 1.

Here is a list of all supported colours:

Static colours:

0 black	1 white	2 slate	3 orange
4 red	5 green	6 blue	7 umber
8 dark grey	9 light grey	10 violet	11 yellow
12 light red	13 light green	14 light blue	15 light umber

Animated (flickering in multiple hues) colours:

16 multi	17 poison	18 fire	19 cold
20 acid	21 electricity	22 confusion	23 sound
24 shards	25 light	26 darkness	27 mana-shield
28 invulnerable	29 curse	30 annihilation	31 half-multi
32 psi	33 nexus	34 nether	35 disenchantment
36 inertia	37 force	38 gravity	39 time
40 meteor	41 mana	42 disintegration	43 water
44 ice	45 plasma	46 detonations	47 nuke (toxic waste)
48 unbreath	49 holy orb	50 holy fire	51 hellfire
52 thunder	(53 lamp)	(54 dark lamp)	55 ember
(56 thin fire)	57 starlight		

For the Linux/OSX client you'll need to either convert FON fonts to PCF format (bitmap font files) or create fonts directly in PCF format. Add them to your system with the usual font-adding procedures for your specific Linux distribution, then you can select them in TomeNET via = f (or enter them directly in your .tomenetrc config file).

(3) Creating a character & starting to play

(3.1) Creating a new character; character modes

During the character creation process you will be asked about details on the character and after you have completed it you will start out in the first town, called Bree.

To create a new character, you press either 'N' or 'E' key in your account overview screen. 'N' is the normal way for creating a new character.

'E' is for creating a so-called 'exclusive' (or 'dedicated') character:

There are two character slots in your account that can be used for creating a character dedicated to each of these special ways of playing:

- a) Ironman Deep Dive Challenge (IDDC, see (4.13) for details)
- b) Player versus Player (see 'PvP' further below in this section)

If you create such an exclusive character, you will be unable to use it for anything else. The point of having exclusive character slots is to ensure that even if your account is full of characters, you still have one slot available to participate in IDDC and in PvP gameplay.

Note: A dedicated IDDC character will be killed and erased if it fails to enter the IDDC dungeon (that is if it acquires any experience outside of it) or if it recalls out of it at one of the static towns. The kill message will be: "XXXX was killed by indetermination".

If you have already created a character of the same name before, you will be given the 'reincarnate' option in every stage of character creation, which allows you to just press the '#' key to make the same choices that you did on your previous character of that name.

However, since this is your first character, just press 'N' to start the creation progress, enter a character name, and continue reading.

First you may choose your gender. This will not have actual influence on your strengths or weaknesses.

Next you have to choose your class. Spellcasters like Istari or Shamans are physically weaker and especially hard to play for beginners.

If you choose a spellcaster, be aware that his casting ability depends on either his intelligence or his wisdom, depending on the actual class. For more information about classes and their pros and cons see (6.5).

Spellcasting involves using 'macros' (see (3.6)) and might be a bit difficult for beginners.

---- PLEASE NOTE: ----

If you are new to the game, it is NOT recommended to choose one of these: Istar, Priest, Shaman, Adventurer.

The reason is that these classes are hard to play in the beginning - compare introductory explanation in (6.5)!

Then you have to choose your race. Humans are good allrounders, while the other races are more or less specialized. For example half-trolls are usually quite dumb but very strong, and hobbits are quite nimble and intelligent but not very strong. For more information about races see (6.4).

A half-troll warrior might be the best choice for a beginner to try since he is tough and has less chance of dying instantly in case you make a more serious mistake. Also you don't have to worry about the spell-casting system for now.

Note that the availability of various races will depend on the class you chose, some class-race combinations are not possible.

Now you will see your six basic attributes STrength, INTelligence, WISdom, DEXterity, CONstitution, CHaRisma.

IMPORTANT NOTE: For fighters (rogues also belong to these, ie all characters that rely on close combat) that use weapons, it is important that you have enough STrength and DEXterity to execute at least two attacks per round, called BpR (blows per round, see (6.5a)).

Sometimes this requires you to get rid of your initial weapon and buy a very light weapon, for example one of these:

- dagger or main gauche (sword class),
- whip (blunt class),
- cleaver (axe class) or
- spear (polearm class).

(For more information about the different weapon classes see (5.1a).)

Sometimes it is even possible to start out with 3 BpR (warriors mostly).

Depending on the server configuration, starting at TomeNET version 4.2.0, there are 2 alternative stages of character creation that may follow now.

1) The old way - random stats: (deprecated)

You see the short names for the 6 stats written from the left to the right on the very bottom of the screen, and you're asked to choose a stat order. You have to determine how important each of the 6 stats is to you by defining an order. The first attribute you choose will be raised most.

However, know that all your stats are randomly modified slightly, each character that you create even with same race and class will be a bit different. Sometimes you are lucky and get really high attributes at the beginning. And sometimes you get more gold to start with. If you don't like the resulting stats after you finished character creation, suicide and start over.

2) The new way since 4.2.0 - chosen stats:

You see your 6 stats written below each other, followed by a base number (10). Right above them you see your free points (30) that you may distribute on the stats. Use the numpad (numlock turned on) to navigate and increase or decrease your stats until you used up all free points. Hit ESC when you're happy with your choice.

In general, if you play a character that relies on close combat, try to at least match the STR and DEX values shown in the table in the column titled 'Min. recommended, if possible'.

If you can do that then you should start with at least 2 BpR with a light weapon, or even with your starting weapon. If your starting weapon already gives 2 BpR you could still examine even lighter weapons in stores to find one that gives you one more BpR i.e. 3 BpR and just discard your starting weapon.

Note: The stat points you distribute have no effect on the maximum value your character can get by quaffing stat potions. These points to distribute are basically just "free stat potions".

Now you can choose a difficulty level you wish to play on. Options are

n) Normal g) no Ghost H) Hellish e) Everlasting

It is recommended that you choose either n) to play a normal character or g) to play a normal character without a ghost.

You can also choose e), that will give your character an infinite amount of resurrections, while 'normal' characters often have a limited amount of lives (depending on the server configuration).

Mode: 'Normal'

A normal character will turn into a ghost if he dies. The ghost can be revived

by either visiting a temple or another living player using a magic scroll of life when standing adjacent to the ghost. The ghost will return to the world of living under the cost of a lot of experience but at least the player can resume playing. If the ghost dies, the character will finally be erased permanently, watch out!
Depending on the server configuration the number of times a ghost is limited, standard is 3 lives.

Mode: 'Everlasting'

Create an everlasting character for an infinite amount of resurrections (with the exception that they too are completely destroyed if they die to insanity.) Everlasting characters can become king/queen, but cannot enter the high-score. Other character types cannot use items that belong to everlasting characters. Exception: Word of Recall scrolls can be exchanged between an everlasting and a non-everlasting player!

Non-everlasting and everlasting characters can't be in the same party.

If an everlasting King/Queen dies, he won't be destroyed but lose the King/Queen status. To regain it, he needs to find another player who hasn't defeated Sauron and Morgoth yet and team up with him, because those two won't (re)spawn for the everlasting player.

Since it was often asked: Non-everlasting and everlasting players can revive each other without problems.

Everlasting characters can additionally use the 'Instant Resurrection' feature offered by town temples, see (4.5a).

Mode: 'Unworldly' (no-ghost)

Unworldly characters are like normal characters, but they have only one life. So if they die they cannot revive but are completely erased (no ghost will be created.)

Note: This is the traditional rogue-like gaming mode.

Mode: 'Hellish' (extra hard no-ghost)

These are unworldly characters with extra penalties:

- 1 point malus on each of the 6 character attributes
- healing is reduced by 25%
- AC is reduced by 50%
- ESP only works within radius of 20 squares
- any speed changes above or below +0 are reduced by 50%
- max number of melee attacks per round is reduced by 1.

Mode: 'PvP'

This is a special restricted mode that has nothing to do with normal gameplay. If you're new to the game, it's absolutely not recommended to choose this. More information about 'PvP' mode is given in (6.13).

Unworldly characters will receive 25% bonus on their high score.
Hellish characters receive 50% bonus on their high score.

Last you can choose a body modification. It's strongly recommended for beginners to choose 'normal body' and NOT 'fruit bat'. ;)

Body: 'Fruit bat' (Batty)

A fruit bat is like a normal character, just not in humanoid shape but in bat form! Fruit bats cannot equip weapons, boots or gloves. These restrictions won't change even if they choose a class which can make use of mimicry and thereby mimic a humanoid form (druid fruit bats would in fact be the most ineffective choice). However, fruit bats are twice as fast as normal characters at the beginning (they get a flat +10 speed bonus added) and their melee attacks are somewhat vampiric, making them leech life on each hit, replenishing their hit points. Fruit bats are said to make good explorers. If you're new to the game, it's absolutely not recommended to try and play fruit bat.

Note that race and class will have influence on how much experience you will need to gain a new character level. For example, High-Elves already know a lot, so experience is hard to gain for them. In fact they will need 130% more experience than a human.

Creation of your character is now finished and you are asked to press a key to start the actual game. Do so and take a minute to read the text that will appear. It is called news or motd (message of the day) and often contains important server-specific information or announcements to the players.

(3.1a) Character names, collisions and reservations

You cannot pick names of characters that are already in use by other players or that are very similar to another player's account name. However, if your character dies and gets erased, its name will be reserved for you for 24 hours, allowing you to recreate it if you want to. Certain swear words are also not allowed in character or account names. Last but not least you cannot create an account with a name of an existing character or account of someone else, but your actual account name will at the same time always be reserved as a character name for you personally, so there is no need to hurry and create a character of the same name as your account just to reserve it for you.

(3.2) The display (user-interface)

After you logged in with a character you will now see yourself (you are the '@' symbol, except if you chose 'fruit bat' body, then you'll be a 'b') in the town of Bree in the main window. You will already have a few basic starter items equipped, so you're mostly ready to move out. Note that Bree has already two dungeon entrances, one is the "Training Tower" where you should go first, the other one is "Barrow-Downs", the first 'real' dungeon. The training tower entrance is a green '<' symbol, step on it and press the '<' key to enter. To actually locate the entrance you can use Shift+L which will let you look around the local map. The entrance to the training tower is somewhat south of your starting position. Note that the Bree already has some "monsters", well, townspeople, denoted by the letter 't'. They're all more or less hostile though so don't hesitate to kill them off for some extra money and beware of mean-looking mercenaries and battle-scarred veterans since these could make short work of you at level 1. You could enter some shops (numbers and '+' symbols) and see if you find anything affordable worth buying, maybe some armour, potions, scrolls or a brass lantern.

You can move around in all 8 directions by using the number pad keys! You can run by pressing the SHIFT key together with a direction key. IMPORTANT: To run (SHIFT+direction) make sure that the Numlock key above your number key pad on the right side of your keyboard is turned off. A green lamp will usually indicate whether it is on or off. Running will not work while awake monsters are in your line of sight, except for the starting town of Bree, where running is always possible.

You can also use the arrow keys to move, but the numpad is better since it allows you to move diagonally too, which is very important.

You can wear/wield items with 'w' (weapons, armour, light source..)
You can pickup items with 'g'. Drop items with 'd'. Destroy items with 'k'.
You can see a list of players who are currently online with '@' key. Other players eligible to form a party with you have their level displayed in light blue colour in this list. Press SHIFT+P to invoke the party menu.
You can chat with other players (say hello ^^) with ':' key.

The top right window will give an overview of your character attributes and miscellaneous abilities. The bottom right window will show the contents of your backpack, also called inventory. All characters except ghosts have a backpack. The bottom left window will show combat- chat- and server-messages. If most of the windows stay totally empty, see (8.8) for possible solutions.

To the left border in the main window you see a short overview of your most important stats:

- starting with your race

- your class

- your current title

- (the title will change as you gain experience levels by fighting monsters),

- followed by your character level

- your amount of experience

- and your cash ('Au' stands for Aurum, latin for gold)

- the 'encumberment' bar (blank at the beginning)
- a mini lag-o-meter bar displaying your 'ping' by coloured plusses, 1 plus symbol means your latency is below 50ms, each further plus symbol means 50ms more, so if you see +++ your latency is between 100 and 149 ms.
- your 6 character attributes: STrength, INtelligence, WISdom, DEXterity, CONstitution, CHaRisma,
- your current sanity (sound means you are completely sane, this might drop, for example if a mindcrafter blasts your mind with psionic energy, leaving you mad)
- then comes your Armor Class (AC) which describes how well you are protected by all the armor you're currently wearing.
- The next two values are most important and will change all the time while fighting monsters. They are your Hit Points (HP) and Mana Points (MP), current/maximum values. Mana points are very important for wizards, since they determine which spells and how many of them you can cast. The current hit points (Cur HP) tell you if you are injured. If they drop below zero you die! If they are the same as your Max HP then you are fully rested and physically healed.
- Next entry is your stamina (ST), if you chose a class that makes use of it. Stamina may allow you to employ special techniques accessed with 'm'. Maximum stamina is always 10. Its regeneration rate can be increased by having a higher Constitution attribute (CON) or by training 'Health' skill.
- Below stamina is a 'flag bar' which displays certain combat-related modi of your character, if available to your class:
 - Combat stance (Bl = balanced, Df = defensive, Of = offensive, see (6.2))
 - Dual-wield mode (DH = dual-hand aka default, MH = main hand only, see (6.2))
 - Fire-till-kill toggle (FK = enabled, see (5.2a))

Below that, there are further status indicators such as

- your current world map location (sector 32,32 aka the starter town of 'Bree' when you log in for the first time) and the 'AFK' status indicator
- as well as your food indicator ('full' by default). Note that if you don't eat when you become hungry you might get paralyzed sporadically and eventually even die of starvation!

In the lower middle to lower right area of the bottom status line of the main window, you find:

- your speed (Normal, Slow or Fast)
- your number of melee attacks per round (BpR aka blows per round)
- your current depth or town. If you are in a town the town's name is displayed, otherwise the dungeon depth (negative numbers) or tower height (positive numbers) are shown, either in feet (each level equals 50 ft) or in levels, depending on your configuration. So if you stand on the world surface (0 ft) and enter a dungeon, you'd end up at -50 ft. This number can also have different colour, indicating some things:
 - A white number means no special effect.
 - An orange number means that Word of Recall magic is pending.
 - A yellow number means that your character's level is somewhat too high compared to the dungeon/tower level you are on, and therefore you will get greatly reduced amounts of experience points.
 - A grey number means that your character's level is way too high compared to the dungeon/tower level you are on, and therefore you will not get any experience points at all here.
- When you spend about 2 minutes on a dungeon floor, a light blue asterisk '*' will appear behind the depth indicator, or if you are in a town the town's name will change colour to light blue. This means that on the next dungeon floor you enter you will receive an extra feeling, displayed in yellow colour, that tells you some rough information about the dangers lurking there. For more information see (4.8).

Note: There are certain areas in the game that inhibit teleportation, mostly so-called "no-teleport vaults". These areas are extremely dangerous because if a monster summons other monsters around you, you might not be able to escape! If you enter such a no-tele area, it will be indicated as described in (4.8) under "vault feelings".

By the way: If you enter the game and find that you don't like your character and want to recreate it from scratch, you can suicide by pressing 'Q' (capital Q), followed by confirming the question if you really want to suicide with 'y' and then finally verify your suicide with '@' key. Note that a suicided character is completely and permanently gone (as is a no-ghost/hellish character on mundane death). Also see (0.2) for some details about suiciding.

(3.2a) The encumberment bar

Between AU and the mini lag-o-meter is a line indicating if you are encumbered in any way. This line is blank by default, but may start to show little coloured icons if your character becomes overburdened in some way.

If you are new to the game, you can skip the rest of this chapter for now, as long as your encumberment bar doesn't show any icons in it, and continue reading at (3.3) down below.

This line consists of the following icons that may show up:
(Order: From left to right)

Brown (Your armour is too heavy (tohit/sneakiness penalty).
Red /	Your weapon is way too heavy for you.
	You will receive extreme penalties on melee combat.
Orange \	Your weapon isn't fit for your character (e.g. priest using non-edged non-blessed weapons like swords).
	You'll receive a big penalty on hit chance and damage.
	An orange warning message will display:
	"You do not feel comfortable with your weapon."
Yellow /	You are using a 1,5-h weapon together with a shield.
	This is possible, but you will receive a penalty on hit chance and damage.
Green	You are using a 1h weapon two-handed and get a small bonus from that (works only for some of the weapons).
Red [Your shield is way too heavy for you.
	You will receive extreme penalties on block chance.
Red]	Your ranged weapon is way too heavy for you.
	You will receive extreme penalties on ranged combat.
Yellow }	You are using a shield on your arm, reducing your accuracy with your ranged weapon.
Light-red 'F'	You are Martial Arts user and your backpack is too heavy, so that you don't receive Free Action from MA! See (5.3a) for more detailed information.
Yellow (You are Martial Arts user and your armour is too heavy. You might receive various penalties (see (5.3a)).
	NOTE: Up to client version 4.4.2 this can stand for both, the meaning described above and the meaning of 'Blue (' described below. Starting with 4.4.2a, these two were separated into yellow and blue '(' icon.
Blue (You're a rogue or using primarily rogueish skills such as dodging or Dual-wield which depend on especially flexible armour (meaning: Your total armour weight must not be too high), but your armour is exceeding that limit! You will lose some of the benefits, see (5.5)!
Violet (Your armour is so heavy that it reduces your MP.
	This only affects classes that have a mana pool.
Violet]	a) Your gloves are not made for spellcasting or too heavy, reducing your MP.
	b) Your headgear is too heavy, impacting your ability to cast mindcrafter school spells, reducing your MP. Only affects characters who have trained in one or more of the mindcrafter schools.

Also see (5.3a) and especially (5.5) for more information about encumberment, and for specific details about penalties that are applied.

(3.3) Behaviour, chat messages and chat modes

You can chat with other players by pressing the colon key ':' once you have joined a game with your character.

In general, don't hesitate to ask questions. Players are usually willing to help you with the beginnings. Keep in mind that players often don't have time to look at the chat while they are fighting monsters, that means if you write to someone while he is in the dungeon, he often likely won't notice your message. Politely try again after some time.

You can scroll back the messages using CTRL+P, or look at chat-only messages using CTRL+O.

Please do not use foul language in chat. If you do, depending on the server settings you might end up in jail.

Also, foul language is filtered by default. If you want to turn that off, press `= 2` and toggle the client option "censor_swearing". (Requires client version newer than 4.4.8a.)

You can also enter slash commands in the chat line. For details about slash commands see (0.2b).

To type a private message to someone, enter `<name>:<text>`

Example: Hi! <- goes to everyone
 C. Blue:Hi! <- goes privately to the character named 'C. Blue'
In chat messages you can type a double colon `':'` to force output of a normal colon `:` instead of having it interpreted as separator for a private chat message. Most smileys are recognized automatically and don't require you to enter a double colon.

You can use colours in messages. To change the message colour, put a { followed by a colour code somewhere into your message line.

Example: {pHi! <- results in a 'poison-coloured' Hi!
 I see some {vh {Bto the east <- results in "I see some h in the east"
 where the 'h' is violet. The rest of the
 message is light blue (standard colour).

If you cannot see coloured messages in your secondary Tomenet windows other than the big main window, check your client option settings by typing `=1` and looking for 'Flicker messages in recall' (recall_flicker). Set it to 'yes'.

If you want to type the character `'{'` in a chat message, rather than using it for a colour code, type it twice `'{'{'`. It will become `'{'`.

Here is a list of colour codes (try not to annoy your fellow players :))

d black	b blue	B light blue
D dark grey	g green	G light green
s slate (grey)	r red	R light red (pink)
W white	u umber	U light umber
w bright white	y yellow	o orange
		v violet
a acidic	c cold	e electric
p poison	L light flicker	h half-multi
A dark flicker	S sound	C confusion
I invulnerability	M disruption shield	f fire
		m multi
		H shards

There are extended colour codes available since 4.5.2 (some in later clients)

P psi	x nexus	n nether	q inertia
T disenchantment	F force	V gravity	t time
E meteor	N mana	Q disintegration	Y water
i ice	l plasma	O detonation	k nuke
K unbreath	j holy orb	J holy fire	X hellfire
z thunder	Z ember	0 starlight	1 havoc

Character names in chat lines have different colours to indicate their status:

White	Normal player.
Light blue	Everlasting player.
Dark grey	No-ghost / hellish player.
Violet	Player character is king / queen.
Dark blue	Player is admin.
Red	Player is a ghost (ie dead).
Yellow	Player is a PvP-mode character.

Chat modes:

After pressing `':'` key to enter chat mode, you may press TAB key to switch between the three chat modes:

-normal

-party chat: All messages are sent exclusively to your own party.

-level chat: All messages are sent to everyone on your dungeon level.

-guild chat: All messages are sent to all your fellow guild members (if any).

Note: While TAB cycles forward, you can also press CTRL+U to cycle backwards, CTRL+A to switch to 'normal' mode, CTRL+T to switch to 'party' (team) mode, CTRL+G for 'guild' mode and CTRL+L for 'level' (floor) mode.

Also you can use the following prefixes in the beginning of a chat line, to get similar behaviour as in one of the chat modes just for one line:

!: Sends the following text to your current party.
\$: Sends the following text to your current guild.
#: Sends the following text to everyone on your dungeon level.
Note: While in town this will instead become a /say.
%: Sends the following text to yourself (has some use in macros).
+: Sends the following text to the last person who whispered us a private message, so it's sort of a 'reply' function.

Note that you can use CTRL+p and CTRL+n while in chat mode (':' key), to repeat a message or command you previously typed.

(3.4) Start-up equipment

Every new player has some items right from the beginning, in the past those came stored in the inventory but nowadays they are immediately equipped. As a warrior you will have a chain mail and a weapon, for example a sword. Start-up equipment always has level 0 and cannot be used by other players!

If you find further items you can equip them with 'w' key - you will be asked which item you would like to wear or wield, choose the letter in front of the item inside your inventory, for example e) if the item is the fifth item in your backpack.

Make sure that you have a lightsource ready to be equipped, like a torch or a lantern. If it is night in town that will help you to see anything. Inside a dungeon most passages and rooms tend to be dark so you should always have a lightsource equipped while in a dungeon.

Startup items that you don't want to use you may simply destroy with 'k'. In town, you can see rectangular blocks that resemble buildings. These are the town stores. They each have an entrance, resembled by a number '1' to '7' as well as '9' and '+' symbols. These are the different shops that you can enter to sell or buy items. It is recommended that instead of using your torches, buy a brass lantern from store '1' (General Store), because a lantern provides more light, increasing your radius of sight in the darkness. Also buy a flask of oil for your lantern to refill it if it runs out of oil (press SHIFT + f).

Press '?' to see an in-game introduction and overview of the keys and commands that you may use. For example 'e' will show your currently equipped items. You can chat with other players using the ':' key. This way you can also enter certain commands like /fill to fill an empty bottle with water of a fountain. At the beginning, all players receive a parchment with their start-up equipment. It's the "Gazette". Press 'r' to read it. It may contain some notes about the server or hints for newbies.

(3.4a) Item basics

When you've logged in and look at your inventory (your backpack, basically), ie the items your character starts with, you will see various item names that give you some sort of idea what the item is good for, along with some cryptic numbers and brackets.

The meaning of these will be explained here:

a Ration of Food {0,+}

Pretty straightforward, this is an item that you can consume if you get hungry. To do so, use SHIFT+e to 'eat' this item.

The {...} part means the following:

The number in it is the level required to use this item. 0 means that you started out with this item, ie it was given to your character on birth.

The '+' symbol means that you OWN the item. If it was someone else's ration then you would see his name written there instead of the '+', for example: a Ration of Food {0,Gandalf}.

If the owner died and the item hasn't been picked up yet by someone else who meets the level requirements, it will display a '-' instead of a name,

meaning it has been owned, but the owner died. Example:
a Ration of Food {0,-}.

If you own an item or found an item, then the level requirements won't matter. Even if they are much higher than your level, you can still use it.

The level requirements are only important for TRADING an item:
If the character who receives the item is too low to match the level requirement, he won't become the owner of the item and therefore will be unable to use the item until he reaches the level. He can still carry the item in his inventory though, but it will be displayed in dark grey to him, indicating that it isn't usable yet.

Note that you usually can neither trade nor sell items that are level 0. Food is an exception to this rule, since it can be traded (but not sold).

For those interested in more details, that item level is roughly determined based on the following factors:

- Base item level (the dungeon depth where it starts popping up)
- A slight increase for when it's found on even much deeper floors
- An increase depending on ego powers it possesses.

Some items have special level requirement calculations, for example the level of a ring of speed is directly tied to its +speed value.

a Chain Mail {0,+} (-2) [14,+0]

The {...} part is already known, it's the same as for the ration described above. What's new is the [...] part, which all types of armour have:

The (-2) part is a to-hit malus. This armour reduces your to-hit value by 2, because of its bulkiness. Lighter armour has -1 or no to-hit malus, heavier armour may have even more than -2.

Rectangular brackets [...] describe 'Armour Class' or short AC. AC is a number that tells you how well the item helps to protect you when a monster (or a player whom you duel) hits you.

The first number stands for the item's 'base AC'. All 'Chain Mails' have the same base AC of 14. All 'Metal Caps' have a base AC of 3, and so on.

The second number, here a +0, can vary: It is this item's magical enchantment. It is simply added to the base AC to determine the total AC this item provides.

For example a Chain Mail [14,+3] is magically enchanted 3 times, and therefore will provide you with 17 AC instead of just 14, ie 14+3. Armour class helps for both: Reducing the chance to get hit, and reducing the actual damage you suffer in case you are hit.

Likewise, if you fight an acidic monster for example, the acid might damage your Chain Mail, and turn it into for example a Chain Mail [14,-2]. This Chain Mail only provides you with 12 AC. You could 'repair' it by buying two 'Scrolls of enchant armour' from store 5 in town to enchant it back to +0, but the cheaper way would be to use the 'repair' service instead which is offered in the armoury (and also at the weaponsmith's). Note that enchanting items by using scrolls to anything above +0 has a chance to fail, depending on how high it has already been enchanted.

a Long Sword {0,+} (2d6) (+0,+0)

Again the {...} part is already known. What's new for all types of weapons is the (2d6) and the (+0,+0) part:

Like in Dungeons & Dragons, on which rules some aspects of the game are loosely based, when your character attacks a monster (or another player), dice are cast to determine the amount of damage your blow deals.

The (2d6) mean that when you hit someone with this weapon, two dice of six sides each are cast, so you may deal anything from 2 to 12 damage randomly. (The real damage the target suffers can possibly be further reduced by the target's armour class or protective magic.)

Similar to armour, weapons can be enchanted too. This is the second pair of brackets: (+0,+0).

The first +0 means that this weapon has no magical enchantment to its hit

chance, ie how likely it is to hit a target.

The second +0 means that this weapon has no magical enchantment to the damage it deals. Example:
a Long Sword (2d6) (+5,+6) would add 5 to your hit chance, which isn't very much, but still better than nothing. Probably worth more is the fact that it also adds 6 to your damage dealt!
This means on each attack it will deal 2d6 +6 damage, which would be anything from 2+6 to 12+6, ie 8..18. As you can see, this is a considerable improvement over 2..12 of an unenchanted Long Sword.

Note that training weapon-related skills will also add to your overall +damage bonus. So your character might have +34 to-damage using a mere Long Sword (2d6) (+9,+15), with the remaining +19 damage coming from your 'Sword-mastery' skill that you trained.

Also note that often it can be better to wield lighter weapons instead of heavier weapons, if you can attack more often during each round with them. Example: A light dagger might allow you to attack 3 times, while a heavy two-handed sword will only allow you one swing each turn. Here you will have to do some math with the weapon dice, your total +damage from weapon and skill, and the number of blows/round you get with each weapon, to find out which setup is best for your character at a given time.

a Long Bow {0,+} (x3) (+0,+0)
Ranged weapons all have a 'multiplier' given in the first pair of round brackets, and the (+hit,+dam) enchantments already known from normal melee weapons.

The multiplier, here x3, means two things:

- a) how far you can shoot
- b) by how much the damage dealt by your arrow (or shot or bolt, depending on the weapon type) will be multiplied.

This means that enchanting a ranged weapon's damage is especially effective because the +damage bonus will also be multiplied by the weapons's factor!
Example: a Long Bow (x3) (+2,+4) will actually add not +4 but $3 \times 4 = +12$ damage to each shot! This is why archers should try to visit store 5 as soon as possible to buy some 'Scrolls of enchant weapon to-dam' from it, to enchant their bows or other ranged weapons.

a Wooden Torch {0,+} (with 2500 turns of light)
Not much new here, except that this item has a 'timeout' given in turns. After having this item equipped for 2500 turns (about half of that in seconds, very roughly), the torch will be depleted and not produce any more light, so you can drop/destroy/sell it, or press SHIFT+f to add a fresh torch from your inventory to your almost depleted one, thereby refueling it (this makes sense if you are using a torch that provides special magic powers).

If you buy a shovel or pick from store '1' to dig up treasure veins, it looks like this:

a Pick {+,1} (0,+2) (+1)
The to-hit and to-dam bonus do not count for fighting, but instead slightly help digging. The main factor though is the (+1). For digging tools, this bonus describes their main digging power. The to-hit and to-dam effect is rather small compared to this main factor. Also, the weight of your digging tool also has a little effect (the heavier the better).

Later on in the game you might find 'ego' digging tools, for example:

a Pick of Digging {+,9} (+5,+9) (+1) (+3)
It's basically same as the normal pick, except it has a second (+3) mod at the end. This belongs to the 'of Digging' suffix and, same as the (+1), further increases the digging ability, in the same way the (+1) does.
So overall you can just view it as if it was a Pick (+4) (1 plus 3).
(See (5.20) for details about digging.)

(3.4b) Items that are always tradable

Certain items can always be traded, no matter the item level or owner mode (ie everlasting vs non-everlasting vs pvp). They will in turn receive a 100% value discount on trading. Those items are:

- Any kind of food
- Scrolls of Satisfy Hunger

- Scrolls of Word of Recall
- Amulets of the Highlands
- Game pieces (eg chess, heavy ball)

(3.5) Preparing the first time for fighting enemies

Before you enter a dungeon by stepping onto a staircase leading into the earth (looks like this: '>') and pressing the staircase symbol '>' you will have to buy some more items for the following reasons:

At the very beginning a single enemy who is a little bit stronger could kill you easily without you having a chance to escape. At the same time, slaying strong opponents at the very beginning will give very much experience, thus making your character rise in experience levels and in power very quickly!

Going deep down into the dungeon with a very low character level in hope of meeting a monster that gives lots of experience while at the same time is not too hard to kill is called "diving" and often is kind of suicide while sometimes very rewarding.

However, buying certain items will greatly raise your chance of escaping from dangerous situations alive or even slaying tough opponents. Also, by buying an item (like magic potions or scrolls) your character will remember what it 'looks like' and instantly recognize it if you find some of the same type in the dungeon. If you find a potion/scroll unknown to your character you will have to either use it or sell it to a shop or use a scroll of identify to find out what it is.

So to prepare for hunting in the dungeon, buy:

- Potion of Heroism (maybe just one, for when you encounter a unique monster)
- Potion of Cure Light/Serious Wounds
- Scroll of Phase Door

The more you can buy of those the better. At least buy one potion of Heroism and Cure Serious Wounds.

And if you still have spare money (this one costs a lot) a

- Scroll of Word of Recall. (See "(0.3) Important inscriptions, Word of Recall" for more info.)

(3.6) Creating basic macros & inscribing items

Macros are absolutely obligatory, you will need them, so read this carefully and if something isn't explained well, ask your fellow players to clarify.

In turn-based single-player rogue-like games you always have enough time to press "q" (quaff a potion) followed by the according inventory slot, for example b) (if there is a potion of cure critical wounds in the second inventory slot).

However, TomeNET is multiplayer and real-time. This means you don't have enough time to look at your inventory and search the correct letters for items which you might need **this instance** to avoid certain death. Often situations get hectic, for example if all of a sudden dark-elven warlocks come around the corner while you are engaging a pack of wolves, then you need kind of a panic button that quickly transports you out of trouble.

To comply with this need, a macro system has been implemented, allowing you to program freely choosable keys of your keyboard to perform a series of other keypresses or commands when pressed. These macros can also interact with certain items of your inventory by using "item inscriptions". You can inscribe items (usually with the '{' key) as often as you like to, the inscription is for example useful if an item has special abilities that you want to remember by looking at it. To remove an inscription, use the '}' key.

You would for example inscribe an Elven Cord Armor that you know helps you to resist the effects of poison. Then it might look like this in your inventory:

Before: d) an Elven Cord Armor [6,+20] (+1) {+,10}

After: d) an Elven Cord Armor [6,+20] (+1) {+,10} {resists poison!}

Inscriptions don't just help you to remember the abilities of certain items, they can also interact with the macro system and other aspects of the game.

Usually if you want to quaff your potion of Heroism or read a scroll of Phase Door, you would press keys 'q' 'c', q for quaff, then c for third inventory slot for example, or 'r' 'd' (r for read, then d for the fourth inventory

slot, if your scroll resides here).

However, if you just picked up another potion, your inventory order might be changed and you had to remember the new positions of your vital potion and scroll.

Now we are going to create three macros that will instantly quaff the potions or read a scroll of recall, no matter where in the inventory they exactly are, on a single keypress! Inscribe the potion of Heroism "@q1", the scroll of Phase Door "@r1" and the potion of Cure Light Wounds "@q2".

It should look like this now:

b) a potion of Heroism {+,1} {@q1}

c) a potion of Cure Light Wounds {+,1} {@q2}

d) a scroll of Phase Door {+,1} {@r1}

Now we will create macros that make use of these items. Invoke the macro menu by pressing '%' key. Then choose "(a) Enter a new action" and enter the following two characters and press Enter:

q1

Now choose "(h) Create a hybrid macro", then press the F1 key.

Now enter a new action, this time q2 instead of q1. Create another macro, this time hit F2. Then Enter the third macro, r1, and choose F3 key.

Have your TomeNET client save the macros to a file on your hard disk, in your TomeNET directory at \lib\user by choosing "(s) Save macros" and entering a filename, or simply confirming the shown default file name which is the same as your character (recommended!).

Now if you press F1 you will automatically quaff the potion of Heroism, F2 for Cure Light Wounds and F3 to read the scroll. You are ready to enter the dungeon now. If you still have some spare money, buy a flask of oil to fuel your lantern if it runs out, as well as some rations of food in case you get hungry.

The next time you log on, you may load your previously saved macro file by invoking the macro menu again ('%'), choosing "(l) Load macros" and entering the filename. If you saved the macros to the same name as your character, they will be automatically loaded, saving you that hassle.

An even simpler way to create macros is the 'macro wizard' described in (3.7c).

The macro recorder:

Note that instead of entering an action string (such as 'q1' or 'r5'), the macro menu also provides a 'macro recorder', which when invoked will record all your key presses until you enter the macro menu again. Then the keys you pressed will be the default action that you can directly bind to a trigger key by choosing normal, command, or hybrid macro.

Note that while it is probably overkill to create macro hotkeys for items which aren't as important as healing or teleportation, inscribing them can still be helpful because it allows you to easily access them.

Example: You inscribed your flasks of oil @F1 . Now if your lantern is running low on oil you just type the keys 'F' (to fill) and '1' instead of having to search your inventory for the correct slot letter the oil flasks reside at. Same goes for other items that aren't used in time-critical situations during combat but nevertheless regularly, like scrolls of identify.

If two items have the same inscription, for example Potions of Cure Critical Wounds @q1 and Potions of Healing @q1, the item which is above the others in your inventory is chosen. So in this example you'd first use up all CCW potions, then use the healing potions because CCW are located above healing potions in your inventory. You can uninscribe items with the '}' key.

Loading macros automatically:

If you save your macros to a filename that is the same as your character's name and add a '.prf' at the end, it will be automatically loaded as you join a game with your character, which is very helpful!

Example: If your character is named 'Kinkan', save the macros to Kinkan.prf to have them loaded automatically.

Note: If you're using a Linux version, remember that the file system is case-sensitive, so don't save your macros to 'kinkan.prf' since your character

an attack queue if you hammer the trigger button for a ranged attack).

2. Designating a target.

3. Attacking the designated target.

What does the macro look like? (Note: Keys could vary depending on your key set definitions. Throwing might be 't' instead of 'v' etc.)

For..

a) casting a magical spell

Press 'm' to see your choices of casting magical spells. Let's assume you see this menu then:

- a) check dodge chance
- b) cast a spell

Now we want 'b'. Press it to see a list of your magical books in your inventory. Let's assume you have learned spell 'a)' from book 'b)' in your inventory. Since the order of your books could change if you pick up new items or drop old ones, we will inscribe your magical book that is currently at position 'b)' like this (press '{' key to inscribe):

@m2

The '2' is our own choice. We could've used 7 or 0 if we wanted to. Note that it must be a single digit! @m20 does not work.

Now we can create the macro.

-Press '%' to invoke the macro menu,

-press 'a' to enter a new action,

-enter: \e)*tmb2a-

This means:	\e)	clear the keyboard buffer
	*t	designate the closest enemy as the target for the spell (if there is an enemy)!
	m	invoke the ability menu
	b	choose 'b) cast a spell'
	2	use the magical book which is inscribed @m2
	a	use spell 'a)' from this book
	-	use previously designated target as direction, if that target is actually valid. Otherwise cancel the spell!

-press ENTER key to accept that macro,

-now hit 'h - create a hybrid macro'

-hit the key you want to bind this macro to, for example the 'F1' key.

F-keys are a good choice for macros, since they're not used otherwise.

-To save your macros, press 's - Save macros' and enter a filename of your choice. If you want your macros to be loaded automatically when you log in with your character, save them to '<yourname>.prf'. For example to 'Gandalf.prf' if your character is called 'Gandalf'.

If your macros are not automatically loaded, you'll have to do it manually after logging in, by pressing % and choosing 'l - Load macros', then specifying the according filename.

Note that if your character gains additional abilities that show up in the 'm' menu, it might happen that 'b) cast a spell' becomes 'c) cast a spell' which would require you to redefine your macros.

Fortunately there is a way around this, by using Ability Codes instead of letters to pick a skill to use. See 'Ability codes' below.

Further, in (3.9b) a way of casting spells (or using items in general) without relying on inscriptions at all will be explained!

b) throwing an item at a monster (or player)

Throwing would be done by pressing 'v', followed by the item and either one of the 8 directions or '*t' to designate the closest enemy as the target.

The macro:

-Press '%' to invoke the macro menu,

-press 'a' to enter a new action,

-lets assume the item you want to throw is at position 'c)'. It's 'c) 3 potions of blindness'.

You could now either specify the slot 'c)' in the macro or you could

inscribe the potions @v1 and replace the c in the macro string by a 1.

Inscribing has the advantage that if the potions change their location in your inventory you could still throw them. If you use 'c' you'd just throw the item at position 'c)' even if the potions are currently 'd)'.

Examples:

enter:	\e)vc*t	or	\e)v1*t
This means:	\e)		clear the keyboard buffer
	v		throw an item
	c	OR	1
			choose 'c) 3 potions of blindness' OR
			choose the item for throwing which is currently
			inscribed @v1
	*t		designate the closest enemy as the target!

- press ENTER key to accept that macro,
 - now hit 'h - Create a hybrid macro'
 - hit the key you want to bind this macro to, for example the 'F2' key.
F-keys are a good choice for macros, since they're not used otherwise.
 - Don't forget to save your macro by pressing 's - Save macros' if you plan to use it again.
- c) firing your equipped ranged weapon (sling, bow, crossbow)
The keys we need are 'f' to fire and a direction key or *t to simply target the closest enemy.
The macro:
- Press '%' to invoke the macro menu,
 - press 'a' to enter a new action,
 - Since ammunition for firing or a boomerang is always at a fixed position in your equipment, we do not need any inscriptions on the weapon or ammunition - the game knows which item we want to use since there's only one possible choice.
- enter: \e)*tf-
- This means:
- | | |
|-----|---|
| \e) | clear the keyboard buffer |
| *t | designate the closest enemy as the target! |
| f | fire an item (boomerang, if equipped) or
fire ammunition (if launcher & ammo is equipped) |
| - | use previously designated target as direction, if
it's still valid, otherwise cancel firing! |
- press ENTER key to accept that macro,
 - now hit 'h - Create a hybrid macro'
 - hit the key you want to bind this macro to, for example the 'F2' key.
F-keys are a good choice for macros, since they're not used otherwise.
 - Don't forget to save your macro by pressing 's - Save macros' if you plan to use it again.
- d) zapping a magical rod or aiming with a magical wand
Rods are used by 'z' (zap a rod) and wands by 'a' (aim a wand), followed by the item and either one of the 8 directions or '*t' to designate the closest enemy as target.
The macro:
- Press '%' to invoke the macro menu,
 - press 'a' to enter a new action,
 - lets assume you want to aim the wand at position 'c)'.
It's 'c) a wand of magic missiles'.
- You could now either specify the slot 'c)' in the macro or you could inscribe the wand @a0 and replace the c in the macro string by a 0. Inscribing has the advantage that if the potions change their location in your inventory you could still throw them. If you use 'c' you'd just throw the item at position 'c)' even if the wand currently is at 'd)'.
Examples:
- enter: \e)*tac- or \e)*ta0-
- This means:
- | | |
|--------------|--|
| \e) | clear the keyboard buffer |
| *t | designate the closest enemy as the target! |
| a | aim a wand (or 'z' to use a rod here) |
| c OR 0 | choose 'c) a wand of magic missiles' OR
choose the item which is currently
inscribed @a0 (or @z0 for a rod) |
| - | use previously designated target as direction, if
it's still valid, otherwise cancel firing! |
- press ENTER key to accept that macro,
 - now hit 'h - Create a hybrid macro'
 - hit the key you want to bind this macro to, for example the 'F2' key.
F-keys are a good choice for macros, since they're not used otherwise.
 - Don't forget to save your macro by pressing 's - Save macros' if you plan to use it again.

What happens if you leave out the '\e)' part?

Well, that means the commands that aren't processed yet will stay in the buffer and wait for execution. Example:

You hit the macro *tf- 30 times rapidly. Now your character will shoot 30 times with his bow. However, since he's quite slow, this might take him 30 seconds! You now sit in front of your keyboard and watch your character process all the remaining 30 shots. If suddenly an enemy appears that needs you to teleport away because it's too dangerous, you couldn't press any key until the 30 shots are finished. The character is 'locked'.

The ')' in the macro '\e)*tf-' clears all previous keypresses and hence allows you to hammer the macro without fearing a lock.

(3.7a) Ability codes

A problem with the 'm' key is that it not only brings up your magic spells but a menu containing all skills you can use. Those can be arrow fletching or dodging for example.
Now you would have to rewrite your macros each time you gain another ability, since entries in 'm' menu might shift if a new skill gets inserted somewhere. To avoid this, you can directly choose which skill (ie spell-casting) you want to use in your macros, by specifying the "ability code"!

Here is a list of all available ability codes:

```
3      Use innate power (for mimicry-users)
4      Toggle Fire-till-kill mode, usable by anyone. See (5.2a).
5      Fighting techniques (see (6.12))
6      Shooting techniques (see (6.12))
8      Check your dodge chance (for dodging skill)
(included in '6' now: 9      Craft ammunition (for archery skill))
10     Set a monster trap (for trapping skill, see (4.7))
11     Cast a magic spell / recite a holy prayer
12     Draw a rune (for runecraft, see '(6.8b) Runes & Runemastery')
13     Change combat stance (for combat stances skill)
14     Check your chances of parrying and blocking (for melee fighters,
      see (6.11) for details about these abilities)
15     Toggle 'Aura of Fear' if you have trained the according skill.
16     Toggle 'Shivering Aura' if you have trained the according skill.
17     Toggle 'Aura of Death' if you have trained the according skill.
```

After the ability code has been entered you need to press Enter to confirm it. In a macro, this is done by '\r' (one of the so-called escape sequences). Example for a macro that directly specifies the ability code to cast the magic spell "a) Manathrust" from book "a) Beginner Cantrips" on the closest monster:

```
\e)*tm@11\r2a-
```

What does that mean?

```
\e  -> escape any pending input request, if there is any
      (so we don't have to press ESC before casting the spell in case we're
      currently 'L'ooking around or something)
)    -> clear the keyboard buffer (removes all pending keypresses that haven't
      been processed yet due to slow character speed, so we become instantly
      ready to perform our Manathrust spell _now_)
*t   -> choose the closest monster as target
m    -> invoke an ability
@    -> specify an ability code directly
11   -> the code for 'cast a magic spell/recite a holy prayer'
\r   -> press Enter to confirm
2    -> cast from book 2 (inscription on the book must be @m2)
a    -> cast spell "a)" (Manathrust)
-    -> use previously designated target as direction, if it's still valid,
      otherwise cancel the spell!
```

(That macro basically does the same as:

```
*tmb2a-
..assumed that entry 'b)' in the ability menu (invoked by 'm') is
'b) Cast a spell'. Except for escaping and clearing the keyboard buffer.)
```

An even better way to cast spells is to not rely on book inscriptions, but to cast spells by name instead. That way you won't have to redo spells when your books change. See (3.9b) for details, or (3.7c) for the 'macro wizard', which uses cast-by-name by default for all macros you create in it (yet can also handle call-by-inscription).

(3.7b) Quick'n'dirty macros

Macro actions can be complex and hence time-consuming to enter and prone to errors furthermore.

To allow you to quickly hack in macro actions, there's the Quick'n'Dirty option in the macro menu, which will accept short cut characters instead of the usual full macro.

On entering the macro action, those characters will be automatically expanded to their real functionality. They are:

P for using a mimic's innate power

Example: Pd
 Uses innate power 'd)', which is the first real innate spell after the three polymorph powers themselves, which always comprise a) to c).
 I for using a mimic's 'transform-into-specific' power.
 Example: I191
 This will become \e)m3\rc191\r (transform into a Grizzly Bear).
 Clients of versions greater than 4.4.8c also support entering a monster name instead of its code, example: I@Fruit bat\
 F for employing a fighting technique
 Example: Fa
 (Use fighting technique 'a)', which usually is 'sprint'.)
 S for employing a shooting technique
 Example: Sa
 (Use shooting technique 'a)', which is probably 'flare'.)
 M for casting a spell
 Example: M@Phase Door\
 Becomes \e)m@11\r@Phase Door\r (cast spell 'Phase Door'.)
 R for drawing a rune
 Examples: Rcbaa or Rc\raa to draw 2 or just 1 rune.
 (The last two 'a' being spell modifier and spell form respectively.)
 T for setting up a trap
 Example: T13
 Set up the monster trap inscribed '@m1' or '@1' loaded with item inscribed '@m3' or '@3'. (Becomes '\e)m@10\r13'.)
 s for changing a stance
 Example: sa (switches to stance 'a)' ie balanced combat stance.)
 @...\ for using call-by-name (spell/item name must be between '@' and '\')
 (Examples have been given above, in some spell casting explanations.)

All other keys are taken over unmodified, like 'f' for firing a ranged weapon.

Also, '\e)' is automatically prefixed, and the most fitting macro type automatically chosen (depending on the trigger key).

Additional examples:

Example 1: Firing your ranged weapon would just be..

*tf-
 (which gets expanded to '\e)*tf-'.)

Example 2: Assumed your book is inscribed @m1 as usual, and you want to cast spell a). What you can simply enter in the q'n'd field is:

*tM1a-
 and it will automatically be expanded to the real macro '\e)*tm@11\r1a-'.

Example 3: Assumed you have the spell Manathrust somewhere in your books and want to cast it by name, what you enter in the q'n'd field is:

*tM@Manathrust\
 and it will automatically be expanded to '\e)*tm@11\r@Manathrust\r-'.

Example 4: Casting Phase Door would be..

M@Phase Door\
 (expanded to '\e)m@11\r@Phase Door\r'.)

(3.7c) The macro wizard

 The easiest (and therefore most limited) way to create a macro is to invoke the built-in macro creation wizard. If you are new to the game and too impatient to figure out how to create macros manually, you might want to give this a try.

To invoke it, enter the macro menu by pressing '%', then press 'z' to bring up the wizard.

The wizard will lead you through three steps with detailed on-screen instructions, allowing you to create macros from a couple of pre-defined command choices which should cover almost all situations.

If the option 'Rogue-like commands' is set to 'yes' when creating a macro in the macro wizard, rogue-like command keys will be used in the macro action.

(The macro type, ie command/hybrid/normal will be chosen automatically for you, same as when using Quick'n'Dirty macro creation.)

NOTE: Whenever the macro wizard asks you to enter a partial name of an item to

use in the macro you may alternatively enter an item inscription instead if you prefer that!

This works simply because item inscriptions are part of the 'item name' which the macro wizard parses.

Example:

If you create a macro to quaff a potion and the wizard asks you to enter the potion name or part of it you may instead just enter

@q1

and the resulting macro will attempt to quaff potions inscribed @q1.

(3.7d) Specifying directions and targets

Whenever you use an attack spell or a wand or rod that cast bolts or balls, the game prompts you to enter a direction. Similarly, friendly spells such as 'cure wounds' require you to target another player (or yourself).

So there are different targetting methods you can choose from:

In our macros so far we have answered the 'which direction' question by specifying '*' instead of an actual direction ie one of 1,2,3,4,6,7,8,9. We have learned that '*' means 'acquire target' and 't' means 'choose closest hostile target'. If there are two targets that are equally close, one that is awake is preferred over one that is asleep.

The '*' key can also be pressed as a command key, ie on its own without any direction request from the server. Press '*' and it will ask you to set a target, which you can do by pressing 't' again to choose the closest hostile entity.

There are, however, more ways to specify a direction or to use the target command, especially since client 4.4.6 which added the '-' option, and 4.4.6b which added the '+' option.

Details follow:

The 'Set Target' command (key '*') that sets a target for spells or item uses that follow, or which can be invoked as a sub-command from a 'Direction?' request, may be answered with..

- 'q' key to drop current target without acquiring a new one.
- 't' or '5' key to choose closest hostile target.
- 'p' to target a grid position manually via movement keys (1..9), confirm with 't' or '5' key.

The 'Direction?' request from commands that require a direction, may be answered with..

- a direction key such as 1,2,3,4,6,7,8,9.
Note that direction '5' will only aim at yourself if you have no valid target set. Otherwise, the '5' key will aim at your target instead.
- '*' key to invoke built-in target command (see above).
- '-' key to use a previously acquired target or cancel the spell/item use/shot if there is no valid target currently set. The '-' option is only available in client version 4.4.6 and higher.
- '+' key, same as '-' except that it won't cancel the action if no valid target was found, but prompt you for manual input instead (hit ESC to cancel, 5 to target your own grid, or any direction key to fire into that direction).

Note that the key '-' is not a command key, but just gets ignored when pressed elsewhere than in direction-requests. This means that you can create 'hacky' macros, for example such as *t/1- that will work with both, magic devices that take a direction and those that don't, since the '-' will just be ignored for those that don't.

Friendly targetting:

Sometimes you want to target a friendly player. For this you can use '('. That key currently targets the most hurt player who is in your party, or the most wounded player in general if you aren't in a party. After this target has been set, you can refer to it with '-', '+' or '5' same as for hostile targets you set with '*' explained above.

Example macros:

*tz0- Will zap rod 0 at the closest hostile entity. If there is none, the rod will not be zapped, conserving the rod's energy.

z0*t Zaps rod 0 at the closest hostile entity. If there is none, the rod will be zapped anyway, with yourself as target. This could be useful if it's for example a Rod of Fire Balls and you are being attacked in close combat by an invisible monster.

*qz05 Your current target is cleared and the rod 0 is zapped at your own location, ie '5'. This could be useful if you want to clear out piles of loot with a rod of acid balls, effectively destroying all lesser items that cannot resist acid and melt from it.

(m@11\r@Cure Wounds\r- Will cast the spell 'Cure Wounds' (from the Holy Curing school) at the most wounded friendly player. Will not do anything if no player is nearby. Replace the '-' by a '5' to target yourself if no other player is around.

(3.8) Example macro sets

(For the meaning of '\e)' see below (3.9). I recommend to have all your macros start with the '\e)' sequence to avoid character lock-ups due to queued keypresses that have to be processed.)

An example macro set for fighters or archers:

This macro set is already in your /lib/user folder! If it's not there, download the latest client from www.tomenet.eu or our personal pages. You can load this macro file by hitting % to invoke the macro menu, then enter 'l' to load a macro file, and specifying its filename, which is depending on your operating system:

linux_fighter.prf or windows_fighter.prf
(On Mac OS X use linux_fighter.prf.)

If you plan on using it for a longer time, immediately save it again with the filename being identical to your character name, example: Killer.prf if your character is named 'Killer'.

(You can save macros by choosing '(s) Save macros' in the macro menu.

Note: The example macro sets are write-protected to avoid overwriting.)

Of course you can just use any other potion/scroll instead of those mentioned, as long as you put the according inscription on that item.

(To inscribe an item press '{' key, to uninscribe press '}'.)

Key	Purpose of the Macro	The macro itself	Inscription on the item(s)
F1	fire with ranged weapon at closest target (you can inscribe your ammunition: != to pick it up automatically)	\e)*tf-	-none-
F2	quaff cure critical wound or healing potion	\e)q1	@q1
F3	quaff speed potion	\e)q2	@q2
F4	quaff potion of resistance, an important thing later in the game. Since these are too expensive in the beginning, you could just buy potions of resist heat instead which are offered for little money in store 5, and inscribe them @q3 accordingly. They can already be very helpful.	\e)q3	@q3
F5	read scroll of phase door	\e)r1	@r1
F6	read scroll of teleportation	\e)r2	@r2
F7	read scroll of identify	\e)r3	@r3
F8	use a staff of teleportation (magic device must be high enough or you will keep failing; also see (6.10))	\e)u1	@u1
F9	quaff a restore life levels potion	\e)q4	@q4
F10	zap some rod (magic device must be high enough or you will keep failing; also see (6.10))	\e)z1	@z1
F11	eat something. (Draconians could inscribe some firestones (see (5.9)) instead of normal food, to quickly boost their powers if needed.)	\e)E1	@E1
F12	use a magic device on the closest target	\e)*t/1-	@/1

(Magic devices are wands, staves or rods.
Your magic device ability must be good enough
or you will keep failing; also see (6.10))

As you can see this fighter is supposed to be able to use quite some magic for support in addition to fighting. Especially helpful are Rods of Perception or of speed. Not all warriors are bright enough to use magic items easily, nor are players always willing to spend many points on the 'Magic Device' skill. If you dislike the use of magic your character would have to rely completely on scrolls of teleportation instead. Just make sure you have confusion and blindness resistance then! (Those two aren't needed to use a staff.)
If you play Draconian, kill Dragonriders because they tend to drop a large amount of firestones. If a difficult combat starts, just eat several of them to get a larger amount of extra powers.
(All macros in the example set were defined as hybrid macros.)

The above macro set slightly changed to fit additional needs of a low level istar or other casters:

This macro set is already in your /lib/user folder! If it's not there, download the latest client from www.tomenet.eu or our personal pages. You can load this macro file by hitting % to invoke the macro menu, then enter 'l' to load a macro file, and specifying its filename, which is depending on your operating system:

linux_caster.prf or windows_caster.prf
(On Mac OS X use linux_caster.prf.)

If you plan on using it for a longer time, immediately save it again with the filename being identical to your character name, example: Killer.prf if your character is named 'Killer'.
(You can save macros by choosing '(s) Save macros' in the macro menu.)
Note: The example macro sets are write-protected to avoid overwriting.)

Of course you can just use any other potion/scroll instead of those mentioned, as long as you put the according inscription on that item.
(To inscribe an item press '{' key, to uninscribe press '}'.)

Key	Purpose of the Macro	The macro itself	Inscription on the item(s)
F1	fire with ranged weapon at closest target (you can inscribe your ammunition: != to pick it up automatically)	\e)*tf-	-none-
F2	quaff cure critical wound or healing potion	\e)q1	@q1
F3	quaff speed potion	\e)q2	@q2
F4	quaff restore mana potion	\e)q3	@q3
F5	read scroll of phase door	\e)r1	@r1
F6	read scroll of teleportation	\e)r2	@r2
F7	read scroll of identify	\e)r3	@r3
F8	use a staff of teleportation	\e)u1	@u1
F9	\e)m@11\r@Detect Monsters\rm@11\r@Sense Hidden\r A combo macro: Cast spells 'Detect Monsters' and 'Sense Hidden' from book Beginner Cantrips. Since this macro casts two spells, it uses up two of your character's turns to complete. (Note that this macro uses 'cast-by-name', ie specifies the spell names instead of relying on book inscriptions, making it very flexible!)	\e)m@11\r@Globe of Light\r	-none-
F10	zap some rod	\e)z1	@z1
F11	\e)m@11\r@Globe of Light\r Cast Globe Of Light spell.	\e)*t/1-	@/1
F12	use a magic device on the closest target (Magic devices are wands, staves or rods. Your magic device ability must be good enough or you will keep failing; also see (6.10))	\e)*tm@11\r@Noxious Cloud\r-	-none-
+	Cast Noxious Cloud spell on nearest target	\e)m@11\r@Phase Door\r	-none-
-	Cast Phase Door.	\e)*tm@11\r@Manathrust\r-	-none-
0	Cast Manathrust at nearest target		

This low level istar might be armed with a sling to support his yet weak magic, so the F1 macro makes sense. Assuming that he uses the numpad keys for movement, the keys +, - and 0 were used to allow quick access to his basic

spells. - and 0 use his startup book 'Beginner Cantrips' while the macro on the + key requires that he bought a spellbook of noxious cloud.
(All macros in the example set were defined as hybrid macros.)

(3.9) Macros with special keys

You can use so-called 'escapes', meaning a combination of '\\' and a regular key to emulate some special keys in your macros:

\\	the backslash itself. Prevents it from being interpreted as the beginning of an escape sequence.
\e	equals the 'ESC' key.
\s	equals the 'SPACE' key. You can also just type in regular spaces, which will be converted automatically.
\r or \n	RETURN/ENTER or LINEFEED. Makes no difference.
Example:	
:hi!\r:hi!\n	makes your character say 'hi!' two times.
)	clears the keyboard buffer (all previous key presses that still have to be processed will be forgotten).
^	Prefixed to any key this will lead to a CTRL + <thatkey> combination. For example a macro '^q' will exit the game.

Example:

```
:Hi all!\r
\e)*tf-
```

This macro writes 'Hi all!' to everyone.

This macro will press escape to leave any potential running input routine, clear the buffer, fire a shot at the closest enemy. You can hammer this macro madly while playing without fear of your client processing the key presses forever, locking you in a position till your last arrow has been shot, since each time you hit the macro, it will clear the keyboard buffer ('') symbol) from all previous entries.

The 'running input routine' means:

If you previously pressed 'q' to quaff a potion, the game will now ask you 'Which potion?' and wait for your input. If you now see an enemy approaching before you decide which potion to quaff, you would usually have to press ESC to leave the quaffing input and start firing arrows then. By integrating the ESC key into the macro ('\e') this step is done automatically.

I recommend to have all macros start with the '\e)' sequence.

Miscellaneous escape sequences:

\x??	Convert the hex code into an ASCII character. For example \x41 (hex 41, dec 65) will become the 65th character of the ASCII charset which is a capital 'A'.
\^	The caret '^' or 'accent circonflex'.
\b	stands for the BACKSPACE key.
\t	stands for the TABulator key.
\0?? or \1?? or \2?? or \3??	stands for an octal code. The code will be converted into an ASCII character similar to \x?? hex mode, so \101 becomes 'A'.
\w??	Waits (asynchronously) for ?? tenth seconds. (eg. 20 -> 2 s) Use this for macros which contain several commands in a row which depend on each others execution. You might have to adjust the delay to your personal latency, depending on your internet connection and speed at which your character acts. NOTE: You must always specify TWO digits. For example if you want to wait for 200 ms, you need to enter "\w02" and NOT "\w2"! Setting a too high delay is actually not necessarily bad: For the most common use cases, wielding/taking off/swapping items or polymorphing yourself, the server will actually send an internal confirmation to the client when that action has finished processing and the client will then exit the \w delay early, so you're not losing any time that way. So if you have a network connection that suffers of continuous lag spikes it might even be an advantage to crank up the \w times. Actually you should just switch your ISP though.

(3.9a) Creating a chat macro for your party

Using public chat for party coordination can prove annoying to other players and as well confusing to your fellow party members since it's sometimes hard to read if people are chatting vividly.

On the other hand, entering your chat lines in this format

<Party name>:<Text>

all the time can get annoying since you have to repeat the party name over and over, although you can use just the first four letters or so as abbreviation.

There are three different ways to easily talk to your party.

1.) use the party wildcard '!'.
Simply start your chatline like this !:blabla..., using the '!' in place of the party name. The text will be sent to your current party (if any).

2.) Hit ':' key to enter chat, now press TAB to switch to party chat mode.

3.) Create a macro to chat with a specific party, so you can write a party-message by hitting a single key, party-chatting becomes as easy as hitting ':' for normal chat.

Enter the macro menu ('%'), enter a new action ('a'), enter the macro according to your party name. For example, if your party is called 'Scarlet Knights', enter this string:

:Scarlet:

hit the Enter key to accept it, create a command macro ('c'), choose a key you wish to use for party chat from now on, and save your macro ('s') to a file which is loaded automatically, like '<Your charname>.prf', for example Kinkan.prf.

Using longer or shorter (at least 4 letters) strings works too of course, as long as there isn't a party of similar name which could get confused with yours.

The best way in my opinion is to combine the two ways and to set up a macro which types :: for you on a single key press automatically:

Enter the macro menu ('%'), enter a new action ('a'), enter the macro:

:::

hit the Enter key to accept it, create a command macro ('c'), choose a key you wish to use for party chat from now on, and save your macro ('s') to a file which is loaded automatically, like '<Your charname>.prf', for example Kinkan.prf. This way, no matter what your party is called, you will always be able to chat to it by pressing a single key.

(3.9b) Alternative macros: Calling objects by their name

An alternative way to utilize macros is to not rely on item inscriptions, but instead call the target object directly by its name!

This can either be an item name, as it appears in your inventory, or a spell name if you want your macro to cast a spell.

The clue is that when you are asked "Aim which wand?", "Read which scroll?", "Cast from which book?" etc. you can also press '@' key to directly type in a name.

Note: In the special case of books, you will then be able to type in a spell name instead of a book name, and the game will search your books for that spell automatically.

So, instead of inscribing your potions of Healing '@q1' and having a macro '\e)q1' you could also just have a macro '\e)q@Healing\r'.

Or, instead of inscribing a Beginner Cantrips book '@m1' and macroing the spell Manathrust with '\e)*tm@11\r9a-' you could also just make a macro '\e)*tm@11\r@Manathrust\r-' without the need to inscribe your book.

In fact you could make a macro '\e)*tm@Cast a spell\r@Manathrust\r-'.

Another example: '\e)m@11\r@Phase Door\r'.

IMPORTANT: Keep in mind that call-by-name is actually case-sensitive!
(So in the example above, 'Manathrust' would not work.)

Additional details:

The text you provide for matching is treated as a partial text (sub-string) that must occur anywhere in an inventory slot text. Only those inventory slots are tested for this, which actually contain an item of fitting base type (tval) for the action that is being executed.

Example: You make a macro `z@Gold-Pl\r` -this will be processed as follows:
The command is 'z' to zap a rod. So only inventory slots that contain rods will be looked at, the rest is ignored.
Now all inventory slots that contain rods will be tested for whether they contain the text piece 'Gold-Pl' somewhere.
So if you carry any Gold-Plated rods in your inventory they will be zapped.

Note that since it's really just all about partial-text-matching, you could inscribe some other rods 'Gold-Pl' so the text matching would succeed, although they aren't 'real' Gold-Plated rods. (!)

(3.10) Experience, level-ups and skill points

By killing monsters your character gains experience. In general, harder monsters on deeper dungeon levels give more experience than easy kills.

If your character accumulates a certain amount of experience, it will gain a 'level-up', meaning that you become noticeably more powerful than you were until now.

Each character level requires your character to accumulate more experience than was needed for the level before, up to millions of experience points! All characters start the game at level 1. At level 50 they are supposed to fight the bad boss of the game, Morgoth, Lord of Darkness.

Depending on race and class, characters need to kill a different amount of monsters in order to reach the next level. Yeeks get experience fastest, while Maiar are slowest. (See (6.4) and (6.5).)

The exact amounts you need are shown in the subsequent paragraph (3.10a).

Each time your character gains a new level, it also gains 5 skill points that you can distribute on your character's skills, press 'G' to invoke the skill chart where you can raise skills of your choice. Do this at a safe place, so your character won't be attacked and killed while you are looking at the skill chart. The different skills are described in (6.2). Which skills your character may specialize in depends on his class, and sometimes also on his race; skills that are not available to your character's class are greyed out and cannot be raised.

On the skill chart you can press 'Up'/'Down' keys to select a skill and 'Right' key to invest one of your spare skill points into it. Choices cannot be undone, so be careful here.

For details about skill point distribution and the different skills see (6.2).

Hanging out on easy dungeon levels compared to your character level (for example a high level 50 character on an (to him) easy dungeon level like 60) may result in diminishing returns of experience points for killed monsters.

On the other hand, killing monsters of higher level than the player's level will give bonus experience.

Experience is shared automatically in 'parties', see (6.9).

Note that if your experience is drained (it will be displayed in yellow instead of in light green to indicate that it is drained), your maximum experience ie the amount you used to have before getting drained still profits by 10% of any experience you gain, so it is not completely wasted if you don't have a potion of restore life levels at hand, or some other means to restore your experience back to normal.

Recommended minimum depths for optimal experience gain

These are only minimum recommended depths above which your experience gain will - depending on your character level - suffer quite a severe reduction. Your character might not always be strong enough to survive on these depths. In that case, despite the experience penalty, you should consider moving to easier dungeon levels anyway until you found decent items and maxed out your vital stats (constitution, etc).

Note: Your depth display in the bottom right corner of the main window will indicate the appropriateness of your current depth in relation to your character level by its colour:

- If you're on a far easier depth, it'll be dark grey, indicating that you cannot expect to gain experience here.
- If you're on a slightly easier depth, it'll turn yellow, to tell you that you're getting closer to the depth required for normal experience gain, but there is still a penalty.
- On the minimum required depth for normal experience gain, or deeper, it's plain white.

(On a side note, while Word of Recall is pending, your depth indicator will actually turn orange, since it's also used as a Word of Recall indicator.)

Here is a list of this relation between character level and the minimum dungeon level required for normal, non-penalised experience gain, showing some steps:

Character level	Dungeon level
1..19	decent exp is gained everywhere
20	15
23	17
25	18
28	22
30	25
35	30
38	36
40	40
41	43
42	46
43	50
44	54
45	59
46	65
47	72
48	81
49	92
----- 50	100 -----
55	110
60	120
/ 65	130 \
66	134
70	150
74	166
\ 75	170 /
80	175
85	180
90	185
95	190
98	193
99	no exp gained

If you are below the optimum depth, your experience gain will decrease. The experience gained will be multiplied by $2 / (2 + \text{leveldifference})$. So for 1 level missing to optimum depth you would get $2 / (2 + 1) = 67\%$ of the optimum experience, at 2 levels difference you'd get 50%, 40% at 3, etc. At level 64 and higher, no dungeon except for the Nether Realm (see (4.5c)) will be deep enough to deliver optimal experience and your experience gain after attaining level 66 will sharply decrease outside of the Nether Realm. The Nether Realm is by far the deepest dungeon in the game and allows players of very high character levels to accumulate excellent experience.

These depth restrictions regarding experience gain are applied to all dungeons except in Ironman Deep Dive Challenge and Halls of Mandos (which is Ironman).

(3.10a) Experience point table

This table shows how many experience points a character needs to attain each character level. Keep in mind that depending on choice of race and class characters main earn experience at a faster or slower rate than others.

A character who gets his experience drained below zero will die. Ghosts (dead players) continuously lose experience points, aka they are fading. If they fall

below zero experience points they die permanently.

At level 50, characters may still accumulate experience points until 1 point below the experience needed for level 51. To eventually advance further they will need to defeat the game boss, Morgoth, the Lord of Darkness (see (1.3) and subsequent subparagraphs for details).

Since characters receive a royal title on defeating Morgoth, the level range past level 50 are often referred to as "post-king levels", while the life time of a character during levels 1 to 50 is often referred to as "pre-king" accordingly.

The highest possible level is 99. Characters of level 99 are impervious to any type of life force (aka experience) draining attacks or effects.

In general, the amount of experience points required to advance from current to next character level tends to increase with each further level gained.

Occasionally, the subsequent level might actually require the same gain of experience points than the previous one, but it will never require less.

Lev.	Experience	Lev.	Experience	Lev.	Experience	Lev.	Experience
1	0	26	17500	51	7000000	76	147000000
2	10	27	25000	52	8200000	77	162000000
3	25	28	35000	53	9400000	78	178000000
4	45	29	50000	54	10800000	79	195000000
5	70	30	75000	55	12600000	80	213000000
6	100	31	100000	56	14600000	81	233000000
7	140	32	150000	57	16800000	82	255000000
8	200	33	200000	58	19200000	83	279000000
9	280	34	275000	59	21800000	84	305000000
10	380	35	350000	60	24600000	85	333000000
11	500	36	450000	61	28000000	86	363000000
12	650	37	550000	62	31500000	87	395000000
13	850	38	700000	63	35500000	88	429000000
14	1100	39	850000	64	40000000	89	465000000
15	1400	40	1050000	65	45000000	90	503000000
16	1800	41	1300000	66	50500000	91	544000000
17	2300	42	1550000	67	56500000	92	588000000
18	2900	43	1850000	68	63000000	93	635000000
19	3600	44	2150000	69	70000000	94	685000000
20	4400	45	2500000	70	78000000	95	738000000
21	5400	46	2900000	71	87000000	96	796000000
22	6800	47	3400000	72	97000000	97	859000000
23	8400	48	4000000	73	108000000	98	927000000
24	10200	49	4800000	74	120000000	99	999000000
25	12500	50	5800000	75	133000000	-	

(3.11) Death, ghosts and looting

Death

If a player dies, an automatic chardump is generated in /lib/user called '`<charname>-death.txt`' (see (8.2)) which you can view with any text editor. Also, a screenshot is made automatically, displaying your situation, saved to '`<charname>-death-screenshot.xhtml`'.
(You can view xhtml files in most webbrowsers.)

Normal/everlasting characters will turn into ghosts if they die. When you become a ghost, your title will change to 'Ghost' until you get revived. Depending on the server configuration, ghosts of a 'normal mode' player can usually be resurrected only 2 times, so a normal player has 3 lives before permanently biting it.

Unworldly/hellish characters don't have a ghost and are completely destroyed if they die.

Everlasting characters may also use the 'Instant Resurrection' feature offered by town temples, see (4.5a), which will avoid turning into a ghost.

If a player ultimately dies on a dungeon or tower floor, ie he didn't turn into a resurrectable ghost but got completely erased, then that particular floor he "perma-died" (also termed "ghost-died") on will remain static for a while, instead of being regenerated.

This allows other players to go down there later and retrieve his items or money, however, whatever killed him/her will probably also still be down there!

The time a level stays static is usually 2 minutes * dungeonlevel.

Example: A player dies on -300 ft in The Orc Cave dungeon.

In The Orc Cave, the first floor at -50ft is already like -500ft ie level 10 (compare (4.5)). The player died 5 floors deeper at -300 so we have to add 5 more floors to 10, so the player died at dungeon level 15 in fact. 2 minutes times 15 = 30 minutes time for others to go there and pickup his loot until the level randomly changes again.

Levels below 9 (eg for Barrow-Downs less deep than -450ft) are usually exempt from remaining static and will regenerate normally, meaning the loot is lost after a couple of seconds.

Sauron's floor (the bottom of Mount Doom) is special and will only stay static for 60 minutes to avoid possibly blocking other players for a long time who want to try and defeat him.

Notes: If a player enters a static-by-death floor, the floor timer will be reset and start counting down the full duration again, prolonging its staticness. This timer-reset happens the moment a player enters that floor. How long he stays or when he leaves again has no effect.

The same timing that applies for static-by-death floors is also valid for static-by-save&exit floors, ie floors where a player logged out instead of doing that in town.

So if you logged out because your character was stuck, make sure you don't log on too early or you will reset the timer as mentioned above.

What happens to your loot

If you die, all of your items are dropped to the floor at the place of your death. Some items from your inventory or even an item from your equipment might get lost, but most of it should be waiting for you to pick it up again after someone came and revived you.

Note however that if you float up or down with your ghost while noone stays on the level to keep it, the level will usually immediately change and be lost and all your items with it!

(Only a ghost's death or death of a character which has only 1 life will turn a floor static as described further above.)

If you stood in a place where there is no room for your items to drop, for example inside a dense forest (green tree fields) or mountain regions (brown ^ fields) then your items will be scattered randomly over the whole level.

Last but not least, non-validated players and characters below level 3 don't drop their items on death, their loot will vanish forever. (The level depends on server settings, so check them via ~d to verify.)

Ghosts

You can continue playing as a ghost, getting a slight experience penalty, but that's not recommended. Instead, you should go for resurrection! Ghosts also do not share experience with party members on the same floor.

Ghosts can float up and down freely (just hit '<' or '>' key as if you take a staircase), so they can quickly float out of the dungeon without having to search for staircases. However, on some servers, a ghost cannot float down to very deep dungeon levels which he hadn't visited yet when he was still alive. So 'Ghost-Diving' (means: simply continuing playing as a ghost) is somewhat limited there.

That will bring you back to life at the cost of experience (35% usually).

There are 3 ways to be revived:

- the ghost can visit a temple (green '4' in town). The temple priest will also give him some money. The temple priest will turn the ghost away without resurrecting it, if the town isn't the last one visited by the player when he was still alive. ('The temple priest turns you away')

- another living player reads a 'Scroll of Life' when standing directly next to a ghost.

- another living player speaks a prayer of 'resurrection' when standing

directly next to a ghost. The higher the resurrection spell level was, the less experience will be lost. The ghost will return to the world of living under the cost of a lot of experience but at least the player can resume playing. If the ghost dies, the character will finally be erased permanently, watch out!

Ghosts slowly lose experience, if they go below 0 they will fade and the player will be erased completely.

Ghosts have some special abilities, these are

- they can see invisible creatures
- life force can hardly be drained from them
- they cannot be paralyzed
- they spot warm-blooded creatures easily
- they resist darkness effects, poison, cold, blindness, fear and confusion
- they cannot be cut since they don't bleed
- they resist insanity attacks
- they can pass solid walls and mountains
- they can levitate
- they cannot use items
- they cannot carry items except for the Book Of The Dead.

Ghosts can access undead powers with 'U' (currently not available, sorry). Those powers drain your experience. If you use them too often and run out of experience you will fade away (your character is erased then).

Getting help

Don't hesitate to ask other players online for help. You can press '@' to see who is currently logged on. To try and get the attention of someone who seems to be afk, you can try the /page command. It will make his game client beep three times.

Write in normal chat (so everyone can read it) that you need help, the dungeon you are in, and the depth you are on, eg: "Help! I died in Mordor -50 ft!" Make sure your ghost is in a safe spot, preferably within walls, so most monsters will be unable to attack you. Avoid moving around until the player you called for a rescue confirms that he has cleared out the monsters and tells you where you should move next.

(4) The world

=====

(4.1) Running, picking up items, fighting

To move around, use the number pad keys 1,2,3; 4,6; 7,8,9.

You can also use the arrow keys to move, but the numpad is better since it allows you to move diagonally too, which is very important.

If no monsters are within your line of sight, or those which are are soundly asleep, you are able to "run".

This feature was introduced to let you quickly cross empty areas, while it will cease to work as long as you fight monsters. To run, press SHIFT+<direction> or type '.' followed by a direction. Running using SHIFT+<direction> will only work if Numlock is turned off. Numlock is the key labeled 'Num' above the number key pad on the right side of your keyboard. Usually a green lamp will indicate whether Numlock is on or off.

An exception is the town of Bree, where you are always able to run, even if enemies are nearby.

If you want to pick up an item from the floor, step on that field and press 'g' (or press '5' on the numpad, while NUMLOCK must be on). For more information about finding, identifying and selling items, see (5.7). However, note that the keys can vary depending on your system configuration.

You can attack a monster with your equipped melee weapon by simply moving on the monster's field, ie 'bumping' into the monster.

A much better choice however, is to either just stand still and let the monster approach you, or -if the monster is asleep- just move next to the monster instead of bumping into it. In both situations, as soon as there is a monster directly next to you, you will automatically attack it!

This is an important feature, called "auto-retaliation", see (4.1a) below!

If you want to use ranged attacks then you have several choices:

- a) casting a magical spell ('m')
- b) throwing an item at a monster (or player) ('v')
- c) firing your equipped ranged weapon (sling, bow, crossbow) ('f')
- d) zapping a magical rod or aiming with a magical wand ('z', 'a')

For most types of ranged attacks you'll need to designate a target.

As soon as you finish casting an attack spell or if you press 'f' to fire an arrow/bolt/pebble/shot the game will ask you for a target or direction. You can now either press one of the 8 direction keys to fire into that direction, or you press the asterisk '*' followed by a 't' to designate the closest enemy as your target, which usually is what you want. Since version 4.4.6 the game also supports '-' to fire at a previously set target if it still exists, or cancel the action; 4.4.6b further added the '+' key; see (3.7d) for details about targetting.

To learn how to create a macro instead of typing all these letters every time you want to launch a ranged attack, look at '(3.7) Creating macros for ranged attacks', or -much simpler- at '(3.7c) The macro wizard'.

(4.1a) Auto-retaliation

If you stand still and an enemy is on an adjacent grid (directly next to you, no space between you and the enemy) then your character will automatically attack it with the equipped melee weapon.

Instead of melee attacks, you can also configure the auto-retaliator to use other items. To do so, you use '@O...' (the letter 'O', not the number zero!) item inscriptions:

Note: To inscribe an item press '{' key, to uninscribe press '}'.

Note: You cannot use any sort of teleportation or recall for auto-retaliation.

Weapons:

@Ox Don't auto-retaliate with it.
 It's recommended for spell-casters who just wear a weapon to profit from its magical abilities to always inscribe it @Ox so it won't accidentally get destroyed when fighting a Nazgul and the auto-retaliator won't take over.

Ranged weapons:

@O Auto-retaliate with it (shooting ammo).
 (Note: @O can either be on your ammunition or on the bow.)

Magic devices:

@O Auto-retaliate with it. (Wands, staves, rods.)
 Note that you cannot use self-relocation magic such as teleport or word of recall for auto-retaliation.

Spellbooks:

@Oc You will auto-retaliate by casting the spell 'c)' from this book (or any other spell, change the inscription accordingly).
 IMPORTANT: If you cannot cast spells from the book or you inscribe an unsuitable item, auto-retaliation will be disabled completely!
 (If 'c' is omitted, the first spell will be chosen.)
 Note that you cannot use self-relocation spells such as phase door, teleport or word of recall for auto-retaliation.

Runes:

@Oaa Auto-retaliate with the inscribed rune. The format is modifier then type. To retaliate with a combination of runes, use the combined rune. 'A' to activate runes for combining. Selecting a non-damaging runespell will disable auto-retaliation.
 Note that you cannot use self-relocation magic such as phase door, teleport or word of recall for auto-retaliation.

Mimic powers:

/ar tg Use the /autoreset or for short /ar command to set these up, compare (0.2b). Usage (t is optional for 'town-only'):
 /ar [t]<power>
 Note that you cannot use self-relocation spells such as blink or teleport for auto-retaliation.

If you want an auto-retaliation-enabling inscription to only work while you are

around a town, add a 't' after the 'O', examples: '@Ot', '@Otb'.

If you want to fall back on melee-autoretaliation in case you are out of mana, use 'Q' symbol instead of 'O'. Examples: '@Qt', '@Qtb'. This is useful for classes that may use attack spells yet can perform decently in close combat, such as paladin or mindcrafter.

(4.2) Level and owner of items

If you press 'l' to look at an unknown item that lies on the floor, you'll see something like this:

You see a Long Sword {?} (2d5)

The '{?}' indicates that this item has not yet been 'identified'. That means we don't know yet if it has certain magic abilities or if it's even cursed. We just know what we can see with our very eyes, that it is undoubtedly some Long Sword, and all Long Swords do a base damage of 2d5. For more information about finding, identifying and selling items, see (5.7). If you pick it up it will be displayed in your inventory like this:

e) a Long Sword {+,?} (2d5)

Note the additional '+' symbol. It means that you're now the 'owner' of that item because you were the first one to pick it up. Now you want to find out if the sword has any magic abilities. So you read a Scroll Of Identify (or a Staff of Perception for example). The sword now looks like this:

e) a Long Sword {+,6} (2d5) (+1,+5)

Now we know all about it. It's a magical Long Sword (magical because its magical to-hit and to-dam boni are not 0,0 but 1,5. That means it's an enchanted Long Sword that magically adds +1 to your hit chance and +5 to the damage, doing (2d5)+5 damage per hit) that requires its wielder to be at least level 6 in order to use it.

-Now if you're the owner of the sword then you are able to use it even if your level is lower than 6 !

-If you give this sword to someone else who is level 4 that person won't be able to use it because he's not the owner.

-If you give the sword to someone who is level 6 or higher, he will become the new owner! Now you're unable to use the sword if you're level 5 and he gives it back to you.

-To the owner an item has the '+' sign displayed in its name. Every other player who looks at the item sees the owner's name instead. Example: If you drop the sword to the ground and 'l'ook at it, you'll still see this:

e) a Long Sword {+,6} (2d5) (+1,+5)

but if someone else looks at it, assuming your name is 'Mithrandir', that person will instead read:

e) a Long Sword {Mithrandir,6} (2d5) (+1,+5)

-Last but not least a nasty scenario:

Your character (named 'Mithrandir', level 20) dies and loses his Bluesteel Blade {+,20}. Now you're a ghost and decide to ask a fellow player (named 'Mugash', level 30) if he can defeat the monsters that killed you and bring your items to town.

He agrees, you float up to town (remember that ghosts can simply float up and down anytime by pressing < and >) and revive in the temple (green '4'). If you revive, you'll always lose a bunch of experience. So your level is now 18 instead of formerly 20.

The level 30 player kills all monsters and picks up your stuff. Since your valuable Bluesteel Blade requires level 20 the level 30 player becomes its new owner because he's not lower than 20. He arrives in town and drops the sword for you.

You pick it up, and whooops it's a Bluesteel Blade {Mugash,20} and you're

level 18. You can't wield it anymore! So the right choice would've been to ask Mugash if he can buy a 'Scroll of Life' and revive you in the dungeon after he killed off all mobs, to avoid him touching your items and becoming the owner.

(4.3) Dungeon and tower types

To enter a dungeon, you look for the staircase symbol '>', step on it and press the '>' key to enter. Same for entering towers, except their staircase goes upwards instead of downwards, and hence is a '<' symbol instead of '>'.

In Bree, there is often a so-called Training Tower, which is represented by a dark green '<'. Enter it by pressing the '<' key. The training tower allows you to 'die' without suffering major consequences (except for a slight loss in experience and gold), and is easier in general. An experience penalty might be applied for killing monsters in the tower (usually 50%). You might ask other players in game (use ':' to chat) where/if there is a newbie tower (also called 'Training Tower'), or you might search for it yourself. It's usually in Bree, to the lower right of the town centre.

In general, when you take a staircase or use Word of Recall, your character will temporarily get a high Armour bonus (+100) and a chance to deflect enemy attacks and to reduce their damage, for a very short duration. This is an extra protection (called 'stair GoI', compare (0.4)) to help surviving nasty surprises when entering a new dungeon level. Keep your scrolls of teleportation ready anyway!

While in a town, you can invoke a map that shows the staircases upwards and downwards by pressing SHIFT+'M' (ie capital M). If you leave a town and explore the wilderness, M will bring up a map showing you towns and areas that you have explored so far. If you are in a dungeon, M will bring up a minimap of your dungeon level instead.

If you want to look at the world map while in town or in a dungeon, press '~' key and choose "Wilderness map".

Before you enter a dungeon, make sure that you have equipped a light source! Note the bright dots around you, these are lightened fields within the radius of your light source. To look around your current dungeon/tower level or town, press 'L' and use direction keys to move your view panel. ESC key bring you back to normal view mode.

The wilderness actually bears many interesting dungeons apart from the usual well known town dungeons.

When you enter the dungeon 'Barrow-Downs' in the starting town Bree, you will note in the main window instead of "Bree" your actual depth is displayed, telling you on which dungeon level you are. Each dungeon level is 50 feet deeper.

Monsters have approximately the same level as the dungeon level they appear on. You should try to figure out how deep you can go without dying. The dungeon depth I can recommend is between 1/3 (if you are _very_ weak) of your own character level and 3/4 of your character level. You can also go deeper, in case you want to try diving quickly. On 750 ft you can often find hounds (their symbol is a 'Z' for 'Zephyrs'). These don't have many hit points but give a lot of experience, making them a valued target for divers.

For a list of dungeons and towers, see (4.5).

Dungeon types

There are different types of dungeons, indicated by different staircase colours (also visible on the world map):

-Normal dungeons. The main dungeons below the five cities Bree, Minas Anor, Gondolin, Lothlorien and Khazad-dum are such regular dungeons. Normal dungeons/towers are marked by a white < or > symbol.

-NO_RECALL_INT0. You may not recall into this dungeon/tower. You can use recall to get out of it though. Probability travel works towards the surface but not towards the dungeon bottom/tower top. To Telekinesis the same

restrictions apply as for NO_RECALL. Ghosts may float freely.
Staircases are yellow.

-NO_UP. These dungeons won't allow you to go upwards, similar to ironman, just without the penalty of permanent ghost-death. You are allowed to use Word of Recall as well! Ghosts of dead players can float upwards.
No-up dungeons/towers are marked by an orange < or > symbol.

-NO_RECALL. These dungeons don't allow you to use Word of Recall nor probability travel to change the level. The staircases are the only way. Sending items via telekinesis to a player who is currently in a no-recall dungeon/tower will only work if both players are on the same dungeon floor. Ghosts of dead players can still float up/down.
No-recall dungeons/towers are marked by a red < or > symbol.

-FORCE_DOWN. Same as NO_UP, but you can only recall at the bottom of the dungeon, similar to ironman (except for the no-ghost death penalty).
Force-down dungeons/towers are marked by a light red < or > symbol.

-Hellish. Players suffer no-ghost deaths inside hellish dungeons. Even if they're everlasting, meaning that if you die in such a dungeon or tower you won't turn into a ghost either but get destroyed completely. Hellish dungeons/towers are marked by a fire-like flickering < or > symbol (red/yellow).

-Ironman. Same as hellish. Also:
Ironman dungeons or towers won't allow you to recall or to use staircases that lead upwards or probability travel backwards! Sending items via telekinesis to a player who is currently in an ironman dungeon/tower will only work if both players are on the same dungeon floor. To leave an ironman dungeon/tower you'll have to get to it's bottom or top respectively. There might be possibilities to use Word of Recall even if you're not at bottom/top yet, depending on the server/dungeon type. In general you will recognize levels which allow recalling by a green message, saying "You don't sense a magic barrier here..." (compare (4.8)).
Ironman dungeons/towers are marked by a dark grey < or > symbol.

NOTE: In the case of Ironman-server settings, you can usually recall INTO town dungeons every $(n \cdot 1000) + 50$ ft, n starting at 0. Example: -50 ft, -1050 ft, -2050 ft, etc. Also, ALL dungeons will usually not allow recalling OUT until you reach a floor that is equivalent to at least dungeon level 20. Examples: At least -1000 ft in Barrow-Downs, at least -550 ft in The Orc Cave.
(See (8.6) for more information about Ironman settings.)

-NO_DEATH. The Training Tower in Bree has this flag. Players who die inside a no-death dungeon won't turn into a ghost if they 'die' but just be teleported back to town! They still lose about 20% experience (and gold) though.
No-death dungeons/towers are marked by a green < or > symbol.

-Unescapable dungeons. There is usually only one such dungeon and that is the 'Death Fate'. Its entrance is a dark-flickering staircase. You should avoid this dungeon at all costs since once you enter you can never get out. If it's indeed the 'Death Fate' one then it's only one floor in size, so you will just starve to death without anything interesting happening in there. (The 'Death Fate' dungeon is actually not an ironman dungeon.)

-Experimental dungeons. There might be an experimental dungeon available, which has special flags that are very unusual:
NO_TELE, NO_ESP, LIMIT_ESP, NO_SUMMON.
These can prevent teleportation, ESP, limit ESP vision to radius 10, prevent all kind of summoning (especially monsters summoning more monsters!). Such experimental dungeons have light umber coloured staircases (same colour as is used for maxed stats/abilities, ie light brown).
Experimental dungeons do not belong to the canon game and you enter on your own risk! (Well, you actually enter any dungeon at your own risk, so..)

If a dungeon has several of these flags, the latter ones will override the staircase colour. So a hellish NO_RECALL_INTRO dungeon has hellish-looking staircases.

Sometimes you might find ruins of old staircases that don't lead to any dungeon or tower. Those have no further functionality and are coloured grey (make sure you don't confuse them with an ironman dungeon accidentally).

If you're looking for a challenge dungeon regarding deep diving without recalling in between, you might want to check out 'The Halls of Mandos' or the 'Ironman Deep Dive Challenge' (see (4.13) for details).

Overview:

Dungeon type	Death?	No-ghost?	Recall	Staircase	Prob travel	+Exp
Normal	yes	(char)	yes	yes	yes	+ 0%
No death	no	no	yes	yes	yes	-50%
No recall	yes	(char)	no	yes	no	+10%
No rec down	yes	(char)	upwards only	yes	upwards	+ 5%
No up	yes	(char)	yes	downwards	downwards	+ 5%
Force down	yes	(char)	at bottom only	downwards	downwards	+10%
Ironman	yes	yes	at bottom only	downwards	no	+15%
Hellish	yes	yes	yes	yes	yes	+10%

(Note: Staircase directions - ie upwards/downwards - are inverted for towers.)

(4.3a) The jail

The jail is a dedicated house that does not allow imprisoned characters to escape until a timer runs out, after which they will be freed.

The jail was originally built for punishment of the following felonies - although depending on the server's configuration some might be disabled while others might get added:

-Swearing

Still the most common felony, it will usually only result in a pretty short time of imprisonment.

Foul language will be filtered by '*' characters to other players, except if they have turned the filter off in their clients (also see (3.3)).

It's possible that not all foul language might result in jailing, but most of it certainly will.

-Spamming the chat (aka 'talking too much')

Very rare to trigger, also results in a pretty short time of imprisonment.

-On server settings where players have to declare that they are ready for pvp, attacking a non-pvp player will result in a long time of imprisonment

Trying to shoot someone who's on a safe grid will also result in a medium duration of imprisonment.

(These settings are not enabled on the main servers.)

If you commit multiple felonies, whether you are already in jail or not, the punishment adds up (except that it doesn't matter how many swear words occurred in one chat message).

There can be multiple jails. The player will be imprisoned in the one closest to him. Also, players will only get caught if they are getting close to a town. If you are far away from town, your punishment will be delayed until you move close to a town again, then you will be jailed "for old crimes" accordingly.

Note that jails (if the server has one) don't allow any sort of teleportation, nor will you turn into a ghost if you get killed there, instead you will get destroyed completely (basically same as if you were a no-ghost mode char).

A jail usually has an ironman tower or dungeon inside. It has no deeper meaning and is certainly not required or recommended to take. If you're up for a pretty hard extra challenge and take it, you'll be a free man or woman if you make it out alive, though.

(4.4) Terrain

Terrain features in the main window:

Town buildings-

Consisting of red or yellow '#' (roof) and white '#' (wall), these cannot be damaged or destroyed and some of them contain the basic town stores (numbers 1 to 9 marking the entrance) as well as special stores (+ sign marking the entrance). See (4.5) for details about stores.

Floor-

Dots '.' resemble empty floor. Green dots are grass, brown ones dirt, grey ones stone or ash. Note that the colour also depends on the season - in summer or autumn, some grass might appear as yellow, when it's been suffering in the heat. ;)
Red dots are lava, violet dots nether mist. These can be dangerous to cross!
See a bit below for more details.

Trees and bushes-

Thick trees are resembled by (mostly green, depending on the season) '#'. To pass them you need to either levitate over them or to be an Ent, shepherd of trees to whom they will slightly bow aside to make room, a yeeek, or a trained ranger or druid. Trees can also be burned up. Dead trees and bushes are '*' symbols.

Staircases-

'<' and '>' are staircases leading upwards or downwards into towers or dungeons. (Press the according key to walk the staircase. Whenever you take a staircase, you'll receive the 'stair GoI' buff, see (0.4) for details on that.)

Doors-

Light brown '+' are closed doors, ' ' are open or broken doors.
(Use 'o' to open, 'c' to close and 'B'/'F' to bash/force doors.)

Void Jumpgates-

Violet '+' are void jumpgates that teleport you elsewhere.
Press '>' key to use them.

Stores-

Store entrances are represented by coloured numbers '1'..'7', '9' and '+'.
See (4.5) for details about stores.

Rubble-

':' is rubble. Characters with high enough archery skill who use a sling-type weapon can stand next to rubble and use their 'Craft Ammunition' ability to create sling ammunition from it.

Dark Pits-

Dark grey '^' are pits that can only be crossed if you have feather falling or levitation ability. Bree is protected by pits around the outer tree wall. These pits cannot be disarmed (because they don't count as trap, as opposed to the actual 'chasm traps' and 'pit traps') or destroyed.

Walls-

White '#' are permanent walls which cannot be damaged or destroyed, or in some special places can be ice walls (which can be destroyed).
'#' and '%' of different grey tones are granite walls, magma intrusions, quartz veins and can be tunneled into and take damage from earthquakes.
Yellow '#' are sand walls, red/brown '#' are indestructible lava walls which may occur in some remote places..

Water-

On the world surface but also in some dungeons there's lots of water (blue '~' fields). It can be dangerous to cross it if you're not good at swimming or if you cannot levitate :) Further, nasty creatures are said to live in the seas. Ents cannot drown in water since they completely consist of wood.

Mountain chains-

Brown '^' fields are massive and very high mountains. To travel these you need a climbing set or another item that gives you climbing abilities. Dwarves can intrinsically travel through mountains. In dungeons '^' resemble solid structures of massive rock that reach nearly up to the top of the huge dungeon levels, climbing these is as hard as climbing mountains above ground.
White '^' are extremely high mountain chains that cannot be climbed.

Lava-

Red dots '.' are shallow lava, which will do heat damage to your character in regular intervals.
Red/orange/yellow '~' is deep lava, which deals a lot of heat damage.
The fire damage lava inflicts might also destroy items in your inventory in case you're not immune to fire or at least double-resist fire - potions of resist heat are a cheap way to attain double resistance for a short time.
(See (5.6) for more information about resistances, double resistance and (5.10) for details about item destruction by elemental effects.)

Fountains-

'_' are fountains. To drink from them use /sip command or press the '_' key. See (0.2) for more details.

Nether mist-

Violet dots designate nether mist. However, this usually only occurs in the Nether Realm, a place which is exclusively accessible to winners. Nether mist deals nether damage periodically, similar to how lava deals fire damage.

Terrain features on the world map:

```
-----
Towns          yellow 'T'
Grassland       green '.'
Forest          green '*'
Dense forests  dark grey '**'      - danger of getting stuck (*)
Swamps          violet '%'
Lakes           are displayed as blue '~' fields on the world map.
Rivers          light blue '~'
Coast areas     yellow ','
Oceans          blue '%' fields.    - might be hard to traverse (***)
Wasteland       umber (bronze) '.'
Mountains       dark grey '^'      - danger of getting stuck (**)
Volcanos        red '^'            - danger of getting stuck (**)
Deserts         yellolw '.'
Icy waste       white '.'
```

- (*) You could get stuck in the trees if you enter such a sector; a digging tool or just using a sword or axe will allow you to hack down the trees relatively easily though to get you out of there. Note that levitation also allows you to pass trees easily.
- (**) You might get stuck in there if you enter such a sector without being able to climb. Especially nasty in case of volcanos, since the fiery ground might burn your items. Use Word of Recall to get out of here.
- (***) If your backpack is too heavy for you to swim then it'll be a big hassle to try and cross deep water without drowning. In that case just get an item that allows you to levitate and you'll be fine. (See (4.15) for details about swimming).

(4.5) Towns, shops, the dungeons and dungeon bosses

To view a list of all towns and dungeons you have discovered, press ~ 8 . Dungeons which have a dedicated final boss will indicate at the end of the line whether you have "conquered" them yet (aka slain that boss) or not.

If you create a new character, it will start in 'Bree', a town located at position 32,32 on the world map (same position on all servers!).

The world map, ranging from 0,0 (bottom left corner) to 63,63 (top right corner), bears several other towns that you can find and explore. These towns often contain different shops (some are said to offer *Identify* service or even a cure to Black Breath) and harder dungeons.

However, they might also be a very dangerous place to stay, compared to Bree. In general you can say the harder the local dungeon entrance of a town the more dangerous monsters can spawn within the town! Bree is the only town that contains just more or less harmless townsfolk. The worst are Khazad-dum and Lothlorien, if you go there be very cautious. Monsters that appear here might look like harmless novice paladins or snagas but are in fact of a higher level and more powerful. Also, dangerous monsters can spawn in those towns: While Gondolin and Minas Anor can already have nasty Mindcrafters, Khazad-Dum and Lothlorien may also spawn the infamous Grand Swordsmasters which have killed many characters that went AFK outside the inns. However, it has been observed that people who figured out how to climb high mountains travelled to Khazad-dum despite their low level for a strange reason >:-). Even if you decide to stay in Gondolin, which is relatively harmless, don't go afk for a longer time or even a snaga archer might kill you with his ranged attacks. Always a nasty surprise..

Despite the hazards of higher level towns, towns in general act as a safe zone,

preventing PK/PvP attacks (ie attacks done by a player against another player) and stop your character's food consumption, meaning that you cannot die by starvation while in town. Towns also put experience drain on hold, which is important for players wearing Nazgul Rings Of Power for example. Dungeon towns behave like normal towns in these regards.

(4.5a) Shops and their services

Each town has several shops, displayed as numbers 1..9 and some '+'. The 1..9 are standard shops, namely..

- | | | |
|---|---------------|---|
| 1 | General Store | Sells food, lanterns, ammunition, cloaks and shrooms. |
| 2 | Armoury | Offers various basic armour. Rarely excellent pieces. Also offers to repair damaged armour (which is cheaper than enchanting it). |
| 3 | Weapon Shop | Offers various basic weapons. Rarely excellent pieces. Also offers to repair damaged weapons (which is cheaper than enchanting it). |
| 4 | Temple | Player ghosts will be revived here, and receive some money. The temple also sells a selection of blunt weaponry, scrolls and potions. The temple priest will also attempt to cure, heal or feed you if you enter the temple in bad condition. |

Since 4.4.9 the temple also offers you to toggle 'Instant Resurrection', a new feature that is only available for everlasting players and will immediately resurrect a player at the temple when he dies, removing the need to wait for some other player to come and rescue him. In turn, the experience penalty will be 50% instead of the usual 35%. Insta-res also keeps all your items except for the usual chance to lose a few of them on death, which is the same as for normal deaths. However, the player will need to have enough cash to pay an instant resurrection fee when he dies, which is: $\text{Dungeonlevel} * \text{dungeonlevel} * 10 + 10$ gold pieces. The money is automatically deducted from the purse or the bank account as required. If the player does not have enough money in total then resurrection will fail and the player will remain a ghost in the dungeon as usual when not using instant resurrection. Instant resurrection does not work in no-ghost dungeons (ie ironman or hellish) and dungeon levels (ie floors where Morgoth is) or in the Nether Realm.

- | | | |
|---|--|---|
| 5 | Alchemist | Sells various scrolls and potions. |
| 6 | Magic Shop | Sells wands, staves, rings and amulets. |
| 7 | Black Market | Sells many different items, mostly very good ones. This shop is very expensive and buys for very little in return. Better not sell your items to this shop, as long as a regular store will pay you better. Some items cannot be sold elsewhere though. |
| 8 | The Inn | In Bree it's The Prancing Pony. Inside the inn, players are relatively safe from monsters. |
| 9 | Book Store | Sells books for istari, priests and all other (hybrid) magic users. Book stores in higher-level towns on average also tend to sell higher-level spells. |
| + | These are different everywhere. Some examples are mainly.. | |
| | Mayor's Office (in Bree) | Allows you to turn in deed parchments you won in tournaments or on other occasions for a reward. Also, you can receive an extermination order here (see (4.13) about those). Last but not least you can check out a list of noteworthy occurrences that may have happened lately. |

The Merchants Guild

An NPC run guild that offers two services, a bank account to deposit your money in so you won't lose it accidentally on a dungeon trip, and a mail service that allows you to send money or an item to other players. Several towns have a subsidiary, you can globally access your bank account and mail from any of those.

Rune Repository

Sells and buys runes used by Runemasters.

Casino Minas Anor has a casino. Go and try your luck!
 (There are various gambling opportunities, and also
 the ancient board game 'Go' which can be played on a
 9x9 board for a one-time fee on each difficulty level.
 Get your Go game records emailed to you via "/kifu".)
 For details about the gambling rules of the casino, see
 subsequent (4.5a2) paragraph.

Mass Identify Service Will identify all items you currently carry for a fee.
 See (5.7) for more information about identification.

Identify Service Will *identify* an item for a fee.
 See (5.7) for more information about ID, *ID*, shops!

Herbal Healing Service Will cure black breath for a high fee. (See (1.3a) for
 more information about Black Breath.)

Morph Restoration Service Restores your form to normal in case you were
 polymorphed (for example by a potion of Chauve-Souris).

Enchant Services These will enchant weapons, arrows, or armour you have
 equipped.
 For weapons, this will attempt to enchant a main-hand
 or off-hand (if dual-wielding) weapon, for armour this
 will look through all armour slots. When an eligible
 item is found, it will be enchanted.
 Cursed items, artifacts and items that cannot be
 enchanted are not eligible and will be skipped.

Only one item is enchanted at a time, so if you have
 three enchantable pieces of armour that aren't in
 perfect state, you'll have to take the enchant service
 three times.

The resulting enchantment bonus of the item is your
 character level divided by 5 and 5 added to that, with
 the result capped at a maximum of +20, therefore
 reached at level 75.
 At level 50 the enchantment would be $50/5 + 5 = 10 + 5$
 $= 15$, which is the maximum enchantment reachable by
 using *enchant* scrolls.
 Ammunition can never be enchanted above (+15,+15).

Note that enchant services will not break curses.

Mining Supply Store In the hazardous city of Khazad-Dum is a store that
 offers some goods found to be useful by the miners
 in the mountain depths.

Donate gold and pray to the gods (EXPERIMENTAL: allows to solo reking)
 This is a special option in The Mirror in Lothlorien
 which allows fallen kings and queens to get their fate
 changed by the gods: Their Morgoth kill will be undone
 so they may challenge him once more, to regain their
 royal title!
 (In game slang, this is called 'solo-rekinging'.)
 This service is useful if you do not have any team mate
 who still hasn't killed Morgoth yet, to kill Morgoth in
 a party together with him, which is the traditional way
 of obtaining a lost royal title again.

To gain the favour of the gods and have your fate
 changed you will need to donate at least 5 million gold
 pieces.
 In addition to this you can either donate another 5
 million or you can wait for about 2 weeks (real time,
 you don't even need to be logged on!) or you can
 gain about 5 million raw experience points or a mix of
 all these, up to your personal preference.
 'Raw' experience means that it's simply the amount of
 experience shown in the monster spoiler (~7) and the
 only other factors are the monster's clone state and
 you being on appropriate depth (grey depth indicator
 will prevent gain completely and a yellow one will
 reduce gain accordingly).

Your race and class which may usually diminish your experience gain (worst for Maiar) do NOT factor in, so the amount of monster slaying is exactly the same for everyone. However, YOU will need to kill the monster! Kills done by party members will not count for you. So even if your character is at the exp cap at level 50 and does not seem to gain any more experience, this 'raw experience' will still accumulate and count for obtaining the favour of the gods.

If you are sure that you have already donated at least 5 million gold pieces and are now working on killing monsters or alternatively just sitting it out, you can check back in The Mirror anytime without donating any more gold (just choose to donate 0 gold pieces) until it tells you in a bright green message that your fate has finally been changed.
("You feel your fate has been changed!")

The conversion rates are, as mentioned above:
1 minute of time passed = 250 Xp = 250 Au.
Some random examples to gain the gods' favour:
a) pay 10M straight.
b) pay 5M, wait for about 2 weeks.
c) pay 2M, wait for about a week, gain 2.5M raw exp, pay 3M more.
d) gain 4M raw exp, pay 6M gold.

..and various miscellaneous store services, of which some currently may not have an actual effect.

Price limits:

Shops that buy and sell items will have a price limit that they will pay for an item a player wants to sell. The limit varies from 50,000 to 300,000 Au depending on the shop owner. The shop owners change regularly, if a shop makes you a bad offer (the cap price) just wait for the owner to change or visit a different shop. Shops in different towns are run by different owners although they may use the same number '1'..'9' and '+' for their entrance symbols. If the item is worth more than 300,000 Au maybe you can find a fellow player who is wealthy and in urgent need of your items.

Item orders

The basic town stores also allow you to order specific basic items that they usually offer in their store template. These items will come without any hit/damage/ac enchantments or ego powers, but in their plain versions.

To order an item, enter a store that provides this option:

'o) Order an item'

Then specify number and name of the item, examples:

potion of restore strength

20 scrolls of identify

spell crystal of psionic blast

and you will be prompted with the price you'd have to pay upfront, then you can accept or decline. If you accept, the money will be deduced from your purse and the shopkeeper will let you know how long the delivery of your order will approximately take, in in-game time. So if it takes "about an hour" that will be much less in real world time for you to wait.

Note that for spells and runes you don't need to type out the full item name! Just typing the spell name or rune name will be sufficient.

Items that are very common in that store will cost about the same amount of money that you'd pay when buying them the regular way, while items that occur only very rarely in a shop can be much more expensive to order.

Ordering a pile of items instead of just one will prolong the delivery time. You can only have one order in process at any time. If you want to order a different item you will have to wait until your order is delivered and fetch it.

When you enter a shop where you had an order placed and the item has arrived then it will be automatically placed in your inventory. If you meanwhile purchase the same type of item in the shop's regular stock that will not affect

your delivery in any way.

The delivered item will carry an inscription containing the shop name.

It is possible that the item arrives earlier than expected, as part of the store's regular stock. In that case the shop owner will inform you and hand you out as many of those items as possible (if you have ordered a pile of them), that amount will then automatically be deducted from your outstanding order.

Shop scumming:

Shops regularly change their inventory on a random basis: Roughly every 33 seconds there is a chance that some items might get dropped and/or some new items might get added to the store inventory.

This "store maintenance" stacks up to 10 times while no player is actually visiting the store.

That means that shop-scumming can be done as fast as checking every ~33 seconds for best results if you don't mind the effort, and on the other hand allows for pretty relaxed scumming by checking about every 5 1/2 minutes.

Or anywhere between 33 seconds and 5 1/2 minutes, as you personally prefer.

See (5.7) for more information about ID, *ID* and shops!

(4.5a2) The casino

The casino is a very special 'store', located in Minas Anor and in the special dungeon towns in the Ironman Deep Dive Challenge at 2000 and 4000 ft.

It provides a variety of games that you can play for money.

Most of these are pure luck, but there's also the ancient board game of Go, which you can play on a 9x9 board.

Below you'll find the gambling rules, you can also view these in-game when entering the casino and pressing 'r' there:

```

/-----+
|               Tome-NET Gambling Rules               |
+-----/

```

Welcome to the TomeNET Casino!

Currently, two games 'In Between' and 'Craps' are available for playing.

('Spin the Wheel' and 'Dice Slots' are under construction.)

Some games playable among players are planned for the future (I hope).

For all the games, you can bet up to 1000*level AU per game, except for players below level 10 who can bet up to 100*level AU.

The game of Go has fixed bets for each stage that you cannot change.

=====

1. 'In Between'

Three 10-faced dice are used for this game. Two black, one red.

First, the dealer rolls the two black dice.

Then you roll the red die - you win if the roll is 'in between' the two black dice and you'll receive the payoff at odds of 3 to 1.

eg.

if two black dice are 4 and 7, and you rolled 6, you win.

if two black dice are 2 and 9, and you rolled 1, you lose.

if two black dice are 2 and 9, and you rolled 2, you lose.

=====

2. 'Craps'

Two 6-faced (cube) dice are used for this game.

You cast the two dice; if the sum of rolls is 7 or 11, you win at once.

if the sum is 2, 3 or 12, you lose at once(craps!).

If the sum isn't one of the numbers above, you cast them once more.
If the sum matches to the first sum, you win.
If the sum is 7, you lose.
In all the other cases, you reroll till you roll the first sum or 7.

If you win, you'll be paid at odds of 1 to 1.

eg.

[2, 3](5) {first roll}
[3, 3](6) {reroll - still not settled}
[4, 1](5) {you win}

[5, 6](11) {you win with the first roll}

3. 'Go challenge'

Two different short video tutorials on YouTube:

<http://youtu.be/qhBQasS5IRI>

<http://youtu.be/gECcsSeRcNo>

Nice read: <http://users.eniinternet.com/bradleyM/America.html>

On Android (free): Go Free or GOdroid, on iOS: Little Go or Igowin for example.

Western online Go servers (english language): www.gokgs.com, www.online-go.com.

You will play the ~3000 year old asian strategy game of Go, also often dubbed 'the divine game', on a 9x9 board against an opponent that gets picked for you based on your past results, for cold hard money!

You pay a wager only once on each of the 8 difficulty levels. You may then play for free until you manage to win on your current level. If you win you will be paid twice your bet and advance into the next difficulty level.

Progress: Two players take turns placing black and white stones on the board respectively. Those stones cannot be moved once placed, they can however be captured (explained below). There is no limit to the stone supply.
Black moves first (which is an advantage).

Goal (chinese rules):

Surround as much 'territory' as possible with your stones (territory just means an area of the board). Each grid you surround counts 1 point, and every stone you place also counts 1 point. The player who ends up with more territory wins.

(Note: Online Go servers and tournaments usually use japanese rules by default: Under those rules, your own stones don't count as points but in turn prisoners count as points. The result is almost always the same as under chinese rules! The reason the casino uses chinese rules is that japanese rules are more troubling for Go bots to handle.)

Capturing: A stone has up to four 'liberties', which means free board grids adjacent to it: North, south, east and west. If the opponent places a stone on the last liberty of your stone, it is removed from the board.

Friendly stones that are adjacent to each other horizontally or vertically (just not diagonally) count as 'connected' and share their liberties, forming chains of stones that can grow quite large and end up with a lot of liberties. A chain of stones is also captured accordingly if ALL of its shared liberties are occupied by opponent stones.

Note that stones on the edges of the board have less than 4 liberties.

Ko rule ('Eternity'): Repetition of a board position is forbidden. If you want to 'capture back' (common application of the Ko rule), you will have to play elsewhere first to change the board layout.

Pass: If a player wishes to skip his turn (usually pointless except at the end of the game) he may pass instead of playing a stone.

End of the game:

-A player may lose on time if his clock runs out before he made a move.

-A player may resign the game if he feels he's too far behind.

-If a player feels there are no more good moves left to play, he passes.

Now if both players pass consecutively then the game ends and the territory of each player on the board is counted to determine who wins.

(If white passes first, he gets +1 point added to his final score. This sort of makes up for black's advantage of playing the first move in the game.)

Examples on a 5x5 board (o = stone, . = free grid):
 WHITE stones are written as 'x' and BLACK stones as 'o'.

```
ooox.
o.ox.  The black group has only 1 liberty left (the '.' inside),
ooox.  if w plays on that '.' the whole black group is therefore captured.
xxxx.  The white group has 8 liberties on its outside so it's quite safe yet.
.....
```

```
.o..o  Due to having at least 'two eyes' (two _separated_ enclosed liberties)
..ooo  neither group can be captured since it would require two moves at once.
ooxxx  A group that has at least two eyes is therefore said to be 'alive'.
xxxx.  Since there is nothing left to do, both players will pass and the game
x.x..  ends. The score is: black 13 - white 12. Black wins by 1 point.
```

Strategy:

- Stones have a balance between securing territory (if they stand lower, ie on 3rd line) and radiating influence (if they stand higher, ie 4th line or more, which can't really happen well on small boards such as 9x9 though).
- Moves on the first line should be avoided in the beginning of the game, because they neither secure territory below them, nor do they have influence because they are much too far away from the centre.
- Typical opening moves on 9x9 are within the imaginary square C3,C7,G7,G3. Other moves, ie moves on the 1st or 2nd board lines, are too close to the edge to be good openers.
- Separate & Connect is an important principle:
 Cut stones of your opponent apart from each other if possible.
 Keep your own stones somewhat in connection, so they can support each other.
- Note that the Ko rule (see above) prevents you from immediately recapturing a single stone of your opponent, which just captured your own stone, since the previous board position would be repeated by that. So, play elsewhere first, then you may recapture.
- Usually Go is played on a 19x19 board, which allows for a huge amount of strategy. Smaller boards are used for non-serious games, 9x9 somewhat common, whereby the games become purely tactical and lack much of the 19x19 strategy.

You can use the /kifu command to have the game email you your Go game records!

Enjoy!

(4.5b) Towns & town dungeons

Here is a list of towns and their corresponding local dungeons:

NOTE: Minimum level requirements for entering are usually disabled in normal server settings, so you can enter any dungeon anytime, if you dare.

Town	Depth/Level of the town itself	Local dungeons	Depth/Level of the local dungeon	Required player level for entering
Bree	0 ft/ 0	The Training Tower	+50..+100/ 1..2	1
		Barrow-Downs	50..1750/ 1..35	1
Gondolin	1000 ft/ 20	Mordor	1700..3300/34..66	15
Minas Anor	2000 ft/ 40	The Paths of the Dead	2000..3500/40..70	20
Lothlorien	3000 ft/ 60	Angband	3350..6350/67..127	30
Khazad-dum	4000 ft/ 80	Angband	3350..6350/67..127	30

To enter a dungeon your character must have the displayed minimum level. Otherwise you'll get a message like this "Suddenly you're grasped by an uncontrollable fear".

The deeper you descend into the dungeons, the more the passing of time itself will be slowed down to make it easier to fight very fast monsters. By the time your character enters those depths, it should already have boosted speed so the slowdown won't bother you but come in handy. For example if you enter Mordor you will notice a slowdown to approx. 1/2 standard time.

See (4.14) for more information about the in-game time system.

Some advice regarding towns and town dungeons can be found at (7.6).

(4.5c) Dungeons

 This paragraph is about dungeons that don't belong to any town.
 For dungeons that belong to specific towns, see the paragraph 'Towns' above.

The staircase colour of a dungeon indicates the dungeon type, compare (4.3).

'Depth/Level' describe a dungeon's starting level and final level. Depth is actually just a different way for expressing a dungeon floor level, so they're redundant: Each dungeon level corresponds to 50 ft.

So for example Orc Cave starts at dungeon level 10 and ends at dungeon level 23 which means:

The first floor (ie -50 ft) in The Orc Cave is the same difficulty level as the tenth floor (ie -500 ft) in the Barrow-Downs dungeon (which starts at level 1). Since The Orc Cave goes from level 10 to level 23 that means it has 14 floors, so its final floor will be -700 ft which is of the same difficulty level as -1150 ft Barrow-Downs (ie level 23).

NOTE: Minimum level requirements for entering are usually disabled in normal server settings, so you can enter any dungeon anytime, if you dare.

Dungeon	Depth* / Level (*relative to Lv.1)	Min. required player level to enter(**)
Death Fate (***)	50.. 50/ 1..1	1
The Halls of Mandos (*****)	50..5000/ 1..100	1
The Orc Cave	500..1150/ 10..23	3
Mirkwood	550..1700/ 11..34	5
The Old Forest	650..1300/ 13..26	5
The Helcaraxe	1000..2050/ 20..41	10
The Sandworm Lair	1100..1500/ 22..30	12
The Heart of the Earth	1250..1850/ 25..37	10
The Maze	1250..1900/ 25..38	15
Cirith Ungol	1250..2550/ 25..51	10
The Land of Rhun	1300..2050/ 26..41	13
The Mines of Moria	1500..2500/ 30..50	15
The Small Water Cave	1600..1750/ 32..35	15
Submerged Ruins	1750..2550/ 35..51	15
The Illusory Castle	1750..2600/ 35..52	10
The Sacred Land of Mountains	2000..2250/ 40..45	20
Erebor	2500..3050/ 50..61	35
Dol Guldur	2850..3550/ 57..71	28
Mount Doom	4250..5000/ 85..99	38
The Cloud Planes	6500..7450/130..149	40 (****)
Nether Realm	8300..9800/166..196	40 (*****)

(**) Minimum level requirements are usually disabled, so you can actually enter any dungeon you like at any character level.

The official main server usually has one or several 'ironman' dungeons (see (4.8)), their entrances (stairs) waiting to be discovered by some bold explorers.

Such custom dungeons appear as 'Wilderness' in the "Recall depths and Towns" list, and usually have no minimum required character level to enter.

There may also be certain special dungeons, related to events or jails, that show up under according names in the list.

(***) Death Fate:

You cannot escape this dungeon, ever. Any character that enters it is fated to die to monsters (unlikely) or starvation (very likely).

(****) Cloud Planes details:

-To enter the Cloud Planes a player must carry the 'King'/'Queen' title, acquired by beating Morgoth, Lord of Darkness.

(*****) Nether Realm details:

-To enter the Nether Realm a player must carry the 'King'/'Queen' title, acquired by beating Morgoth, Lord of Darkness.

-Each floor in the Nether Realm gives a +2% bonus to experience from monster kills. So hunting at -350ft in there will give a +14% exp bonus. (This bonus is actually multiplied by the usual floor boni, instead of added. So you will get even much more exp when hunting on a floor with a lot of 'bad' special flags.)

To any floor experience boni that might occur, an additional 5% bonus is added

because the whole dungeon is flagged NO_RECALL_INT0, meaning it cannot be entered via Word of Recall (you may recall out of it though).
 -Note that the amount of experience is already very high even without this depth-bonus, since creatures in the Nether Realm are of a very high level.
 -Instant resurrection does not work in the Nether Realm.

(*****) Halls of Mandos details:

-Getting out of the Halls of Mandos will be complemented with an entry into 'Noteworthy Occurances' list.
 -Extermination orders in the Halls of Mandos will (same as for the IDDC) have its monster level depend on the floor level rather than on the player's level.
 -Also same as in IDDC, minimum floor depth vs character level regarding experience gain is not enforced: Normal experience is gained on any depth regardless of your character's level.
 -The Halls of Mandos are barred to any unique monsters!

(4.5c2) Example dungeon depth relations

 Here are some examples of relations of dungeon level difficulties.

This does not take into account the dungeon 'theme', ie types of walls, floors and other terrain and preferred/disallowed monster types.
 It is purely about the depth, ie the dungeon floor level, and therefore the basic average monster level encountered on those dungeon floors.
 (The average level of monsters you can expect there is always the same as the level of the dungeon floor. With a few random exceptions sometimes.)

-The Orc Cave -50ft is same depth as Barrow-Downs -500ft, aka dungeon level 10.
 -Mordor -50ft is dungeon level 34, while Barrow-Down's deepest floor at -1750ft is actually dungeon level 35 (1750ft/50ft).
 -Path of the Dead -50ft is dungeon level 40, which is the same dungeon level as Mordor -350ft, ie 6 levels 'deeper' (34*50ft + 6*50ft).
 -Angband -50ft is dungeon level 67, while Mordor's deepest floor at -1650 is dungeon level 66. Pretty seamless.
 -Path of the Dead bottom at -1550ft is the same dungeon level as Angband -200ft ie dungeon level 70.

(4.5d) Dungeon bosses

 Most dungeons have a dungeon boss at the final floor, which in most cases has a chance to drop a specific artifact. In most cases the chance to drop it is 1/3. The bosses have different probabilities to appear, but none of them is overly rare (Azog being one of the rarer ones), so just reset the level a couple of times until you find the boss (by leaving the level, waiting for a little bit, then entering it again).

Dungeon bosses have especially high hit points and yield an extraordinary amount of experience points when you defeat them. Apart from the specific artifact drop the higher level ones also tend to drop great items in general.

Of course you can only find an artifact if it is currently not on the list of known artifacts ie if noone else is currently in possession of it. Even if you don't get an artifact, some of the dungeon bosses have 'DROP_GREAT' flag, which means you will usually get especially good loot from them.

Dungeon bosses will bump the floor feeling up to at least 'special', same as any other unique monsters do (see (4.8) for more info about floor feelings).

Here is a list of all dungeon bosses and the artifacts they are guarding:
 (Some names have been shortened to fit.)

Dungeon, sorted by depth	Boss	Artifact
The Training Tower	-	-
Barrow-Downs	Wight-King	Stone of Lore
Mordor	-	-
The Paths of the Dead	Feagwath	Doomcaller
Angband	- (*)	-
-----Non-town dungeons-----	-----	-----

Death Fate	-	-
The Halls of Mandos (****)	-	-
The Orc Cave	Azog	-
Mirkwood	-	-
The Old Forest	Old Man Willow	Boomerang of Beor
The Helcaraxe	White Balrog	Pike 'Til-i-arc'
The Sandworm lair	Sandworm Queen	Armour of the Sandworm
The Heart of the Earth	Golgarach	Space-time Anchor (**)
The Maze	Minotaur	Helm of Hammerhand
Cirith Ungol	Shelob	Smallsword 'Sting'
The Land Of Rhun	Ulfang the Black	Sabre 'Careth Asdriag'
Moria	Balrog of Moria	Quarterstaff 'Ruyi Bang'
The Small Water Cave	Watcher in the Water	Trident of Wrath
Submerged Ruins	Ar-Pharazon	Amulet 'Toris Mejistos'
The Illusory Castle	King in Yellow	Helm of Knowledge
The Sacred Land Of Mountains	T'ron (level 72!)	Coat of T'ron
Erebor	Smaug	Arkenstone of Thrain
Dol Guldur (***)	Shadow of Dol Guldur	Ring of Durin
Mount Doom (***)	Sauron, the Sorceror	-
The Cloud Planes	The Living Lightning	-
Nether Realm	Zu-Aon (*****)	Ring of Phasing

(*) Angband does not have a designated final boss, but the unique monster Tik'srvzllat does not appear before depth 127. Since Angband ends at depth 127, you can find him on the final floor (if he actually spawns). In this light, Tik'srvzllat could be seen as Angband's final boss.

Also, Morgoth, the Lord of Darkness is encountered in Angband at -1700 ft or deeper. See (1.3), (1.3a) and (1.3b) for more information.

(**) A space-time anchor is an anti-teleportation field of radius 12 that will prevent all teleportation and stall all Word of Recall attempts within.

(Note: It actually prevents all teleportation attempts that originate from within it and also prevents all teleportation targets to be moved away from within it, but does not prevent a teleportation from dropping its target into them.)

(***) While Sauron, the Sorceror, boss of Mount Doom, does not drop any specific artifact, he is still a required kill before you are able to encounter Morgoth, the Lord of Darkness (compare (1.3), (1.3a) and (1.3b)).

When you kill Sauron, you will be able to recall out from that dungeon level! (Usually you cannot recall into/out of Mt Doom.)

Note: If you kill Sauron, you will automatically also get kill credit for the Shadow of Dol Guldur, meaning that the Shadow won't spawn for you anymore if you didn't kill it before killing Sauron.

Also, you cannot find The One Ring anymore if you already killed Sauron.

(****) The Halls of Mandos are barred to ANY unique monsters!

(*****) Zu-Aon's teleport-to attack has special transdimensional power and actually defeats anti-teleportation, space-time anchors and cannot be mitigated by saving throw or teleportation resistance either.

It can however be defeated regularly by holy martyr or by antimagic fields which -as usual- can prevent the spell from coming into existence in the first place.

(4.6) Pits and vaults

Usually monsters are found on their corresponding depth. You can press ~7 to find out which monster occurs where. However there are some exceptions, where you can find monsters "out-of-depth" (ood), meaning that you will encounter way more powerful enemies than would usually occur on a particular depth. That can be very dangerous but also very rewarding. Out-of-depth monsters sometimes occur inside of so-called "pits" and very likely inside "vaults".

Pits are large rooms, surrounded by a rectangle-shaped passage, containing monsters picked by a pit-specific criterium (troll pit, zoo pit...).

Usually pits are very welcome means for gaining experience or items, like orc pits at low character levels, troll pits at low-medium character levels, dragon pits at high character levels and to an extent greater demon pits.

Some pits have a rather bad threat/reward ratio though, such as treasure pits (containing jellies, molds and mimics that look like treasure, not actually real treasure), humanoid pits, undead pits (called 'graveyards' - the problem is that they contain a lot of wall-eaters, which is hard to handle sometimes), zoos (animal pits, that often contain multiple nasty quylthulgs) and chapels (lesser angels, but also knight templars which may summon more dangerous angels if unlucky).

Kennels (canines and hounds) are usually safe, but at higher level you should watch out for aether hounds and gravity hounds which may breathe gravity for tele-to effect.

Many rather mid-level demon pits may contain wall-eating lesser balrogs, but with some effort can be cleared without much hassle, especially if you have wraithform at your disposal.

Vaults are (sometimes extremely large) fixed structures of rooms and passages, mostly surrounded by permanent walls that cannot be damaged except for a few entrance spots made of normal granite wall. However, some vaults are open and do not require special effort to get into, or are not even surrounded by permanent walls.

They are usually filled to the brim with traps and nasty monsters. Using means of trap detection and monster sensing allows you to spot vaults easily, if its wall structure or permanent walls (not all vaults have those) doesn't already give it away.

Another very early indication for a vault on your dungeon level are the floor feelings displayed in yellow colour, see (4.8).

A vault can be a real adventure of its own! If your character isn't very powerful compared to the dungeon level, you better stay out of vaults if their structure doesn't allow easy monster killing.

Note that some monsters can destroy walls and thereby dig their way out of a vault, if they are awake. So in case of dangerous vaults you better stay at a distance or even leave the level.

Besides pits and vaults, there are also special rooms with features inside, see 'Pit', 'Vault' or 'Room' in (0.4).

(4.7) Traps & trap kits

About traps:

At the beginning you will encounter traps that can do little damage, some will decrease your stats temporarily, they are annoying but not a big danger. However, later on traps will become extremely nasty and you should either get a very high searching skill or make sure that you have staves, spells or scrolls that can detect traps. If you encounter a dangerous trap do not try to disarm it if you are not very sure that you can do it without setting it off, or if you don't at least know that setting it off won't have too bad effects (some traps aren't very harmful, so you can just keep trying to disarm them).

If you manually disarm a trap (ie via the disarm command instead of relying on magic spells or magic devices that do the disarming for you) you will get a certain amount of experience points depending on the trap type; it can pay off to disarm a large patch of traps.

Disarming traps will become an essential part of the gameplay later on. Vaults will have *lots* of traps and if you haven't got superior disarming skills (or wands of disarming / trap destruction) every single move of your character will have to be planned! This can be especially annoying and dangerous if there are multiplying or extremely tough monsters inside the vault. If your searching ability is 'Heroic' or 'Legendary' you will discover most traps instantly just by coming close to them without having to explicitly search for them.

If you look at an object that is on an already detected trap, you will be notified about the trap by an ^ symbol in front of the item name and the trap type appended to it in { } brackets. It looks like this:

^ A potion of Constitution {Chaos Ball Trap}

Trap symbols ('^') come in different colours. Here's an overview:

blue	stat traps (STR/INT/WIS/DEX/CON/CHR) in three difficulties:
	1) only reduces an attribute temporarily, heals on its own.
	2) reduces an attribute, requiring you to use restoration.
	3) permanently reduces an attribute. Counter with stat

	potion.
bright white	teleport traps
orange	dungeon/trap rearrangement traps
violet	summoning traps
yellow	item-affecting traps
red	character status-affecting traps
green	elemental bolt traps
light blue	elemental ball traps
light red	arrow/bolt/dagger traps
white	miscellaneous traps

About trap kits:

The 'Trapping' skill allows a player to set up 'monster traps'.
The ability to set up a trap can be accessed by pressing the 'm' key
or by utilizing the macro wizard (press % and z to start it).

A monster trap consists of

- a trap kit
- an item (or a stack of items) to load the trap kit.

Each kind of trap kit requires different items serving as ammunition:

Catapult Trap Kit (orange)	-	Sling ammo (fires with 2x base might).
Arrow Trap Kit (red)	-	Arrows (fires with 3x base might).
Bolt Trap Kit (bright red)	-	Bolts (fires with 4x base might).
Fumes Trap Kit (dark blue)	-	Potions. The effects are very similar to the effects when throwing a potion at a monster, the trap will greatly increase the potion's effectiveness though, by generating a thick fume that envelops nearby creatures and possibly gets inhaled as well.
Magic Trap Kit (violet)	-	Scrolls or runes. Even scrolls that are usually only used on other items might have effects on certain creatures.
Device Trap Kit (slate)	-	Wands/Staves/Rods. The charges of wands and staves will be decreased by 1 each time the trap sets off. Rod-traps will have timeouts, same as the rod itself.

A normal trap kit can be loaded with 1 item of the according ammo.

After it went off (and is out of charges for device traps) you can pick up the trap kit to use it again.

If it was a catapult/arrow/bolt trap kit you can often recover the ammunition too, in case it didn't break. (Magic ammo and artifact ammo never break).

Trap kits can have special (ego) powers:

(prefixes:)

Automatic	-	Can set off up to 99 times, with a 20% chance each time of ceasing to function. Requires the according amount of ammo though, if it's not a device trap kit.
Fully Automatic	-	Sets off up to 99 times. Requires the according amount of ammunition if it's not a device trap kit.
Well-hidden	-	Makes it harder for monsters to spot the trap.
Complicated	-	Trap gets an extra AC bonus, making it harder to disarm.
Obvious	-	Curses the trap and makes it practically useless.

(suffixes:)

of Extra Might	-	fires with +x (bonus shown in round brackets) extra might. ("It fires missiles with extra might.")
of Extra Shots	-	fires +x (bonus shown in round brackets) extra shots/round. ("It fires missiles excessively fast.")
for Dragons	-	Only triggers against dragons. Especially hard to spot. Fires extra shots.
for Demons	-	Only triggers against demons. Especially hard to spot. Fires extra shots.
for Animals	-	Only triggers against animals. Especially hard to spot. Fires extra shots.
for Undead	-	Only triggers against undead. Especially hard to spot.

Fires extra shots. May damage or destroy ghosts.
for Evil - Only triggers against evil. Especially hard to spot.
Fires extra shots. May damage or destroy ghosts.

Trap kits can also have two special properties in addition to the above:

Kill Ghosts - trap kit will also harm creatures in wraithform (those are all creatures that can pass solid walls). Trap kits without KILL_GHOST flag cannot hurt wraithform creatures.

Teleport-To - after triggering, if the monster is still alive, it will be teleported to the player (TELEPORT_TO).

If monsters notice a trap they can try to disarm it:

A pval (that's a number in round parentheses, eg (+2)) increases the trap's "stealth", making it well-hidden and therefore harder for monsters to notice.

The "armour class" bonus of a trap kit, given in brackets (eg [+8]) increases the trap's complexity, making it harder for monsters to disarm the trap.

Trap kits and ammo that were disarmed by a monster cannot be recovered.

You can disarm your own traps to get back the trap kit (and ammunition).

Hints for quick and easy handling:

It is a good idea to inscribe trap kits and their loads.
For example you could inscribe all trapping-related items != so you will pick them up from the floor automatically when you want to retrieve trap kits that went off.

Also you could inscribe the ammo/load items @m1 so you can macro them easily.

In the macro wizard you could even make a macro that prompts you for which trap kit to use if you enter a blank line (just hit ENTER key) when it asks you which item you want to load a trap with.

Last but not least when your trapper is low level and you pick up all sorts of bad potions you could make a macro to load a fumes trap kit with a potion inscribed @m1 . Now make another macro that lets you inscribe all the bad potions you pick up @m1 so you won't have to do that manually for each of them. That inscribing-macro could look like this:

```
{-@m1\r
```

where the '-' will cause the { inscribe command to prompt for inscription first and the item afterwards, effectively simply asking you to specify the item.

(4.8) Dungeon, floor & vault feelings

Dungeon feelings:

Dungeons that haven't been visited for a while will start giving a temporary experience bonus, until the game perceives them as 'well explored' again. If you enter such a rarely visited dungeon you will be notified about the experience bonus by one of these dungeon feelings, displayed in light umber:

"This place has not been explored recently.": +7% experience gain.

"This place has not been explored in a long time.": +13% experience gain.

"This place has not been explored in ages.": +20% experience gain.

These boni stack with boni from 'bad' (orange) floor feelings explained below.

Floor feelings:

Sometimes if you enter a new dungeon level your character will have a special feeling about it, called 'level feelings' or 'floor feelings', displayed in orange text.

These feelings are as follows:

"You feel an imminent danger!" ->	This dungeon level is *way* higher than your character level. (Does not show in the IDDC.)
"You feel a suppressive air." ->	You cannot use wraith form or probability travel on this level. (NO_MAGIC, +10% experience bonus!)
"The air seems distorted." -> (formerly 'feeling of peace')	You cannot use genocide on this level! (NO_GENO, +5% experience bonus!)
"You lose all sense of direction..." ->	You won't be able to auto-map this dungeon, meaning that you won't remember the dungeon layout. You can only see your nearby surroundings within your character's line of sight. (NO_MAP, +15% experience bonus!)
"You feel like a stranger..." ->	You cannot use magic mapping nor clairvoyance here! (NO_MAGIC_MAP, +10% experience bonus!)
"The walls here seem very solid." ->	The dungeon structure on this level is unaffected by *Destruction* or by earthquake magic. (NO_DESTROY, +5% experience bonus!)
"You feel that your life hangs in the balance!" ->	** Extremely dangerous to normal/everlasting players! ** This only occurs on a level where Morgoth, Lord of Darkness resides, grasping the area with his untamable will to destroy. Players who die on this level will be completely extinguished and not even their ghost will survive! Everlasting and normal players will die the same way as unworldly and hellish ones!
"You don't sense a magic barrier here..." ->	This message only occurs in Ironman or no-recall dungeons/towers. It lets you know that you may use Word of Recall on this floor! (This message is displayed in green colour, not orange.)

In addition to those orange level specialties, there are more feelings you may get about the danger a level poses. Those only appear if you spent some time (usually a few minutes) on the dungeon level you were coming from, so they won't be helpful while stair-scumming or probability-travelling quickly. (Exception: On Ironman-rule servers these will always be displayed, since all dungeons are ironman and stair-scumming is not possible.)
The number telling you the current floor's depth (or a town name if you're in a town) in the bottom right corner of the main window will get a light blue star appended to it when you spent enough time on your current floor to receive an extra feeling on entering the next floor. If you are in a town, the town's name will turn light blue instead of a star appearing.
These extra level feelings (displayed in yellow) are:

"What a terrifying place..."
means a) there's a highly ood monster (20..40 levels above floor level, with 40 actually being the maximum possible ood level shift, compare ood explanation in (0.4)) or
b) a great vault and some ood monster (10..19 levels) on the level.
If you receive this message it will in most cases also change the normal music theme of that dungeon to a special 'terrifying' music, making it easier to notice quickly.

"You sense an air of danger..."
means there's a freely roaming ood monster (10..19 levels) on the level, and also the level has a vault on it somewhere.

"Feels somewhat dangerous around here..."

means there's a vault or a rather dangerous monster pit or nest on the level.

"There's a sensation of challenge.."

means there's a freely roaming slightly ood monster (10..19 levels) on the level.

"There's a special feeling about this place.."

means there's a unique monster on the level.

(Dungeon bosses cause this feeling too, just like any unique monster.)

"What a boring place.."

means nothing of the above apply to this level.

Explanations:

"Freely roaming" means that the monster isn't generated inside a vault.

"Ood" means out of depth, ie a monster which is of higher level than the actual dungeon level it spawned on.

Note that you will only get one, ie the strongest of these feelings applying to your dungeon level, meaning feelings higher up the list will take precedence over those below.

Also, the feeling of a dungeon level only indicate its status at the very moment of the level being created initially!

This means the feeling will persist, even if its cause is removed or changed. For example if the feeling indicates an OOD monster and you kill it, you or following players entering that floor will still get that same feeling. Or if a powerful monster spawns later on on an initially "boring place" level, it'll remain to feel like a boring place, despite the new monster that might actually make it pretty non-boring now..

You can check the floor feeling again anytime with the '/feel' command. If you weren't eligible for receiving a floor feeling (because you didn't spend enough time on the previous floor) then this command will just tell you:

"You feel nothing special..".

If you are in the Ironman Deep Dive Challenge dungeon, you will get a feeling informing you about the presence of a dungeon boss monster that belongs to the dungeon theme in your current IDDC section.

This feeling appears in addition to the yellow floor feelings listed above:

"You feel a commanding presence.."

means that the dungeon boss of the current IDDC theme has been spawned.

Vault feelings:

Vaults can also bear a very dangerous feature that is displayed as dark grey feeling as soon as you are about to enter the vault:

"The air in here feels very still." -> Means that you cannot use any type of teleportation, including Word of Recall while inside the vault. Beware! Further, Wraith Form and probability travel won't work either! The fact that you are standing within a no-tele area is also indicated by your (xx, yy) position display on the lower left area of the main window and also your speed indicator on the bottom status line of the main window turning from light green to dark grey! Also, the music will in most cases change from the normal theme of that dungeon to the same music played on 'terrifying' levels, for easier notice. (Morgoth's music will not change.)

As soon as you leave such a no-teleport-vault you'll receive this feeling:

"Fresh air greets you as you leave the vault."

(4.9) Navigating on maps

The world map is divided into 64 x 64 world map sectors. Each of these sectors contains 5 x 5 smaller subsectors (screens). Dungeon levels or tower floors also can have up to 5 x 5 subsectors, same as 1 world map sector. (Use 'L' key to look around your current worldmap sector/dungeon level, and you will see the subsector coordinates displayed at the top line.)

Monsters cannot cross world map sector borders! Keep this in mind while travelling, it might save your life.

Note that dungeon/tower levels are often smaller than 5 x 5 subsectors, sometimes even just as small as 2 x 2.

While you are looking around with 'L' key, the current map sector is displayed in the top left corner of the screen. This information can help other players to find you in case you need help!

You can press 'M' to invoke a map that gives you a larger overview.

If you press 'M' in a dungeon, tower or a town, you'll see the complete 4 x 4 sectors. If you invoke the map while you're in the wilderness outside of towns, you will see a part of the 64 x 64 world map, centered around your current world map sector, displaying towns (yellow T), the sea (blue %), mountains (^) and other information (compare (4.4)).

If you want to see the world map while in town or in a dungeon, press ~ key and choose "Wilderness map".

In the main window around the very bottom left corner you will see two numbers separated by a komma, these tell you your current world map sector.

In case you're currently in a town, the town's name will be displayed in the bottom right corner of the screen.

(You can also see your coordinates by invoking the character screen with 'C'.)

If you're in a dungeon or tower, you will see your current depth/height in feet. Each dungeon level or tower floor has a height of 50 feet.

Example: If it shows '-550ft' that means you've descended to the 11th level of the dungeon. The deeper you go, the more nasty monsters will show up. Negative depths in dungeons and positive heights in towers mean identical monster difficulties. Example: In Bree there's a tower and a dungeon. In the 2nd tower floor on 100ft you will usually find the same monsters as in the dungeon on level -100ft (2nd dungeon level).

(4.10) Houses

There are two types of houses, private houses and (very few) public houses. Public houses have walls of slate colour, while private houses have white walls. Public houses always have a light brown house door and can be entered by anyone, they cannot be bought.

Private houses can actually be bought by a player, and their access can be configured for example to allow everyone in your party to enter it.

Press 'h' to buy or sell a private house, or to change house parameters (for example giving all your party members access to it). You need to stand directly next to the house door to do this.

If you sell a house you get half the money back it cost you to buy it, or actually even a bit less than half, depending on your charisma.

(When that house is sold, all items that are still inside are erased.)

The door colour of private houses will indicate the door permissions, ie which players may access it:

- a light brown house door indicates that the house is currently unowned (so you can buy it if you have sufficient funds).

- a light green house door indicates that you are the owner.

- a dark green house door indicates that another character of yours is the owner which means that you are allowed to enter it too (provided your character is not of incompatible mode).

- a grey door indicates that this house is already owned by someone and you

don't have access to it.

-a light blue door indicates that you may access this house because it's set to party access for your party.

-a violet door indicates that you may access this house because you're in the same guild as the owner, ie the house is set to 'guild access'.
(Note: Guild access is currently disabled.)

-a yellow door indicates that you will have access to this house, as soon as your level matches the level restriction set by its owner.

Houses with party access allow further restrictions. Those are:

-a white door indicates that the door has a race and/or class restriction, and you may access it because you match the race/class of the owner.

-an orange door indicates that you don't match a race/class restriction.

-a light red door indicates that access is restricted to either winners (Kings/Queens/Emperors/Empresses) or to fallen winners (winners who died and thus lost their title), and you may access it because you match the condition.

-a red door means that you fail to match above restriction.

(Note: The restrictions 'winners' and 'fallen winners' can be applied together when setting house door restrictions. In that case, they will require anyone who wants to enter to be either winner or fallen winner.)

-a dark grey door means that this house may only be accessed by no-ghost characters, that means either unworldly or hellish.

If you forgot which houses you own, type ~9 or use the /houses command to see a list of your houses.

The house owner can always access his house and cannot lock himself out by setting restrictions. The door will always be displayed light green to him.

Note: The colour of house walls and doors are affected by day/night, so in the night the colours will not be accurate but darker, until you come close enough that the door is within your lamp's light radius.

Special gimmick: You can press 'h' or use the /paint command to paint your house, see the "/paint" command in (0.2b) for more information.

WARNING:

Items on the floor within a house don't form piles! If you drop too many items and space in the house runs out the dropped item may just disappear!

(4.10a) Player stores

Players can turn their houses into stores, which run automatically even while they aren't logged on. Other players can enter your store and buy items, but not sell any. You will receive cheques that you can turn in for money by simply reading them with 'r' key, same as scrolls. You can also 'I'nspect them. The prices customers will see listed when they enter your store are at least as high as twice of the item's base value (or in other words half of normal Black Market price, except that prices in player stores do not depend on race or charisma). You can further increase an item's price by inscribing it, if you like:

To turn a house into a player-store, simply put an item in it that carries the @S

inscription. This inscription means that this item will be put up for sale in your store for the item's default price.

(Press '{' key to inscribe an item or '}' key to remove an inscription.)

As soon as a house contains at least one item inscribed this way, if a player who does not have access to the house tries to open the door, he will be presented with a store screen where he can buy those inscribed items.

The default price of an item is 2x its base value that it would cost in normal (non black market) town stores. This price cannot be undercut in player shops. However, the following items have a default price of only 1x their base value:

- Rings of Speed
- Scrolls of Artifact Creation
- Random artifacts

If you want to set a higher price than the default price, you can inscribe the item with the price like this:

```
@S20000
```

This will ask for 20000 gold, provided the minimum price isn't actually higher.

Instead of setting a price, you can also add to the base price, by using the following inscription syntax:

```
@S+10000
```

This will add 10000 gold to the default price that is asked for.

Another way of increasing the price is by multiplying it with a percentage, which may range from 100 to 1000 depending on the server, like this:

```
@S%150
```

This will sell the item for 1.5 times (150%) the default price.

Note that if you want to put up items with inscriptions longer than just the store-part, you need to terminate the store inscription with a dot or space. Examples:

```
Hello@S10000.Customer
```

```
@S Good stuff
```

This item will appear in your store with an inscription "HelloCustomer". The "S@..." part is always omitted. This way, you can add short notes to the items you offer.

You can use 'k' and 'M' to denote a multiplier of thousand and million respectively:

```
@S3k will sell for 3000,
```

```
@S1M will sell for 1000000.
```

If you want to display items that are not for sale, eg create a 'museum', you can inscribe the items

```
@S-
```

which will make them unsellable, yet they will be on display on your store.

You can also put up 'signs' in your store by inscribing a (non-massive) piece of wood "@S:" followed by the desired sign text. Signs are just for viewing and cannot be purchased by customers. For example inscribe it:

```
@S:Welcome to my store!
```

Items in stores are sorted by their type. Inscribed store signs however are not sorted, and other items that are sorted in will pass them by when checking where they are to be sorted in. This allows you to rearrange the store signs at will, but might need some experimenting and shuffling around all other items till you achieve the desired result.

If another player buys your item, there will be a 10% fee that is cut from your profits.

The rest of the price the customer paid will be imprinted into a cheque. This cheque is then placed into an available spot in that house. To turn a cheque into money, simply press 'r' to read it like you would read a scroll.

You can also 'I'nspect a cheque to find out how much it's worth.

There are two types of cheques:

Normally, if an item or a whole pile is bought by someone, the item or pile will simply be replaced with a cheque accordingly, for you to withdraw.

If however the customer buys only part of a pile of items, then another type of cheque will be used, called 'mass cheque' which uses one extra slot in your house and combines all sales of partial piles of items.

While normal cheques are inscribed with details of the item that was sold, mass cheques only say 'various piled items' or something similar.

So if you offer piles, make sure that you have at least one free space in your house, or the cheque cannot be generated! In that case the purchase will be cancelled and the customer will see a message:

```
"Sorry, the store is currently not open for sale. Please contact .. the owner!"
```

Usually, player stores may only pop up if a player doesn't have access to that house door. If you want to test your own player store though, you can just press 'h' key or use the /pstore command when standing next to your house door (see (0.2b)).

To indicate that your house is a player store, you can use 'h' key or the "/paint" command to paint your house entrance for other players to see!

Please see (0.2b) for more information about painting.

(4.11) Malicious effects players can suffer

The player can suffer from various effects caused by monsters, traps or himself. Against several of these effects the 'Saving Throw' ability helps to decide whether it will be resisted or not (especially true for effects that are cast by monsters on the player - see (6.3) for more details on Saving Throw).

The various effects are:

For 'Fear', 'Blindness', 'Confusion' and 'Paralysis' - please see (5.6).

Hunger	-Gorged	Your speed gets reduced by 10.
	-Full	While being /afk in 'Full' state or in normal state (normal = no food state is displayed, the 'Full' disappeared), your digestion will be stopped, allowing you to remain afk as long as you wish.
	-Hungry	
	-Weak (yellow)	
	-Weak (orange)	
	-Weak (red)	You lose hit points and get paralyzed even with FA.
	(starving)	If you hit a bowel cramps trap, you instantly enter this nutrition state. 'Slow Digestion' will help to not get insta-paralyzed!
		You will regenerate hit points slower if you are weak, and not at all if you are starving (red 'Weak').
Slowdown		Monsters can cast spells or breathe (inertia, gravity) to slow the player down. This effect is temporary. 'Free Action' helps a bit to reduce the effect from inertia breath.
Stun	-Stun	Reduces to-hit and to-dam. Reduces your martial arts damage (because you cannot perform MA special styles while stunned). Reduces chance for successful spell-casting. Prevents you from intercepting a monster (see (6.2) 'Interception' skill). Reduces chance to block or parry.
	-Heavy stun	Greatly reduces to-hit and to-dam. Reduces your martial arts damage (because you cannot perform MA special styles while stunned). Greatly reduces chance for successful spell-casting.
	-Knocked out	You cannot perform any action while knocked out, it leaves your character completely helpless. Beware! High AC helps to avoid melee-based stuns (see (5.12)) (most famous monster is probably "The Stormbringer"), while stun from sound attacks can only be prevented by having sound resistance. Melee-based stun can be caused by HIT, PUNCH, KICK, BUTT and CRUSH type attacks, also see (*) below.
Cut		Cuts will make you lose HP continuously.
(Graze, Light cut, Bad cut, Nasty cut, Severe cut, Deep gash, Mortal wound)		Cuts can be caused by melee based critical monster hits that use HIT, CLAW or BITE attack type (also see (*) below), or by shard attacks. By transforming into a monster that has NO_CUT flag (mostly undead forms), the player becomes immune to cut effects. Cuts from shards can be avoided with shard resistance.
Poison	-Poisoned	The player will continuously lose Hit Points. Resisting poison will prevent the player from getting poisoned (compare (5.6)).
Not really a status effect but..		
Switch places		Monsters that have MOVE_BODY flag may switch place with the player. This can be very dangerous if it happens in a situation where the player is standing on a staircase on purpose to retreat quickly if the situation gets out

of hands and the player is also within a no-teleport area.

The higher the player's level and the greater his body weight is, the less likely he is going to get switched.

(*) Details about melee-induced cuts and stuns:

For a monster attack to cause cuts or stun it must deal at least 95% of its potential damage maximum (rounded down). This is also called a 'critical hit' of a monster (has nothing to do with the critical-hit mechanics for player attacks).

An attack type ('HIT') that can do both, cut and stun, will randomly do either one, but never both at once. The 95% damage criterium is measured for the final damage ie after the damage-reduction of AC has been applied. This is why high armour class helps **alot** to prevent any type of cut or stun effect that comes from critical hits by monsters, no matter how high the actual potential damage of that attack might be.

However, unlike the most common damage types (like 'HURT') certain damage types cannot be mitigated by AC and hence their cut/stun potential is always to be reckoned with (see damage types in the second table in (5.12a), which say so if they can be mitigated by AC.)

Example:

A Star-Spawn of Cthulhu hits you with its 2d33 CRUSH attack. The attack could deal 2..66 damage. This means its potential maximum damage is 66 (if both dice rolls turn out a 33 each). 95% of 66 is 62 (rounded down from 62.7), so if that hit deals a final damage of 62 or higher, you will get stunned. Note that this attack of the Star-Spawn doesn't have a HURT effect but instead an UN_BONUS effect. UN_BONUS attacks do not get their damage reduced by AC, so a Star-Spawn always has a chance to stun you, even if your AC is very high.

(4.11a) Drain effects

Apart from the effects listed above which are indicated in the status bar at the bottom of the main window, there are three 'drain' effects that can occur. These can be caused by items, monsters or terrain, and are:

Experience drain ('Drains your life force')

Having 'Hold Life' does not protect against this.

If you equip multiple items that drain experience, the total drain will diminish with each further item though instead of adding up, so for example using two rings of power will be less severe than one might expect.

If experience drain hits the threshold for your current character level, it will not drain any further, so you cannot lose a level from it. Beware however, that you are not hit by another life draining effect that lowers your experience further below the level threshold, or the experience drain will kick in again.

Experience drain is on hold while you are in town areas, this includes dungeon towns.

All the rings of power that are dropped by Nazgul drain experience (and turn you invisible).

Mana drain ('Drains your magic')

Drains your mana pool over time while you have this item equipped.

Hit point drain ('Drains your hit points')

Drains your hit points down to zero, then stops. This means that this effect won't kill you, but can make it extremely risky to go AFK in an unsafe place. Well, going AFK in an unsafe place can kill you anyway.

HP drain stacks and is given by:

- Items that just drain your HP
- Items that have strong good powers and you use them as a Vampire
- The sun, when it's day and you're a Vampire and out in the open without a protective mummy wrapping
- Monster forms that provide wall-passing (wraith form)

HP drain can be countered by HP regeneration, which can be gained from:

- 'Regeneration' ability (which is a flag, ie one source providing it is enough and having more than one regen source won't increase the effect), gained from items or as racial/form bonus
- Health skill
- Holy Curing school bonus

- Nature school spell
- Biofeedback from fire stones

which all stack too.

Also see (5.17) for how these drain effects stack or may be cancelled out.

(4.12) Malicious effects monsters can suffer

Monsters can be affected by similar effects as players.
Those are:

Fear, blindness, confusion, sleep, slowing, and stun.

Note (except for 'stun' effect):

There are basic spells or magic devices that don't do anything except trying to cause one of these effects directly, for example a 'wand of slow monsters' or the spell 'scare'.

It is important to know that unique monsters are always unaffected by these basic spells. Other monsters have a chance to resist, depending on their level vs the power (level) of the spell.

Effect details:

Fear is a temporary effect, causing the monster to flee. Many monsters turn afraid if their hit points drop very low. Wears off after a while.
Monsters that have NO_FEAR flag cannot be scared.

Blindness and confusion are currently the same thing, resulting in erratic movements and being unable to cast spells or attack. Usually only low level monsters are prone to these.
They are temporary effects that wear off after a while.
Monsters that have NO_CONF flag cannot be confused.
Undead, demon, dragons, nonliving monsters and monsters of level 45 or higher cannot be blinded.

Sleep is especially nice if it's cast as an area effect. Gets you out of trouble, although most higher monsters are immune to it.
Monsters will wake up after a while, depending on your stealth.
Sleep effects are NOT cumulative.
Monsters that have NO_SLEEP flag cannot be slept. Note that they may still be asleep when you meet them though.

Slowing on monsters is currently a permanent effect. Very effective, although many higher monsters are immune to it. Also, it is currently cumulative (subject to change) and can be applied several times, although monsters might resist.

Stun (Note that "stunned" and "dazed" are the same thing.)
Stun can be caused by special martial art attacks among other things. Stunned monsters have a harder time to successfully cast spells or hit you in melee combat. Also monsters cannot interfere with your actions while they are stunned. Many monsters are immune to stun, but also many monsters - even of high level - are not.
Monsters can also be heavily stunned or knocked out, same as players. Stun is temporary and will wear off, if no new stun effect is applied. Monsters that have NO_STUN flag cannot be stunned.

Monsters have a saving throw, and unique monsters are usually immune to some of these crowd-control effects.

(4.13) Extermination Orders, Events and Ironman Challenge

Your character will have uncounted opportunities to receive and carry out extermination orders and participate in global (as in, open to everyone at the same time) events.

Extermination orders can be received by a player on demand and only concern him personally, while events are automatically scheduled in regular time intervals and allow (or even require) multiple players to participate simultaneously.

Some events will require you to have zero experience in order to participate. The maximum experience your character ever accumulated counts for this, so make sure you don't gain even 1 point of experience before the event starts! The following actions may reward 1 XP without you noticing:

- Eating a bad food ration.

- Picking a lock.
- Transferring items or money from another player to you.
- Picking up/earning more than 300 gold pieces (IDDC-exclusive characters are unable to pick up any gold at all, and in turn start out with 300 extra).

Use the /ex command to see how much more gold you may pick up
Killing townspeople in Bree however will not give you any experience.
Stay clean!

Here is a list of currently available events:

Extermination Orders

These are basically 'kill quests'. You need to venture out and kill a fixed amount of a certain type of monster.
To receive an order, visit the major in the town hall (one of the '+' doors in town), or if you are in the IDDC simply type "/xorder" in the chat. There is a certain time limit which in most cases is easily sufficient, especially if you have the according ESP ability.
The time limit is actually two 'in-game days', which in real time lasts somewhat over two hours. (See (4.14) for more information about the in-game time system.)
The time will continue to run out even while you're not logged on.
If you carry out the extermination order you received, you will be rewarded with a good or great item, depending on the difficulty (monster level) and chance.
The item does not depend on your race, class, skills or luck in any way, it's completely random. It's quality is also on average lower than the items obtained from winning events (read further below about events).
If you fail to carry out your order in time, the order will be cancelled and you can just get a new one if you want to. There is no penalty.

Party members (and you) can see that you received an extermination order by looking at the character list ('@' key): An 'X' will appear behind your location information (except if they are using the super compact @-screen layout that shows only two lines per player).

On an Ironman server or within the Ironman Deep Dive Challenge dungeon, the amount of monsters that need to be slain is somewhat lower (especially for low level orders). Also, in the IDDC and in the Halls of Mandos, the monster level of the extermination order will depend on the floor level rather than on the player's level.

Events (use /evinfo and /evsign commands to get information and to sign up)

Note: Item rewards depend on your character, see (8.5) for more information about item rewards.

Make sure that you aren't inside a dungeon that does not allow normal usage of Word of Recall when an event begins that you signed up for, or you will fail to join the event! (Eg ironman, forcedown, no-recall dungeons, even if you're on the final floor and could use Word of Recall.)

Highlander Tournament (pvp, only one can win, 2+ participants)

When you see a message, announcing a Highlander Tournament, type "/evinfo" in the chat to find out more, and use "/evsign" followed by the event's number to sign up for participation.
It's a deathmatch with 10 minutes of preparation time, and only newly created characters with 0 experience may join it.
The winner will receive a deed that can be 'r'ead, and turned in at Bree's Mayor Office for either an item that fits the needs of the character (it checks which skills you have trained to determine the item), or the deed can be turned in for a temporary luck boost. Usually you will want the item. However, you can trade the deed to someone else, who can then go and redeem it for luck for that character of his (although the luck bonus he gets will be somewhat lower than what the original owner would receive).
All losers will also receive a deed on the next character they log in with which can be turned in for a small temporary luck bonus.
For details about luck see LUCK flag in (5.8).

Detailed course of the event:

After signing up, players can kill townies for cash and go shopping.

They must not earn ANY experience though, or they won't be able to participate when the event starts.

If a player collects more than 300 gold, he will gain 1 experience point, and therefore become ineligible to participate.

Picking up items belonging to other players will also give 1 experience.

When the event starts, all players are teleported into a specific dungeon that is reserved for Highlander Tournament participants exclusively. All players receive an Amulet of the Highlands which they should not forget to wear, because it gives the character considerable power.

They now have 10 minutes to level up in this dungeon.

In this highlander dungeon players are randomly teleported when they take a staircase, so even if two players take the same staircase they won't end up next to each other.

After 10 minutes, everyone is teleported out of the dungeon and meets on a battlefield where they have to kill each other, because it is well known that THERE CAN ONLY BE ONE!

When a player is slain and drops his items, other players can pick up his Amulet of the Highlands and 'wear it, which will make it fuse with an already existing Amulet of the Highlands, increasing its power!

When only one player is left, he will be the designated winner, and teleported back to Bree. He automatically receives a victory deed in his inventory which he can exchange at the Mayor's office in the town hall. It can be exchanged for either an item or a temporary luck bonus. He can also give this deed to another character if he wishes, although in that case it can only be exchanged for a luck bonus, not an item, and the bonus will be somewhat lower than for the Highlander champion himself.

All losers will also receive a 'contenders deed' on the next character they log on with, which can be exchanged at the Mayor's office for small temporary luck bonus (note that it vanishes when you log off).

A note regarding turning in a deed for an item:

The item you get will be random but still depend on your character's skill points spent. So you should not turn in the deed before you actually spent your skill points. For example if you spend several points into Sword-mastery then if you receive a weapon it will actually be a sword. See (8.5) for details!

Highlander Tournament rewards can theoretically end up with a higher item value in gold than rewards from other events. Reward items cannot be sold to stores though.

Arena Monster Challenge (no losses or gains, for testing your abilities)

The wizards of Arena Monster Challenge (tm) have prepared a spectacular event on the top floor of Bree's training tower, which will allow any Joe and Jane to experience top-notch fights against creatures that usually pose lethal threat. In this illusionary arena, players will experience a fight that seems absolutely real, but they won't suffer any consequences if they lose, ie 'die'. Test your might against any foe you always wanted to challenge but never dared in real dungeoneer's life! It's also possible to challenge ego monsters (such as veteran archers or holy animals). The arena corners are safe zones and allow for spectating. Note that you cannot die or suffer various hazardous effects in the arena, and monsters cannot summon. Hint: If you want to spice a monster up, try the /scream command while it's in your line of sight. Inventory and equipment cannot be damaged/destroyed or disenchanting in this event, and you cannot get disarmed either.

Dungeon Keeper (everyone can win, 1+ participants)

(You should enable 'easy_open' option in = 6 for this event, which is enabled by default, and lets you open doors simply by moving into them.)

Characters who want to participate must not be of higher level than 14.

A character can participate only once in this event.

PvP-mode characters are not eligible to join.

Running, phasing, teleporting, magic mapping, detection and ESP are disabled in the event. Also, your speed cannot exceed +0 (Normal), and the lava that floods the dungeon will deal irresistible damage even if your character is immune to fire.

Except for a brass lantern which you can buy from town store '1' (general store), no items are required for this event.

When the event starts, all participants are transported into a labyrinth of rooms made of impenetrable walls but connected by doors or even void jump gates.

The goal is to find one of four escape beacon, which is a light green '>'. Everyone who steps on an escape beacon and presses the '>' key will be teleported to Bree and has thereby successfully escaped the maze and qualified as a winner.

It does not matter who the first or last is to leave, everyone who manages to get out, wins, and gets a parchment for reward that can be turned in at the mayor's office.

After about 5 minutes, the dungeon floor however will crackle, and be flooded more and more with lava. Time is running out. Now the players who haven't escaped yet should hurry, before the maze is completely submerged in lava. Doors and the exit beacons will stay clear until the very final push of lava occurs which then completely submerges everything. However, it seems the former keeper of this abandoned maze left behind a horrible guardian, the Horned Reaper. It can sense your presence and if it manages to catch you, there is no hope of survival.

Players who do not manage to escape, but die, still get a small reward. It is again a parchment that can be turned in at the mayor's office. The next character a player logs on with after losing in the event will receive it.

Winner parchments can be turned in for either an item or a temporary luck buff (about 30 minutes duration). The item will depend on how you have spent your skill points, so make sure to distribute some skill points first before turning in a parchment for an item reward. See (8.5) for details! The winner parchments can also be given to other characters, but those will only be able to exchange them for a luck buff, not for an item-

Loser parchments are not tradable and can only be turned in for a small temporary luck buff (about 30 minutes duration). For details about luck see LUCK flag in (5.8).

Hints:

- The Horned Reaper in this maze bashes doors instead of opening them.
- If you stand still for a turn, you can 'run' over one adjacent floor grid as quickly as you can double-tap a movement key (maybe create a macro).
- Players usually do not start next to rooms that have escape beacons.
- Don't OCD this dungeon. Your goal is to pass through as many rooms as possible, not to cover areas "cleanly".
- It is known that in a world of squares, moving diagonally has a certain advantage.

Asides from extermination orders and events, there is another, permanently available challenge that waits for you to tackle it:

Ironman Deep Dive Challenge (IDDC)

This is a special, gigantic ironman dungeon (or tower) which is 127 levels in size and does not allow recalling in between, except for in the two 'dungeon towns' which will be generated at dungeon level 40 and 80. (More dungeon towns might spawn but won't allow recalling.) If you recall at such a town it counts as withdrawing from the challenge and you won't make it on the leaderboard that can be viewed at the mayor's office in Bree. (Note that 'IDDC-exclusive' characters can NOT recall out at static towns. If they try, they are just 'killed by indeterminnation' and erased.) Monsters cannot spawn in the wilderness sector of the dungeon, so you can just idle at the entrance, waiting for team mates.

The Deep Dive dungeon requires your character to have zero experience points in order to be eligible to enter.

To fulfil that requirement you may not collect more than 300 Au (gold pieces) or pick up any items or money of other players. Also, if you eat a ration of food and you are unlucky enough that it's gone bad you will get 1 xp for that.

Use the /ex command to see how much more gold you may pick up.

If you make a 'slot-exclusive' IDDC character, it will start out with 300 extra gold, get at least a 50% discount in all shops in Bree, and in turn will automatically be unable to pick up any more gold or items of other players, and it won't get experience from eating bad food either. (It

cannot buy houses either, but you won't need those anyway.)

As IDDC-exclusive character you will get no experience when you kill a monsters outside of the IDDC. As a little extra bonus, slot-exclusive IDDC characters will also randomly gain knowledge of some item flavours on entering the IDDC dungeon. (Flavoured items are: potions, scrolls, rings, amulets, magic devices, mushrooms.)

All characters that enter the IDDC will also get 20 scrolls of identify for free, which will automatically be placed into their inventory.

Players in the IDDC receive a 20% experience gain bonus in addition to the usual 15% experience bonus all ironman dungeons provide, so overall you gain +35% more experience in IDDC than in a normal, generic dungeon. You could decide to 'abuse' IDDC to level up your character, and then leave the dungeon when you reach -2000 ft. This might be especially interesting for mimicry users (see further below).

The IDDC does not enforce a minimum depth in regards to player level in order to gain optimal experience.

On average the experience gained in IDDC is high enough, that even a character of a highly penalized race/class combination can still obtain at least level 46 before he reaches Nargothrond at -4000 ft, even if he skips all floors that give a "terrifying" feeling - if he clears out all other floors completely. This number is an average and may therefore vary.

To further bring your character up to snuff on deeper levels, when you hit -3000 ft you will have a very high chance to find one very useful ring of speed. This high chance will stay in effect until you actually find it. This does not have to happen on -3000 ft, it can be on deeper levels too. As soon as you find it, your chance to find further rings of speed will revert back to normal.

Since you cannot recall out aside from these two towns, except if you reach the 127th floor of the dungeon, it is extremely likely that you will die before making it through all those floors. So this dungeon serves as a challenge of how far you can make it before death!

The level reached will be recorded in the mayor's office in Bree ('n' key inside the office, to view the records).

To provide some more support, this dungeon will have additional, generic town levels at -1000 ft and -3000 ft. Monsters cannot spawn in any kind of dungeon town.

Those towns remain static for only 5 minutes after dying, all other IDDC floors will remain static for 10 minutes, giving other players a chance to loot items and money. An exception are floors 50 ft..350ft which only stay static for 2 minutes, still giving you a chance to reconnect if you get disconnected without the floor turning stale.

Also, starting at dungeon level 8, a hidden library may appear randomly (that's a book store with a red '9' for entrance), allowing you to purchase magic spells you might be missing. It also offers a special service to identify all items you are carrying.

On very deep floors after Nargothrond, a seasoned alchemist store may appear, allowing you to resupply.

Rogues should be aware that it's not possible to steal from general store, weaponsmith, armoury, temple, magic shop, black market and the special potion store in the dungeon towns.

Inside the challenge dungeon you can acquire an extermination order via /xorder command at level 1 already, instead of the usual minimum level 5. On average, extermination orders in here require less monsters to be slain. Also, the monster level of the order will depend on the floor level instead of the player's level.

The IDDC is randomly using themes of all the other dungeons, the selection is randomly rerolled every 24 hours. The final floor of each theme might spawn the according dungeon boss if you are lucky. The chance for a boss to spawn is even somewhat higher than in normal dungeons.

Further, you will receive an feeling "You feel a commanding presence.." that indicates a dungeon boss spawn. Like yellow feeling messages, this too requires you to have stayed on the previous floor for about 2 minutes (until your depth indicator gets a light blue star attached).

Although Sauron is the final guardian of Mt Doom, he may spawn in any theme

in the IDDC, provided the floor depth is at least level 99. As in any other dungeon, Morgoth will only spawn if all players on a floor have already defeated Sauron. He may spawn in any theme, on floor depths of level 100 or deeper.

For servers running 'strict_etiquette', meaning that a player will lose all true artifacts after winning: If Morgoth is defeated, players on his floor will be allowed to use Word of Recall to leave the dungeon if they wish! (Alternatively they may go on and recall at the final floor, which is level 127 aka -6350 ft.) 'Strict_etiquette' is usually turned off though.

An IDDC-slot-exclusive character that makes it out of the dungeon will be restricted to the world surface. If it attempts to enter any dungeon or tower it will automatically retire instantly. Note that it cannot buy any houses, but it won't need those anyway.

Usually unique monsters may not spawn in two or more places in the game world at once, but the IDDC is actually an exception. In here, a unique monster is allowed to spawn (once) on a floor even though another instance of it already exists right now elsewhere in the world. This means that you don't have to worry which uniques other players are currently fighting - they can still spawn for you just fine.

Mimicry users gain +9 extra kill credit on each kill, effectively learning forms TEN TIMES as fast. (However, if that character decides to withdraw from the challenge at a static town, it loses 2/3 of those extra kill credits again, still not a bad deal.)

Darklings and Candlebearers for Maiar spawn slightly earlier, from dungeon level 10 to 20 in the IDDC, instead of from 12 to 20 anywhere else in the world.

After the first fixed town at -2000 ft, Menegroth, all further floors you enter will give you a progressively increasing (with floor depth) luck bonus, making it more and more likely to obtain better items.

The IDDC does not allow forming a party or adding someone to an existing party, so you have to do this while everyone who wants to join the party is still outside of the IDDC.

IDDC allows partying and trading between everlasting and non-everlasting characters. To form a party between those, everyone must be within the worldmap sector where the IDDC entrance is located.

Level requirements on items are not in effect while inside the ironman deep dive challenge either, so item levels are meaningless.

Party bonus experience is higher than outside of IDDC. This means that the experience you get per killed monster is much closer to the experience you would get for playing solo, making partying more attractive since you do not need to worry about 'loss' of experience compared to going solo.

If the party leader dies inside the IDDC, the party isn't disbanded but ownership of the party is transferred to another party member. (Same as on Ironman server.)

In case you need to go offline you'll just have to log out inside the dungeon. Keep in mind that your character will stay in the game for about 30 more seconds during which it could be killed if in an unsafe place. Dungeon towns in general however are free of any monster spawns, so they are safe.

If you log out in the IDDC and log back on before the level has changed, you can continue business as usual. However, if you log off and wait until the level has reset, then the level will be "stale" for you, the next time you log on, which will prevent you from getting any experience, items or gold until you move on by taking a staircase to the next floor.

Therefore, if you need to log out and stop playing, you should first clear as many monsters as you can on your current floor before logging out. That way you won't "waste" any experience points.

Note that dungeon towns never turn stale.

Monsters cannot spawn 'live' in the IDDC, but only at the time of creation of each dungeon floor. Summon staves cannot be recharged in the IDDC and polymorphing magic does not work.

NOTE: If you use stolen enchant scrolls on an item while you are in a town, then the item will get a 100% off discount. If you want to use stolen scrolls to enchant your items and keep the items sellable, then you have to take the staircase to leave the town, and read the scrolls in an actual dungeon level instead.

NOTE: You can use the command '/convertexclusive' to convert one of your characters into a dedicated IDDC character, moving it to a specific IDDC-only-character slot and freeing up the generic character slot again. This of course only works if you still have a free IDDC-exclusive character slot available.

Seasonal events

At certain times of the year, some seasonal events will occur for a couple of days each. The exact time of the day when they start or end can vary depending on your time zone, even a date difference of +/-1 day is possible for that reason. The ending date means that sometime after the beginning of that day, the event will end:

Halloween

Running from 26th October till 2nd November.

The server will recall all players (20 minutes ahead warning will be displayed) and restart. After that, Halloween is live and costumes can be found and stored costumes can be worn again.

Townspeople will actually give experience (!) but also have a fear-causing 'touch' attack. They can't really harm you, though.

Randomly, the Great Pumpkin will appear on dungeon levels, either with low or medium or high amount of hit points, depending on the location. If you cannot beat the high-HP version, you could try leaving the floor to reset it and hope to see the Pumpkin randomly respawn quickly afterwards in easier form. The pumpkin will despawn on its own if it doesn't get defeated before one hour has passed after it appeared. It will quickly respawn on another dungeon level in that case. About 5 minutes before it fades away, nearby players will get a warning message, saying that the Great Pumpkin "wails and seems to fade".

The Pumpkin is aiming at intermediate-level characters. It can spawn on any dungeon floor shallower than dungeon level 35 (or 40 on Ironman server*), except it won't show up on the first 19 floors in the Ironman Deep Dive Challenge.

Players who are too high level (above 30 on main, above 35 on Ironman*) will not be able to hunt him, for the others he will still be tough and might require teamwork.

The Great Pumpkin does not cause any damage but still has a few annoying spells at its disposal. It is level 127 and therefore can drop quite high-level items and usually drops very good stuff. Please share fairly. ;) When a player defeats the Great Pumpkin, everyone will get a message about it. The Great Pumpkin will randomly respawn again some time later.

During Halloween, it will stay deep night on the world's surface and magic that lights up the world surface won't work.

(* the 'Ironman' server, also called 'RPG' server, is currently not available. Instead, try the IDDC or Halls of Mandos, if you want to play ironman-style.)

Christmas

Running from 23th December to 27th December.

The server will recall all players (20 minutes ahead warning will be displayed) and restart, after which the event is live.

During christmas, costumes can be worn again and you might even find Santa Claus costumes. Also, Santa Claus will spawn in town and drops great stuff when you uh.. kill him. :)

New year's eve

Running from 31st December to 1st January.

Fireworks will be launched into the sky of the town of Bree.

While it's night and fireworks are being launched, magic that lights up the world surface will not work.

(4.14) In-game time system

Three time systems are relevant for the players' game experience:

- real time (you can check the server's time with /stime command by the way)
- in-game day time (check in-game time with /time command)
When NPCs inform you about anything time related, they will do so in in-game time, effectively speaking to your character, not to you as a player.
In-game time passes much faster than real-time (see below).
This time also controls day/night changes.
- in-game 'turns' (the /ex command tells you how fast you can move, ie how much you can move each turn)
Turns are small chunks of time during which players and monsters can make a move (or several moves if their speed is greater than the basic value of +0 or less moves if they are especially slow).
The special thing about turns is that they pass slower for deeper dungeon floors, meaning that the speed of all actions is slowed down for both players and monsters alike. This is done because both players and monsters will usually have gained more speed at higher levels and combat would become too fast to react properly.

Real time:

Special events for example are usually measured in real-time, ie /evinfo command will return information that mentions minutes and seconds. This is, because event information is 'out-of-game' information that is supposed to inform the player, not the character played.

Scheduling of seasonal events or of event scheduling in general (the frequency at which events are invoked) are also handled by calculating real time.

Basically all other things in-game are measured by the passing of 'game turns' and in in-game time, ie the time of the day as seen by your character, not by you as a player behind it.

The in-game day time can be checked with /time or with /ex chat commands and runs at about 20x speed of real time and also features day/night change:

Usually a whole day (day + night, ie full 24h in-game time cycle) will last for slightly more than one hour real time.

The sun will usually rise at around 6am, while night falls at around 8pm, so the in-game night lasts for slightly less than half an hour real time.

An in-game hour lasts for about 160 seconds in real-time.

Extermination orders (see (4.13)) usually have a time limit of two full in-game days, so you will have about 2.5 h to carry them out.

Wanderers in the wilderness in turn would rather prefer day light in order to locate the entrance to that dungeon they are looking for.

Vampires burn if they move around in day light without either a protective wrapping or an item that provides resistance to light.

Even store orders and the Merchants Guild mail system work in in-game time and tell your character how long their deliveries will take, not you as the player, so when they speak of "hours" or "days", fear not, it'll be much faster in real time.

More technical stuff about 'game turns' and how time for your character's actions passes, and actually passes more slowly on deeper dungeon levels:

Before explaining more about them, I'd like to interject that there is a second meaning to the term 'turns' in the game, which is used to describe frames of the game engine, usually running at 60 fps internally. Instead of just calling those internal processing steps 'frames' as would be precise, unfortunately they are also called 'turns'. But those 'frame-turns' aren't what we'll be talking about here, since they don't matter to the players at all.

The only place players will ever come in contact with frame-turns unfortunately is the high score board, which should probably really be changed to either 'in-game' turns or just to real days/hours/minutes, which make more sense.

So, how do game turns work?

They measure the time experienced by characters and monsters.

For example if you are poisoned then you will see your hit points ticking down. This is done once each turn, so it will allow you to observe how long a turn actually lasts in real time.

Same for lamp fuel: It runs out by 1 point of energy each turn.

The speed of characters and monsters also depends on game turns:

A creature (including players) moving at +0 speed can move once per game turn, while creatures at higher speed may move several times per game turn, and of lower speed only once in several game turns, depending on the exact speed.

Note that +SPEED is actually not linear in absolute time! To find out how often your character can really move per game turn, use the /ex command. You will find that increasing your speed more and more will yield somewhat diminishing returns on the amount of actions your character can actually perform per turn.

So how long is one game turn actually?

The simplest way to notice is creating a new character and walking around Bree (not run, but walk), as it will be able to move exactly one grid per turn it gets. So you'd observe that a turn takes a bit longer than 1/2 and a bit less than 2/3 seconds, roughly - that is, on the world surface at least! Read on..

An special thing about game turns is that their passing depends on the dungeon level your character is on!

You can for example observe the passing of turns if you watch your light source losing fuel and hit CTRL+R to refresh the display and thereby take measure points.

In the dungeon however, the time will pass slower. The deeper you are, the slower game turns will pass in real-time. For example if you enter Mordor, you might feel as if your character only moves at half his usual speed. This is because each in-game turn is slowed down quite much on dungeon level 34, which corresponds to the floor at Mordor -50 ft.

The reason for this is that higher level monsters usually move faster than lower level monsters. This would make the game more and more dangerous to play, since your reaction times would need to be *very* short. Actually much shorter than is feasible.

To counter that, the whole time itself is just slowed down on deeper levels, to allow you to react more easily.

If you enter the town Khazad-dum, you can observe how things would look without these slow-down mechanics: The town is actually considered level 80 (so basically as dangerous as a dungeon floor of depth -4000, even though hardly any high level monsters can spawn there, apart from a few higher level human type monsters). However, the town is also on the world surface, which means turn-time is not slowed down there. Now see if you can spot a pack of orcs or novice warriors that got spawned in Khazad-dum: You'll see that they move at very high speed! That is because monsters on dungeon levels that are much deeper than their native level get boosted stats, including their speed. In the dungeon on -4000 ft you would hardly notice that their speed was raised because the slower passing of turns counters the visual effect. In Khazad-dum however you'll see how astonishing fast they suddenly move. You wouldn't want to have to handle this time speed in the actual dungeon where you encounter the really bad guys..

(4.15) Swimming

Some very light characters can swim without losing hit points occasionally ('drowning'). The weight limit includes equipment, backpack and the character's weight itself. For example an elf has no problems swimming through deep water.

The heavier a character gets, the more often he will get a 'tick' of drowning inflicted on him, reducing his hit points. This is a continuous process that scales from 'no damage at all' at very low total weight to serious drowning for really heavily packed characters.

Most races are too heavy to be able to swim perfectly out of the box, and even low-weight races will run into trouble when they store things in their backpack or wear a couple of items.

However, this is often not a big problem because even though a character may not be able to swim perfectly, it'll still be sufficient to cross large rivers without taking much of a dip in hit points, if he isn't carrying or wearing a load of heavy items.

If you're really too heavy and want to operate in watery surroundings though? Here are ways to improve your swimming capabilities:

Constitution or being undead (includes mimicked monster forms) will reduce the hit point damage, but not the drowning tick frequency.
Strength and dexterity will randomly reduce the tick frequency but are still no guarantee for perfect swimming.

The 'Swimming' skill is the easiest choice to reduce tick frequency, and it does so to zero ie perfect swimming, when maxed. at 0.700 you will become able to swim very fast, which can be compared to 'running' through the water in terms of speed. However, this costs precious skill points, so it's not a very popular way of getting good at crossing water.

Mimics and especially druids can use an aquatic form or a form that can swim easily, and they will be able to cross water in the same way, without ever drowning. Another way is to use a form that grants wraithform or simply a form that grants levitation, which is a rather common ability.

Rangers learn how to swim at great skill at level 25, Martial Arts users will be able to swim easily at a Martial Arts skill of 30.000.

Ents never drown since they're made of wood, while Draconians will actually gain intrinsic levitation at level 30.

Characters training the magic 'Water' or 'Nature' school will acquire water-passing at 40.000, while 'Air' school grants levitation at 50.000.

Other characters can rely on items that grant levitation, swimming (rare), or wraithform (by spell or item) to become able to cross water easily. Levitation is definitely the most popular choice, since you can 'fly' over water quickly. Wraithform is as good as levitation, but hard to acquire.

In short: Obtaining levitation is probably the most popular way for crossing larger areas of water.

(4.16) Teleportation

Teleportation is the magical, instantaneous relocation of a player or monster.

There are five main types of teleportation:

-Phase door/Blink

It follows the same rules as 'teleport self', it's just named differently to indicate that it is limited to a rather short range (usually less than 20 grids away).

The spell available to players are usually called 'Phase Door' while the spell used by monsters is usually called 'blink', but again that's just a matter of naming.

Note that monsters cannot blink out of vaults.

-Teleport self

The normal 'teleportation' as provided by scrolls, staves or used by monsters which has a very long range and also tries to keep a certain minimum range to make sure you actually get away from trouble.

Note that monsters cannot teleport out of vaults.

-Teleport other

It's basically the same as normal teleportation, except it does teleport a targetted player/monster instead of the invoking player/monster himself.

If you get teleported by someone you cannot see, instead of his name you will see this message: "Someone teleports you away!"

Note that monsters cannot teleport you away if you're within a no-teleport area (no-tele vault).

-Teleport-to

This spell tries to move the targetted player or monster onto a grid next to the caster. This can be nasty when monsters with dangerous melee attacks cast teleport-to on a player who tried to keep his distance.

Note that teleport-to has no effect if the source grid or the destination

grid are in a no-teleport area (no-tele vault).

-Word of recall

The only non-instantaneous teleportation spell and the one with the longest range. After a certain 'charge' phase has elapsed it will teleport the player over the world map or into or out of a dungeon.

Further rules that determine the target location:

- Neither monsters nor players can teleport into vaults or houses or into shops.
- Monsters cannot land on grids that have a glyph or rune on it, or on 'protected' grids (the inns and the arena event corners).
- Players cannot land on grids that are inside monster nests/pits, including the outer corridor around them (pits/nests are rectangular rooms surrounded by a one-space-wide outer passage, that are filled to the brim with monsters).
Note: Earthquakes or *destruction* magic will cancel the special protected state of pit/nest grids, so they become valid teleportation destinations again.

However, under certain conditions, teleportation spells may still fail!
In general for all teleportation attempts, these are:

- Teleport spells cast onto others (teleport other, teleport-to) may get resisted by the target depending on its saving throw, level or status.
- Trying to teleport while engaged in pvp with a pvp-character. There will be a cooldown of maybe half a minute after a pvp-mode fight till you can use teleportation again. If you try to flee by teleportation, you will receive a yellow message: "There's no easy way out of this fight!" >:)
- Certain special floors ('Dungeon Keeper' event or an experimental no-teleport dungeon).
- Trying to teleport in a local no-teleport area.
When you enter such an area (no-tele vaults) you will see a message in dark grey, saying "The air in here feels very still". Music will change too in most cases (Morgoth's music will not change), and your speed and worldmap indicator will change colour to grey, to catch your attention.
When you try to teleport you will get a message in bright red, saying:
"This location suppresses teleportation!"
- Trying to teleport while having equipped an amulet of anti-teleportation or activated a space-time-anchor effect. You will get an orange message, saying:
"You are surrounded by an anti-teleportation field!"
- Trying to teleport on a floor that has no or only few free floor grids.
Teleportation magic tries hard to find a free destination grid, but if it is unlucky due to a low number of available grids it might just fail. So it is not recommended for example for an istar to cast stone prison all over the level, filling it mostly up. This puts attempts to successfully teleport on this level at hazard.
'Free' floor grid means a floor grid that doesn't have a monster or item on it and is classified as 'floor' (water and lava count as floor too).
If a teleportation spell fails because it didn't find a free destination grid you will see an orange message "The teleportation spell strangely fizzles!".

(5) Item and monster details

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(5.1) Melee weapons, brands

One of TomeNET's features is the "auto-retaliator". This means, if an enemy enters a field that is adjacent to you, you will automatically attack the foe with your equipped melee weapon. This is helpful against lags as well as for preventing RSI ;) - for details about auto-retaliation please see (4.1a).

Melee weapons have at least three stats, it's 'damage dice', 'to-hit' and 'to-damage'. 'To-hit' helps you actually not miss an enemy, 'to-dam' increases the damage. The 'damage dice' shows how many dice are added to calculate the random damage you inflict on an enemy as you hit!

Example: Broad Sword (2d5) (+3,+4)

This means, your chance to hit is a bit increased (+3) and you will inflict a damage of: 2 dice with 5 sides each, to the result +4 is added.

So the damage you inflict will randomly vary from 6 (1+1+4) up to 14 (5+5+4) meaning that you do an average damage of 10 per hit with that weapon
($[6+14]/2 = 10$).

A very important thing about melee weapons is that, depending on your strength

and dexterity as well as the weight of your melee weapon, you might be able to deliver more than just one blow per round with it!

For example a warrior might be able to swing his "Broad Sword (2d5) (+0,+0)" one time per round, delivering $2 * (1..5)$ damage. The 'd' means dice, so it's like throwing 2 dice with 5 sides each and adding their values to estimate the damage you inflicted on the victim. Now if that warrior equips a light whip which weighs only 3 pounds (the broad sword weighs 15 pounds) he might get 2 or even 3 swings per round! Since a whip does 1d6 damage, he would deal (assumed he got 2 hits) $2 * 1 * (1..6)$ damage, which in total is more damage per round than he would deliver using the broad sword! Let's compare what happens if the warrior magically enchants the damage of both weapons, using "Scrolls of Enchant Weapon To-Dam" (these scrolls can be bought in shop '5'). One of these scrolls can enchant a weapon so one extra point is added to the damage dice after they have been added. If we manage to enchant the damage of the broad sword 9 times, the weapon will look like this:

"Broad Sword (2d5) (+0,+9)"

That means after 2 dice with 5 sides each have been added up, there will be further 9 points of damage added to the result!

Broad Sword 2d5 (+0,+9) 1 blow per round --> $1 * [2 * (1..5) + 9]$ damage
--> $2 * ((1+5)/2) + 9$ average damage which is 15 per round.

Whip 1d6 (+0,+9) 2 blows per round --> $2 * [1 * (1..6) + 9]$ damage
--> $2 * [1 * (3,5) + 9]$ --> $2 * 12,5 = 25$ damage per round!
Far more than with the broad sword.

As you can see, the additional damage caused by enchantment will be added to the dice result.

If you manage to get your hands on an item that imbues your melee weapon with an elemental brand (like a Ring Of Ice for example), the dice of your weapon will be multiplied by 2 if the target doesn't resist that brand. See (5.3) to get an easy overview.

Characters using weapons have a limited number of melee attacks per round, depending on the character class. A table showing the blows/round limits is at section (6.5).

There are four different classes of melee weapons, swords/daggers, blunt weapons, axes, polearms. (Also see (5.1a) below!) You may inspect a weapon by pressing 'I' to see its base class. For items listed in a store, the command is 'x' to examine it. Those again are divided into four sub-classes each: Single-handed, forced two-handed, should-be-wielded-two-handed, may-be-wielded-two-handed. If you inspect a weapon, it will tell you if it belongs to one of the latter three sub-classes:
"It must be wielded two-handed" (MUST2H)
"It should be wielded two-handed" (SHOULD2H)
"It may be wielded two-handed" (COULD2H)

While smaller melee weapons require only 1 hand to use them, some larger weapons need 2 hands. Using a shield together with those is not possible. Some larger weapons that should be used two-handed can also be used single-handed, but you will receive penalties to to-hit and to-dam bonus if you use it that way. Look at your character screen ('C') to compare the to-hit/to-dam boni and see if it's worth it. You'll see a warning message "Using this large weapon together with a shield makes fighting harder."

Medium weapons which 'may' be used two-handed won't give malus if used single-handed, but you might get more blows per round if you wield them with both hands! Again check your character screen ('C') to spot any difference. You'll see "Without shield, your weapon feels especially easy to swing.". Depending on weapon weight, your strength and your dexterity, sometimes you get more blows/round from it, sometimes you don't.

If you try to wield a weapon that is too heavy for your character, meaning your 'STrength' stat isn't high enough yet, you'll get a warning message: "You have trouble wielding such a heavy weapon". This means you won't get any benefits from your 'Weaponmastery' skill, nor any extra blows per round at all, instead you'll be stuck with 1 blow/round. Also, you'll be more prone to disarming attacks.

Similar is possible for shields. If you try to use a shield which is too heavy for you, you'll get another warning message:

"You have trouble wielding such a heavy shield".
That means you will hardly be able to deflect anything with this shield and won't get any 'reflection' ability from it, if it provides this.
All other abilities you gain from it are not affected though (eg resistances or stat boni), you will benefit from these just fine.

Your character might have a chance to parry attacks with his weapon and block attacks with his shield, provided he uses one.
For more details about class-specific ability to utilize weapons and shields for parrying and blocking, see (6.5), for more details about parrying and blocking in general see (6.11).
In general, the bigger a weapon the more you may parry, while the bigger a shield the more you will block!
Last but not least, training "Weaponmastery" skill will also increase your parry chance a good deal.

(5.1a) Melee weapon types

As mentioned previously, there are four weapon classes:
Swords, axes, blunt weapons (whips, hammers, morning stars etc.), polearms.

You may wonder which one to choose and why. In general, if your character is especially skilled at one of the four masteries you might want to pick that one to save skill points (for example Half-Trolls get a bonus on Blunt-mastery).

Also, priests cannot use edged weapons that aren't 'blessed' (a special magical property, ie ego-power), so if you want to create a melee-oriented priest, you will usually pick blunt weapons (or 'Martial Arts' instead, for weaponless combat, making more for a monk-style character).

However, if you have a choice or don't care about a few skill points more, you may want to consider the following table to help you make a decision:

Type	1h/1.5+2h abundance	2h top damage/weight	Base item level 1+1.5h/2h
Swords**	very high / medium	medium / medium	low / mid
Axes*	medium / medium	high / heavy	low / high
Blunt	medium / high	high / very heavy	low / mid
Polearms*	low / high	high / medium	low / mid

* Note that these weapon types can (partially) obtain VORPAL mod from 'Sharp' or 'Spinning' ego power (see (5.8)):

** For randarts, only swords can spawn the VORPAL (see (5.8)) mod:
Damage-wise 2h-swords with VORPAL flag can make up somewhat for the damage gap towards the top tier weapons of the other weapon classes.
VORPAL mod makes an especially big difference in scenarios that are low on critical hits (ie no CRIT item flag or Critical-strike skill being applied).

For example if you stick with dual-wielding two weapons, you might want to go with swords and definitely not with polearms, since there are a lot of 1h swords, and very few 1h polearms.

The base item level determines at which depth you will start finding that item. Also, normal town stores usually only sell low level weapons and armour while black markets tend to prefer mid (normal black market) or high (special black markets) level items.

In-game you can press 'I' (or 'x' if inside a store) to inspect an item. Even if you haven't *identified* it, it will still tell you the weapon class the item belongs to, if it is a weapon.

(Swords can be damaged by acid-based attacks, all other weapon types can be damaged by both fire- and acid-based attacks.)

(5.2) Ranged Weapons, brands

Ranged weapons are not to be underestimated, they can be very powerful. Especially characters with low Hit Points will love them since approaching hordes can be killed at a distance or at least driven back, so they won't come close and hit the player with devastating blows. It is recommended that you

equip a ranged weapon as soon as possible, and enchant its 'to-damage' to at least +7 !

Ranged weapons have to-hit and to-dam like melee weapons, but instead of dice they have a 'multiplier'.

Example: Ranged weapon is: Long Bow (x3) (+0,+5)
Ammunition is: 65 Arrows (1d4) (+0,+2)

If you shoot an arrow, it will inflict
(1d4 +2 +5) * 3 damage on the victim. The dice of the arrow varies from 1 up to 4, so we can do a damage of 24 up to 33, so the average damage is 28,5. We can see here that ranged weapons can do a lot of damage :)

Ranged weapons will be placed in equipment slot 'c)'. After you equipped one, you need to also equip ammunition that will be used. For example if you use a long bow, you need to fill your quiver with some arrows. (w)ield the arrows, and they will be placed into equipment slot 'm)', the ammo slot. A macro that shoots at the target closest to you, looks like this: *tf-
Explanation in case you really want to know: * means entering targetting mode and choosing nearest target, t means exiting target mode and remember currently selected target, f means fire, - means to aim at previously acquired target if it's valid and otherwise to cancel the action.
To automatically pick up your arrows simply inscribe them: !=
To inscribe an item press '{' key, to remove an inscription press '}'.
Ranged weapons can also auto-retaliate, that means you will fire automatically at targets on sight. See (4.1a) for details about auto-retaliation. However, auto-retaliating with a ranged weapon works only if the enemy stands on an adjacent field, so use 'fire-till-kill' mode in general!

The dice of ammunition are also effected by brands and slays same as normal weapons but the additional damage is reduced to 2/5.
Example: Ring of Acid will usually add 1x your melee base damage (weapon dice). For ranged weapons it will add 1*2/5x of your base damage (arrow dice), so multiply the average arrow dice result by 1.4 instead of by 2 to get your total damage output. See (5.3) to get an easy overview.

If you try to wield a ranged weapon that is too heavy for your character, meaning your 'STrength' stat isn't high enough yet, you'll get a warning message:

"You have trouble wielding such a heavy bow".

That means you'll get neither any benefits from your 'Archery' skill nor from any particular ranged mastery (extra shots!) at all when using that weapon.

Note: +damage bonus from other items besides the ranged weapon itself or the ammunition it uses will not be added to ranged attacks, while +hit bonus will. This means for example that 'a Ring of Slaying (+10,+12)' will add +10 to both your melee hit chance and your ranged hit chance, but the +12 damage will only be added to your melee damage, not your ranged.

Also see 'Armour weight (concerning ranged weapons)' further below in (5.5) for details about how wearing armour affects your ranged weapon accuracy.

(5.2a) Fire-till-kill mode

Accessible via 'm' key, you can switch 'fire-till-kill' mode on or off. While enabled, your character will keep firing a ranged weapon (ie a weapon in your 'shooter' equipment slot) once you initiated the first shot until the target either dies or direct firing at it becomes impossible/obstructed for any reason.
The main use besides making ranged weapon usage more relaxed is that you are able to single out enemies you want to kill of big monster packs such as escorts.

Fire-till-kill mode also works with spells and runes, same as with ranged weapons, except it may stop under additional conditions such as having no more mana or other effects that render you 100% unable to cast spells. While it will also stop if your spell requires a clear line of sight and would (while travelling to the target) hit other monsters on the way, some spells which don't travel to their destination but arrive instantly (most notably ball spells and mindcrafter spells) will not be affected by monsters crossing your line of sight.

To manually stop fire-till-kill without moving or performing any other action,

just press the SPACE key. Note that SPACE also stops all other kinds of repeatable actions such as searching or tunnelling.

Fire-till-kill does not work with any other type of attacks besides those mentioned above.

(5.3) Slaying vs brands

If you use a weapon that slays trolls, that means its dice will be doubled if you hit a troll ('T'). If you have an item that gives fire brand, the dice would also be doubled by the brand. Slaying and brands are not cumulative. That means you will get a total dice multiplier of 2 here. Brands don't stack. The best one is taken. So if you wear a ring of fire and your weapon does cold damage the dice will be multiplied by 2 if the target doesn't resist both heat and cold. If the target is susceptible to one of those the dice are multiplied by 4. Same goes for SLAY flags.

Combat Type	Dice multiplier for brands (fire/cold/acid/lightning/poison)				
	Monster..	..is immune	..resists	..doesn't resist	..is susceptible
Melee Weapon	1	1.5	2	4	
Ranged Weap.	1	1.2	1.4	2.2	
Martial Arts	1	1.25	1.5	2.5	

Slaying	Dice multiplier	Description
Slay Animal	1.5	It is esp. deadly against natural creatures.
Slay Giant	2	It is especially deadly against giants.
Slay Undead	2	It strikes at undead with holy wrath.
Slay Troll	2	It is especially deadly against trolls.
Slay Orc	2	It is especially deadly against orcs.
Slay Dragon	2	It is especially deadly against dragons.
Slay Demon	2	It strikes at undead with holy wrath.
Slay Evil	1.5	It fights against evil with holy fury.
Kill Undead	3	It is a great bane of undead.
Kill Dragon	3	It is a great bane of dragons.
Kill Demon	3	It is a great bane of demons.

Same as in the 'brands' table, x1.5 will become x1.2 for ranged weapons and x1.17 for Martial Arts, x2 becomes x1.4 and x1.33 and x3 will become x1.8 and x1.67 respectively.

Giants, Undead, Trolls, Orcs, Dragons, Demons are all 'Evil'.

If several multipliers match the highest one will be used.

For ranged weapons, the damage calculated from brands/slays applied to ammo dice will further be multiplied by the bow's multiplier (x2..x5, depending on the type of sling, bow or crossbow).

(5.3a) Martial Arts, brands

The "auto-retaliator" (see (4.1a)) also works if you fight bare-handed.

Training Martial Arts will give you..

- a bonus to-hit and to-dam.

- special combat moves which your character will use automatically.

These moves do a lot of extra damage and often additionally stun or slow your opponent.

- special abilities and resistances (like Free Action, see (6.2) for details).

- extra speed and stealth bonus.

- extra AC bonus for each part of armour that is NOT worn.

Increasing your Martial Arts skill lets you wear light and even medium armour and still benefit from its AC.

- a chance to grab your enemies to prevent them from casting or teleporting.

(This chance adds to your interception skill.)

However, to use the full potential of martial arts you will need to take care of several points..

- a very light backpack will give martial artists a small additional speed and

stealth bonus. (No warning message here.)

- a very heavy backpack will nullify the abilities and resistances, as well as the speed and stealth bonus! You will see a red warning message, telling you about weight encumbrment:
"You can't move freely due to your backpack weight."
- using too heavy armour will cut your number of blows per round to half, and nullify your to-hit, to-dam, speed and stealth bonus from MA.
- using a melee or ranged weapon or carrying a very heavy backpack will nullify the AC bonus from Martial Arts, and greatly reduce your number of blows per round.
- using a melee or ranged weapon or a shield will nullify the special combat styles, reducing your damage.
- using a melee or ranged weapon or a shield or wearing too heavy armour will reduce additional interception bonus gained from Martial Arts skill to zero.
- using a heavy shield, melee or ranged weapon will nullify your speed and stealth bonus.

The backpack weight limit includes the weight of your equipment and is depending on your strength and Martial Arts skill. It is $10.0 \text{ lb} + (\text{str_wgt} * 2.0 \text{ lb}) + ((\text{str_wgt} + 5) * \text{rounddown}(\text{skill} * 0.1 \text{ lb}))$.

Here's a table to tell you the values for str_wgt:
(Warning message is: "You can't move freely due to your backpack weight.")

str_wgt	STrength of the character	str_wgt	STrength of the character
5	3	16	14
6	4	17	15
7	5	18	16
8	6	19	17
9	7	20	18/00-18/09
10	8	22	18/10-18/19
11	9	24	18/20-18/29
12	10	26	18/30-18/39
13	11	28	18/40-18/49
14	12	30	18/50-18/220+
15	13		

The armour weight limit is $5.0 \text{ lb} + \text{Martial Arts skill level} * 0.42 \text{ lb}$.
So for MA 50 it is $5.0 + 21.0 = 26.0 \text{ lb}$.
If your armour becomes too heavy, you will see this warning message:
"Your armour weight strains your martial arts performance."

Here's a table, for those who prefer this view:

Equipment/inventory	+hit/dam	abilities	styles	spd/stl	+AC	grab	blows
Light backpack				+			
Heavy backpack		0		0	0		0
Heavy armour	0			0		0	50%
Any melee weapon			0		0	0	0
Any ranged weapon			0		0	0	0
Any shield			0			0	
Heavy shield/weapons				0			

Martial Arts special combat moves have certain dice, similar to normal weapons. These dice are also effected by brands and slays same as normal weapons but the additional damage is reduced to 1/3.
Example: Ring of Acid will usually add 1x your base damage.
For MA it will add 1/3 of your base damage, so multiply your base damage by 1.33 instead of by 2 to get your total damage output.
See (5.3) to get an easy overview.

You cannot use special moves while stunned or confused.

Here is a list of Martial Arts special moves:
A move is picked randomly, then used if $\text{random}(1..MA_Skill) > \text{chance}$.
If the chance fails, another move is picked.
There are $MA_Skill / 7$ tries to find a move, otherwise you will hit without a special move. There is always at least 1 try to pick a move.

Move	Min.level	Chance	Damage dice	Effects
Punch	1	0	1d4	-
Kick	2	0	1d6	-
Strike	3	0	1d7	-
Knee	5	5	2d3	Stunning & increase chance to stun again
Elbow	7	5	1d8	-
Butt	9	10	2d5	-
Kick	11	10	2d5	Slowing (PvM)
Uppercut	13	12	4d3	Stunning
Double-kick	16	15	4d4	-
Cat's Claw	20	20	6d3	-
Jump Kick	25	25	3d9	Stunning
Eagle's Claw	29	25	7d4	-
Circle Kick	33	30	4d9	-
Iron Fist	37	35	6d6	Stunning
Flying Kick	41	35	5d8	-
Dragon Fist	45	35	6d8	Stunning
Crushing Blow	48	35	8d7	Stunning
For winners, ie kings/queens only:				
Titan's Fist	48	45	8d5	Stunning
Phoenix Claw	48	45	5d9	Slowing (PvM)

Depending on your MA skill, you have a fixed number of barehanded attacks per round, independent of your character class, your strength or your dexterity (unlike characters that use weapons):

(The attack number can be increased further by items like rings of extra attacks or by magical influence like priest prayer 'Zeal'.)

Note that EA effects (like EA ring or Zeal prayer) won't work on characters who fight barehanded without having Martial Arts skill at 01.000 or higher!

Martial Arts skill level	Attacks per round
1	2
10	3
20	4
30	5
40	6
45	7
50	8

Martial Arts users have a higher risk of being infected with Black Breath from high undead monsters than weapon-users.

Also, they have a high risk of being badly cut if a monster uses a disarming attack against them.

(5.4) Application of attack-affecting item mods

While item abilities such as resistances or stat boosts are always applied, magical mods that affect attacks might not be.
Such mods are:

+to-hit, +to-dam, extra attacks, critical hits, vampiric, slays and brands.

These mods on weapons are only applied to attacks done with that particular weapon.

Except for 'extra attacks', which generally increases your number of attacks and will not discriminate which weapon will be used for attacking if you are dual-wielding - both weapons always have a 50% chance each blow.

These mods on other items, like gloves or rings, will affect all weapons, even ranged ones, and also martial arts!

Exceptions:

- +to-dam boni will not be applied to ranged weapons, only to melee attacks.
- Extra attacks are not applied to ranged weapons, only to melee attacks.
- Vampirism effect will be weaker (compare table at the end of (5.15)).

(5.5) Weight of weapons and armour

Weight of items in your inventory or equipment can have great effect on martial artists. If you use martial arts, also see (5.3a) for more information.

Even if you're not using martial arts, there are certain types of encumbrment which may affect your character:

Weapon weight

If your melee weapon or ranged weapon is too heavy you will hardly be able to use it, resulting in reduced attack number per round and less damage. You will get the message "You have trouble wielding such a heavy weapon/bow" and probably your blows will drop to 1 and tohit/todam go near to zero. A weapon is too heavy for you if its weight is greater than the so-called str_hold value. Below is a table with the str_hold values, depending on a character's strength:

str_hold	STrength of the character	str_hold	STrength of the character
4	3	45	18/40-18/49
5	4	50	18/50-18/59
6	5	55	18/60-18/69
7	6	60	18/70-18/79
8	7	65	18/80-18/89
10	8	70	18/90-18/99
12	9	80	18/100-18/109
14	10	80	18/110-18/119
16	11	80	18/120-18/129
18	12	80	18/130-18/139
20	13	80	18/140-18/149
22	14	90	18/150-18/159
24	15	90	18/160-18/169
26	16	90	18/170-18/179
28	17	90	18/180-18/189
30	18/00-18/09	90	18/190-18/199
30	18/10-18/19	100	18/200-18/209
35	18/20-18/29	100	18/210-18/219
40	18/30-18/39	100	18/220+

Armour weight (concerning magic)

Wearing armour which is too bulky gives you this message:

"The weight of your armour strains your spellcasting."

That means your mana will be (severely) reduced from the bulkiness of your armour. To counter this effect, train your 'Combat' skill.

To cast freely, you may wear 15.0 to 30.0 lb of armour (depending on your class and hence the type of magic you utilize) plus your combat skill (in 0.3 lb). Here is a table illustrating the values:

Adventurer	21.0 lb
Warrior	-
Istar	15.0 lb
Priest	25.0 lb
Rogue	20.0 lb
Mimic	28.0 lb
Archer	-
Paladin	30.0 lb (also Death Knight/Hell Knight)
Ranger	22.0 lb
Druid	20.0 lb
Shaman	17.0 lb
Runemaster	23.0 lb
Mindcrafter	26.0 lb (and will get penalty for head gear heavier than 4.0 lb)

So 50 points in 'Combat' would allow a paladin to wear $30.0 + 15.0 = 45.0$ lb of armour parts without receiving mana penalty from being encumbered. In general, praying is the easiest-to-use form of magic, and weaving spells the most difficult one.

Your total armour weight is the sum of the weight of any armour pieces worn

on head (helmet), body, hands, feet, and your cloak. Note that the weight of a possibly equipped shield does not matter here (experimental).

Armour weight (concerning sneakiness/to-hit boni)

Wearing armour which is too heavy for you will reduce speed bonus from 'Sneakiness' skill and your to-hit boni received from your dexterity and weapon class' mastery skill (eg Sword-mastery).

You will receive a warning message, telling you:

"The weight of your armour encumbers your movement."

To move freely, you may wear 10.0 lb of armoury plus a strength-factor plus $0.6 * \text{your combat skill}$. Strength factor is $0.6 * \text{str_hold}$ (see table above to find your str_hold). So the top weight limit is

$10.0 + 0.6 * 50 \text{ (combat)} + 0.6 * 100 \text{ (str_hold)} = 100.0 \text{ lb.}$

(Inspecting an item causing this type of encumbrment would display that it encumbers "your movement" accordingly.)

Armour weight (concerning flexibility boni and abilities)

Some special abilities depend on armour weight (including shield) too.

Those are..

- dodge chance from 'Dodging' skill.

- critical hit bonus from 'Critical-strike' skill.

- extra parry bonus from dual-wielding two weapons. (Also see (6.11).)

- extra blow/round bonus from dual-wielding two weapons.

- area searching for the 'Rogue' class (exclusive ability).

- cloaking mode for the 'Rogue' class (exclusive ability).

If the armour becomes too heavy to perform those, a message will appear:

"The weight of your armour strains your flexibility and awareness."

This 'rogueish weight limit' (the skills are mostly used by rogues) is:

$20.0 + (\text{Combat skill} * 6 / 50) \text{ lb, ie max } 26.0 \text{ lb.}$

IMPORTANT: If you get the above flexibility warning message, that means your secondary weapon is NOT APPLIED AT ALL!

So you won't receive any boni/resistances/whatever from it, it's basically as if you don't have it equipped at all.

Armour weight (concerning ranged weapons)

If you wear a shield on your arm, no matter its weight and your strength, your hit chance with ranged weapons will be reduced by this encumbrment. You will get an orange message saying

"You find it hard to aim while carrying your shield."

and a yellow '}' icon will appear in the encumbrment bar.

Also, the greater your total equipped armour weight is, the more your ranged to-hit bonus is reduced. This is a fluent, continuous process, and therefore it's not considered an 'encumbrment' per se, ie you won't see any icons in the encumbrment bar about this.

Glove encumbrment (concerning magic)

Wearing gloves as a sorceror may reduce your maximum mana points if they are not magically enchanted, such as:

Providing 'Free Action' / increasing your mana / increasing your dexterity.

You will receive a warning message, saying:

"Your covered hands feel unsuitable for spellcasting."

Also see (3.2) at the end of the chapter, for information about the 'Encumbrment status line'.

Very heavy armour and/or heavy items in your inventory may also slow you down (slightly reduce your moving speed) if your STrength isn't very great.

(5.6) Resistances & caps, Immunities, Susceptibilities

Resistances & caps

Several monsters or traps can cause elemental attacks on you. These attacks can deliver very high damage if you do not 'resist' the specific attack type. Those 'resistances' become very important in deeper dungeons where many monsters are able to breathe on you with devastating power.

Permanent resistances (for example if you wear a ring and an armor that both give fire resistance) will not stack. So one item is sufficient for each resistance. There is no difference if it's a helmet or an armour. However, a temporary resistance (by potion or spell) and a permanent resistance can stack (NOTE: This only applies to base and poison resistance, base ones being fire, cold, electricity and acid). That means if you quaff a 'potion of resist heat' (temporary resistance) and wear an armour of fire resistance (permanent resistance) fire attacks will do only $1/3 * 1/3 = 1/9$ of the original damage. This is known as 'double resistance'. For more information on resistance/ability stacking see (5.17).

For all attacks the following way of how the final damage is calculated applies:

If a monster breathes, that attack often has a damage potential of $1/3$ of the monster's hit points.

This 'raw' damage will now be capped at a maximum value that varies for the different types of attacks.

If you 'resist' that attack, the damage will be cut to further $1/3$ (this value varies for the different types of attacks).

Example:

An Ancient Red Dragon breathes fire.

It has 1500 HP. The fire breath would do approx. 500 damage.

The damage cap for fire attacks is 1200. So the value of 500 remains.

Let's assume that your character resists fire. The damage will be cut down to $1/3$ now, leaving 170 damage.

Example 2:

A Great Hell Wurm :) breathes fire.

It has 5000 HP. The fire breath would do approx. 1700 damage.

Since 1700 is greater than the cap (1200) it becomes 1200.

Let's assume your character resists fire. The damage will be cut down to $1/3$, leaving approx. 400 damage.

Global damage cap

Breath damage is capped, the number is given in the corresponding description and actual breath damage generally depends on the monster's current hit points.

Bolts and balls depend damage-wise on the level of the casting monster as the formulas show and is not as strictly capped as breath damage.

However, all breaths and magical attacks (such as bolts and ball spells) are subject to a global magical damage cap of 1600. Even though breaths are not strictly magical spells.

Keep in mind that susceptibility may still double that damage though, as it is applied after the global damage cap. So a susceptible target could suffer up to 3200 damage.

There are four so-called 'basic resistances'. These are

Fire/Heat

These attacks can burn items in your inventory.

They can also damage your equipment.

Without resistance it can reduce your strength.

Fire bolts do $(\text{level}/3) + (9d8)$ damage.

Fire balls do $(\text{level} * 7/2) + 10$ damage.

Fire breaths do $\text{HP} / 3$ damage, capping at 1200.

Immunity or double resistance protects items in your inventory from getting harmed (5.10), (5.17).

Potions of resist heat are a cheap way to attain

Frost/Cold	double-resistance for a short time in order to pass lava streams without your inventory taking damage.
	These attacks can shatter potions.
Lightning/Electricity	Without resistance it can reduce your strength.
	Frost bolts do $(\text{level}/3)+(6d8)$ damage.
	Cold balls do $(\text{level}*2)+10$ damage.
	Cold breaths do HP / 3 damage, capping at 1200.
	Immunity or double resistance protects items in your inventory from getting harmed (5.10), (5.17).
Acid	These attacks can destroy rings, damage amulets (reducing their (+X) bonus pval) and discharge magic devices, draining their charges (or energy in case of rods).
	Without resistance it can reduce your dexterity.
	Lightning bolts do $(\text{level}/3)+(4d8)$ damage.
	Lightning balls do $(\text{level}*3/2)+8$ damage.
	Lightning breaths do HP / 3 damage, capping at 1200.
	Immunity or double resistance protects items in your inventory from getting harmed (5.10), (5.17).
	These attacks can destroy items in your inventory.
	They can also damage your equipment.
	Without resistance it can reduce your charisma.
	Acid bolts do $(\text{level}/3)+(7d8)$ damage.
	Acid balls do $(\text{level}*3)+15$ damage.
	Acid breaths do HP / 3 damage, capping at 1200.
	Immunity or double resistance protects items in your inventory from getting harmed (5.10), (5.17).

Note: Equipment is mostly safe, except that some weapons can take damage from coming in contact with fire, acid or water, depending on the item type. Also, armour can be damaged by fire, acid or water, depending on its material. Items which ignore an element, resist it, or even provide immunity against it are unaffected by any attack of that type and won't take damage. Taking damage means that weapons will lose +dam enchantment, and armour will will lose +AC enchantment, so you can repair them again by either using the armoury's repair service or -in tougher cases- reenchanted them. If your character resists a specific element, the chance of any item getting damaged by it is reduced. Having double resistance will reduce it much further even.

Note that double resistance will completely prevent any inventory damage from the elements; this is especially important for characters who carry a lot of potions that they don't want to get destroyed by cold-based attacks. If your character is immune to an element (see further down), that will completely prevent any sort of damage from that particular element for any item you carry, wield or wear.

All artifacts are completely immune to any elemental damage.

Breath damage before capping is monster HP/3. Damage of these attacks is capped at 1200 (always before resistances are applied).

If you resist them, the damage will be cut to 1/3. If you are susceptible to them, like Ents to fire, you will take twice the damage! This also applies for aura attacks like hitting someone who wears a cloak of immolation.

To prevent side-effects of the attacks on your inventory from occurring you will need the according immunity! Resistance is only sufficient to protect your equipment, not your inventory.

While wands and staves can be destroyed by according elemental attacks, rods cannot be destroyed but only discharged (see elemental attack list above).

Semi-high resistances

Poison	Poison resistance doesn't belong to the basic resistances but to the high resistances, yet is also very essential already from the early stages of your character's life on.
	If you resist poison you will not only take just 1/3 of the poison damage but also be protected from poisoning effects.
	Breath damage before capping is monster HP/3. Poison breath caps at 800.
	Stinking clouds, which are small poison balls, inflict 12d2 damage.
Unbreath	A special type of poison, castable by mages.
	This one will deprive the air of all oxygen, thereby also deal damage to otherwise poison-immune monsters.
	The only monsters immune to this are those that do not require

to breathe, which means undead, greater demons, angels and nonliving constructs.

Make sure that you have the basic resistances as soon as possible, and poison resistance before going into deeper Mordor. Also, get 'Free Action' before going as deep as about -1000 ft or deeper since many monsters can paralyze you.

There are also five minor resistances:

Fear	While you're afraid you won't be able to attack a target in close combat.
Blindness	You cannot read scrolls or books while you're blind. Blindness can be caused directly by a blindness attack or by indirectly by light or darkness attacks if you don't resist those. You still can use magic staves, rods or wands and quaff potions. Quaffing a potion of Healing, Curing or Cure Critical Wounds will remove the blindness.
Confusion	While confused you cannot move, shoot or fight straight. Further, you're unable to read scrolls or books. However, you still can use staves, wands and rods. Quaffing a potion of Healing, Curing or Cure Serious/Critical Wounds will remove the confusion. Resisting confusion or chaos will lower damage to 5/7..5/12. Breath damage is monster HP/6. Confusion damage caps at 400. Confusion resistance is covered by chaos resistance, so if you already resist chaos then you don't need any more items that give confusion resistance. (Monsters that have the NO_CONF flag will resist somewhat and suffer less damage.)
Paralysis	Paralysis can be caused by bashing doors, lack of food, by traps and by monsters. Against the latter two effects you can become immune by equipping a 'Free Action' item. You should become immune to paralysis before descending below 1000 ft.
Hold Life	This will provide some protection against experience drain; it won't help against experience drain inflicted by items you equipped though.

Note: 'Feather Falling' reduces damage taken from gravity attacks, although it is technically not a resistance. 'Levitation' includes 'Feather Falling', so if you have a source granting you levitation then you don't need another one for feather falling. (Same as chaos resistance also gives confusion resistance.)

Further, there are several high resistances:

(Poison	was described above, at the end of the basic resistances.)
Water	Water resistance is rare (an *ID*ed item will say 'it provides resistance to unleashed water'). Water attacks can stun and confuse you if you don't resist them and usually do a lot of damage. Resistance will cut damage to 1/3. If you're mimicking an aquatic monster the damage will be further cut down to 1/4. If you don't wear a 'tarpaulin' items in your inventory might be destroyed by the water (if they don't resist water). Water bolts do (10d10)+level damage. Water balls do 50+(1...[level*5/2]) damage. Note: The confusion effect can be prevented by confusion resistance, and the stun effect by sound resistance.
Sound	Sound attacks do less damage but can stun you or even knock you out so you will die as if you were paralyzed. Free Action won't help you then. Resistance will cut damage to 5/7..5/12. Damage is reduced by further 50% if bio-feedback is active. (Bio-feedback is activated if a Draconian eats a firestone and gets the 'adrenaline' message. See (5.9) for firestone details.) Sound resistance will protect you from stunning effects. Breath damage is monster HP/6. Sound breath caps at 400. (Monsters that have the NO_STUN flag will resist somewhat and suffer less damage.)
Shards	Resistance will cut damage to 6/7..6/12.

Damage is reduced by further 50% if bio-feedback is active.
(Bio-feedback is activated if a Draconian eats a firestone and gets the 'adrenaline' message. See (5.9) for firestone details.)

Nexus	Shard resistance will protect you from cuts. If you don't have it you might get nasty cuts that make you bleed over time. Breath damage is monster HP/6. Shard breath caps at 400. Nexus attacks can have extremely nasty side-effects if you don't resist them. Those are -Teleport you randomly. -Teleport you towards the monster. -Teleport you a dungeon level higher or lower. -Swap two of your six stats randomly! ("Your body starts to scramble") This change is permanent and there is no remedy against it except for getting hit by more nexus deliberately and hoping for a 'good' scramble result eventually. -Destroy items in your inventory. ("Your backpack starts to scramble") Resistance will cut damage to 6/7..6/12. Breath damage is monster HP/3. Nexus breath caps at 250. Chaos attacks can also have nasty side-effects if you don't resist. These are: -Confuse you. -Let you hallucinate. -Drain some experience. Resisting 'Nether' will also prevent this. Having 'Hold Life' will also provide some protection against life draining. Resisting chaos will also make you resist confusion attacks. Resisting chaos will prevent hallucination from certain mind blast attacks. Resistance will cut down damage to 6/7..6/12. Breath damage is monster HP/6. Chaos breath caps at 600. Raw chaos invocation (chaos ball) does (level*4)+(10d10) dam.
Light	Light effects can blind you if you don't resist it. Resistance will cut damage to 4/7..4/12. If you are mimicking a monster that is susceptible to light you will suffer double damage from attacks. Breath damage is monster HP/6. Light breath caps at 400.
Darkness	Darkness effects can blind you if you don't resist it. Resistance will cut damage to 4/7..4/12. Breath damage is monster HP/6. Darkness breath caps at 400. Darkness Storms (balls) do (level*5)+(10d10) damage.
Nether	Nether is kind of 'the element of undead' - most higher level undead creatures will have a nether attack of some sort. Resistance will cut damage to 6/7..6/12 and prevent all life draining (experience loss) from nether attacks. Breath damage is monster HP/6. Nether breath caps at 550. Nether bolts do 30+(5d5)+(level*3/2) damage. Nether balls do 50+(level*4)+(10d10) damage. If you lack nether resistance, having 'Hold Life' ability can at least offers some protection from experience loss.
Disenchantment	This attack does massive damage and can also disenchant your equipped items, lowering their to-hit/to-dam/to-ac bonus! It can also destroy ethereal ammunition. Resistance will cut damage to 6/7..6/12 and prevent disenchantment of your equipment. Breath damage is monster HP/6, it caps at 500. Disenchantment bolts do 25+(4d5)+(level*3/2) damage. If disenchantment hits items on the floor, it can even reduce their magical (+X) pval bonus. Artifacts have a chance to resist disenchantment.

Irresistible/extremely powerful damage types:

Force	Pure force impact (BR_WALL). Raw damage is monster HP/6. Force impact (breath only) is capped at 200 and irresistible. If you lack sound resistance you will get stunned.
Inertia	Inertia attacks will slow you down a lot. There is no 'Inertia resistance' but 'Free Action' will slightly reduce the slowdown duration.
Gravity	Damage (breath only) is monster HP/6 and caps at 200. These attacks have very annoying side-effects:

	-Teleport you randomly.
	-Slow you down.
	-Stun you if you don't resist sound.
	It's impossible to resist gravitation. However, having 'Feather Falling' will reduce the damage your body takes from being thrown around by the shockwave and hence cut the damage to 6/7..6/12.
Mana	Damage (breath only) is monster HP/3 and caps at 150. Mana is pure magical energy. There are only rumours about items that provide resistance against it. Resisting it will cut damage to 6/7..6/12. Breath damage is monster HP/3, breath caps at 250. Only very few monsters (mostly uniques) can breathe mana. Mana bolts do $50+(1...[\text{level}*7/2])$ damage. Mana storms (balls) do $(\text{level}*5)+(10d10)$ damage. Beware!
Time	Time is pure temporary distortion. There are only rumours about items that provide resistance against it. Time attacks can have very nasty side effects: -Drain experience (Hold Life won't help). -One of your stats can be lowered (resistance will reduce the amount; for runespell backlash damage in particular resistance will even prevent all drain effects completely). -Drain all your stats (resistance will prevent this). Resistance will cut damage to 6/7..6/12. Breath damage is monster HP/3. Time breath caps at 150.
Meteor	This is an irresistible attack of pure impact. Sound resistance will prevent stun effect.
Disintegration	This is an irresistible attack of raw destruction. Damage (breath only) is monster HP/3, capping at 300.
Combined damage types: -----	
Ice	Ice attacks combine shard and cold damage. Ice damage (bolt only) is $(6d6)+\text{monsterlevel}$. Ice damage consists of 60% cold damage and 40% shards damage.
Plasma	Plasma attacks combine raw force, electricity and, mostly of all, immense heat. The usual resistances, susceptibilities and immunities for fire, electricity and sound apply as available. Plasma also has stun effect if sound resistance is missing. Breath damage is monster HP/6. Plasma breath caps at 150. Plasma bolts do $10+\text{level}+(8d7)$ damage.
Radiation/Nuke/ Toxic Waste	This is a poisonous attack (player suffers pure poison damage) that may have acidic effect on your inventory (inventory may get destroyed as if you were hit by acidic attacks). If you resist poison - you will just take 2/5 of the damage - you will be protected from being poisoned - your equipment will be safe from acidic damage. Breath damage is monster HP/3 and caps at 800. Nuke balls (radiation balls) do $(\text{level}*3)+(10d6)$ damage.
Rocket	Rockets combine fire, shard & sound effects and can also damage your inventory. Rockets do insane damage if unresisted: Rocket damage is monster MaxHP/4, it caps at 800. Shard and sound resistance will lower damage by 1/6 each, fire resistance will lower damage by 1/5, fire immunity by 1/4 (overriding fire resistance). These reductions stack (as in they are consecutively applied to the damage). Shard resistance will prevent cuts, sound resistance will prevent getting stunned. (Technically, rockets are similar to breath attacks.)
Detonation	Same as rocket.
Inferno	Same as detonation, except it does not destroy walls.
Havoc	A terrible mixture of wrecking Inferno, blasts of uncontrolled mana and waves of raw chaos.

There is also a special 'Teleportation Resistance', giving the self-knowledge line: "You resist incoming teleportation effects."
Having this will give the character a good chance to not be affected by most teleportation effects from traps or monsters (teleport-away and teleport-to).
Nexus-related teleportation is also affected by this, gravity however is not.

Immunities

Players can become immune to the basic elements and poison by wearing items (for example dragon scale mails of the corresponding colour) or by transforming into a monster shape that carries the according immunities (see (6.7) about mimicry details).

If a player is immune to an element, (s)he won't take any damage from those attacks nor be affected by any side-effects.

Example: Wearing the unique cape 'Ocean Soul' which as a special feature provides water immunity makes the player take 0 damage from a water bolt attack and also protect him from the stun+confuse effect of water bolts.

(It won't protect him from the stun/confuse effect of other types of attacks though, for example a sound or confusion breath.)

Susceptibilities

Some monsters and players are susceptible against certain elements. For example fire hounds are susceptible against cold attacks and Ents are susceptible against fire attacks.

Branded physical attacks vs monsters:

Susceptibility of a monster will result in a doubled multiplier for branded attacks. Example: If the player hits a Cold Hound with a fiery broad sword (2d6) the Cold Hound will receive $2d6 * 4$ damage instead of $2d6 * 2$ (usual brand multiplier for melee weapons).

Also see (5.3) for a table of brand multipliers.

Magical attacks vs monsters:

Susceptibility of a monster will result in double damage for the according elemental attacks (ie cold ball vs fire hounds).

Magical attacks vs players:

If a susceptible player without resistance or immunity is hit by the according elemental damage type, the damage will be doubled! The susceptibility is applied after the global magical damage cap of 1600, so the player could in theory take up to 3200 damage.

Branded melee attacks vs players:

Some monsters attack with elemental-branded melee attacks. These are treated depending on the attack method, see (5.12a): The attack method will determine how much of the damage is treated as elemental part and how much is physical part. The elemental part will accordingly be doubled if the player is susceptible to it.

Having both resistance and susceptibility to an element:

Resistance or immunity will not just cancel out the according susceptibility but actually undo it. That means you will not take more damage on a character that has both, susceptibility and resistance to an element than on a character that has just the resistance but is not actually susceptible.

So one of the first things to do as an Ent is to visit the magic store and buy a ring of fire resistance, or any druid ego monster or later on arch-vile will give you a hard time.

(Branded physical attacks in pvp are not influenced by susceptibilities. Also see (5.12) for details about melee attacks and melee damage caps.)

(5.7) Qualitative classification of items, identifying & selling items

Items are classified by

- a basic item type
- a simple magical enchantment (to hit-chance, to damage, to armour class)
- an ego power (some items even have two ego powers at once),
(some examples: resistances on armours, elemental brands on weapons, enhanced brightness on light sources. The item carries the names of its ego powers. For example an 'Acidic Long Sword of Gondolin' has been blessed with two ego powers: 'Acidic' and 'Gondolin'. For more information about ego powers see (7.4) Spoiler Files).
- sometimes you may find an artifact which can have quite a bunch of different powers combined! Artifacts can be recognized by them carrying a name. Example: The War Maul 'Turmil' or The Whip of Gothmog.

(See (5.9b) for more information about artifacts.)

If you find an item, it's 'unidentified'. That means you see only the basic item type.

Example:

A Whip {+,?} (1d6)

The ? indicates that you don't know yet which level is required to wield this item. You have to identify the item to find out more about it.

(The (1d6) means that this weapon has one 6-sided die rolled to determine its damage afflicted to your target.)

Assuming you identify it you could get one of the results below:

Example 1:

A Whip {+,1} (1d6) (+0,+3)

This is a magical whip. Magical, because its damage is enchanted to +3.

It doesn't possess any further special abilities.

Example 2:

A Fiery Whip of Gondolin {+,24} (1d6) (+8,+11) (+3)

This is an ego-weapon ('of Gondolin') with a fire brand ('Fiery'). The base weapon type is a whip which makes it belong to the blunt weapons.

Its to-hit and to-damage are magically enchanted to +8 and +11.

Gondolin weapons increase strength and constitution (here +3).

Ego-items or excellent magical items often have varying abilities.

For example a Gondolin-weapon can have HOLD_LIFE, a high resistance, or increase your dex. It doesn't have to, however. Some Gondolin-Weapons have different abilities than others. To find out the complete powers of an item it can be necessary to **identify** it.

Identify (same as **Perception**) reveals the complete ability list.

You can check the complete list of any item listed in a store by pressing 'x' to 'Examine an item'. For items in your inventory or equipment it is the 'I' key instead. To get a full list of an items magical abilities outside of stores requires that you already **identified** the item or bought it from a shop.

Items that are bought from a shop are always automatically **identified**.

Some shops offer an **identify** service but they are quite expensive.

If you want to look up what certain special items can/cannot do, see the spoiler files section (7.4) or further explanations in (5.8) and (5.9).

If you sell an item to a shop the offer you will receive depends on the following:

Item is not identified at all -> the offered cash will equal the value of the basic item type, eg 300 Au for a long sword or 20 Au for an unknown potion.

Item has been pseudo-identified -> shops won't buy items that have a bad pseudo-identification. 'average' items will sell for the value of the basic item type. good/excellent/special items will sell for their basic value too so you better identify them to get more money for them!

Item has been identified -> the shop will pay you fully for all those boni that are either very obvious (like +STrength or Extra Attacks or Life/Mana) or which are always granted to this kind of ego item (for example 'weapons of **Slay Evil**' always give 'ESP evil').

However, the shop won't offer money for 'hidden' abilities like resistances or ESP which aren't obvious and which are randomly bestowed upon this type of ego item. (Most ego items have one or more random powers!)

To make the shop pay for these unknown powers too you'll need to fully identify the item, this is called **identifying** (note the asterisks). To do this, there are scrolls of **Identify**, staves of **Perception** as well as the spell 'Greater Identify'.

If your item turns out to lack any hidden powers you wasted the **Identify** scroll, but that's not

a big deal.

Item has been identified and is a true artifact -> the shop will pay a fixed price which is predefined for each true artifact. You don't need to *ID* it. Note that you can actually look up all true artifacts by pressing: ~ 6

Item has been identified and is a randart -> Shops will usually offer between 10,000 and 15,000 Au for unknown randarts, but never more than the item is really worth. You should always *identify* your randarts to discover all their hidden abilities, so shopkeepers will pay a lot more.

Item has been identified and is cursed -> the shops never buy cursed items. That might change if you uncure it and if the item hasn't only bad (negative) boni on it.

Shop prices in general may slightly vary depending on the shop owner's race and your character's race.

Sometimes an item turns out to be an artifact!
See (5.9b) for more information about artifacts.

If a player holds an unidentified item long enough he/she might get a 'feeling' about it. The more points in 'Combat' skill the player has the faster and clearer he can feel the item's value. This is called 'pseudo-identifying'. Warriors are more likely to pseudo-id than casters. If a player pseudo-ids an item, the 'feeling' will be appended in { } brackets to the item name.

Note that archers or casters will also become better at pseudo-id'ing, if they train the 'Archery' or 'Magic' skill respectively. 'Archery' at level 11 helps to get more detailed ('excellent' too instead of just 'good') feelings about ranged weapons and ammunition. 'Magic' at level 11 helps to get more detailed ('excellent' too, instead of just 'good') feelings about magic items, potions and scrolls.

Items display the following pseudo-id tags:

-Basic items, non-magical:	{average}
-Magically enchanted items	{good}
-Excellent magical items	{excellent}
-Artifacts (random & static)	{special}
-Cursed items	{cursed}
-Useless items (often cursed)	{worthless}
-Useless items (not cursed)	{broken}
-Cursed artifacts / egos	{terrible}

('worthless' and 'broken' sort of overlap, depending on item base type. For example rods without value will be worthless instead of broken, while armour will be broken, and ego armour without value will be worthless again.)

Terrible doesn't need to equal useless. Some cursed artifacts can be very powerful, rings of power dropped by Nazgul especially.

Note that potions don't have 'egos' or 'artifacts', scrolls don't have artifacts either, but some of the potions and scrolls show similar pseudo-id tags.

Again - if you want to look up what certain special items can/cannot do, see the spoiler files section (7.4) or further explanations in (5.8) and (5.9).

(5.7a) Types of Identification

There are different stages and types of identification:

a) pseudo-indentification.

This gives you one of the basic feelings like {good}, described above.

- b) identification via ID (eg by scroll, staff or shop service - or from trying to use the item, if your character is able to observe any result, in which case it might yield some experience even):
This actually does two types of identification!
- 1) It identifies the magical properties of an item, such as +hit, +damage, +ac, names of ego powers or artifact power. These values are then seen by any player who looks at the item after it has been identified.
 - 2) It identifies the flavour of an item (if it is a flavoured item) for the particular player who identifies it. Flavours are prefixes in the base item name, in particular:
 - potion colours
 - scroll titles
 - ring/amulet materials
 - magic device materialsSo if you identify a 'clear potion' you will get to know that it's a 'clear potion of water'. However, this flavour is now only known to you. Other characters who have not yet identified a clear potion on their own will still not know that it's a 'clear potion of water'.
- c) identification via *ID* (eg by scroll, staff or shop service):
This is the same as ID but additionally reveals all details of all ego- or artifact powers the item has.
This can lead to an increase in price if some of those powers were not considered obvious, in which case stores wouldn't pay for them when you sell the item. Non-obvious powers are those that are randomly occurring (those don't exist on true artifacts).

Note: There are certain effects that can make your character lose his knowledge of items, which corresponds to 'unindentification' of types a) and b)1) and also loses the additional knowledge gained from c) in the list above. The flavour knowledge as described in b)2) is always preserved though.

(5.7b) The EASY_KNOW flag

Items that do not have any random mods, enchantments or abilities on their base version possess the EASY_KNOW flag.
This flag means that the item will not need to be identified if it doesn't have any special powers (ego powers/artifact). Example:

Most items don't have EASY_KNOW flag and look like this when you find them:
Dagger {+,?} <- the question mark, hiding its level requirements, indicates that you don't know if it's got special powers or not, until you identify it.

Light sources are among those items that have EASY_KNOW flag and when you find one it will look like either one of these:

Brass Lantern {+,3} <- you know right away that this lantern has NO special powers, because it shows the level requirements.
Brass Lantern {+,?} <- you know right away that this one MUST have special powers, because it masks the level requirements.

So whenever you find a light source with '?' for level requirements, make sure to pick it up and identify it, it will have special powers!

More examples:

- Rings of Resist Fire have EASY_KNOW flag, because they cannot have any random properties.
- Rings of Protection do not have EASY_KNOW, because they come with a random +AC enchantment, so you need to identify it to find out.
- Why do Amulets of Anti-Teleportation come with '?' for level requirements, even though they do not have any enchantments or special powers? Because they have one: They can actually be cursed sometimes, this counts as random special power too!
- Note that shields have EASY_KNOW flag too, so make sure to pick up any shield that shows a '?' for level requirements, it might turn out very valuable.

(5.7c) Loot tables

Also called drop tables, specifying which type of items a monster might drop. The type, level, quality and use-level of an item may depend on these factors:

- The level of the entity it is dropped by (monster or chest).

Monsters have a loot table that you can review by pressing ~7. It knows five treasure classes: Treasure, combat, magic, tools, junk (see further below).

Small chests have a higher chance of dropping gold instead of items, while larger chests drop more items than gold. Note that items found in chests have a high chance of being 'good' aka enchanted (same as DROP_GOOD monster flag).

Monsters may have DROP_xxx flags that determine if they drop gold, items, how many of them, and whether the items have a higher chance to be enchanted or to possess ego powers or turn out to be an artifact than usual (those are the DROP_GOOD flag for enchantments and especially important the DROP_GREAT flag for it becoming an ego item or artifact - also see (5.11a) for some tips on hunting lower level monsters that have the DROP_GREAT flag). Note that unique monsters have a higher chance of dropping enchanted items (similar to the effect of the player having more 'Luck').

A higher chance to turn out 'good' (by luck or by the DROP_GOOD flag or equivalent means as described above) will also carry over to become a somewhat higher chance to turn out 'great' (ego item or artifact), so for example unique monsters and chests don't just have an especially high chance to drop enchanted items but will also drop ego/artifact (great) items somewhat more often.

- The player's 'Digging' skill, for money mined from terrain features and for items discovered from mining - will affect potential item level and quality. Amount of gems mined and the level of items discovered will at the same time also depend on dungeon floor depth and get limited by it somewhat.
- The floor level (depth) and in the case of acquirement scrolls whether it's read on the world surface or not (reading it in a high-level town CAN produce the same results as reading it on a dungeon floor of similar level, but will not GRANT a high quality, which it does when you read it in a dungeon).
- The event type if it's a reward for some kind of event (for events other than extermination orders the use-level is usually zeroed, binding the item to your character so it cannot be traded).
- The player's 'winner' state (whether the player has beaten Morgoth or not) and the player's 'fallen winner' state (whether the player has died after having beaten Morgoth and hence lost the royal title). These states are used to determine whether an item is dropped that can only be used by winners (WINNERS_ONLY flag) or a random artifact being created receives +LIFE bonus (increases hit points) or not. LIFE bonus can also be influenced with '!L' inscription on Artifact Creation scrolls. The only WINNERS_ONLY items existing in the game are a couple of different types of royal armour which melee-oriented characters can utilize to improve their tankiness.
- The player's amount of 'Luck' for monster drops and items found by digging, see 'LUCK' in (5.8) for details. Luck will increase chances of those items to turn out good (enchanted) or even great (ego power or artifact) somewhat more often.
- The item's ego powers will increase the item's use-level. If it's an artifact it will influence the item's use-level depending on the predefined artifact level (for true artifacts) or the artifact's power (for random artifacts).
- The item base type in some special cases (the level may be tied to the item's power for certain types of items). For example the use-level of speed rings directly and only depends on their +SPEED bonus.
- Whether the item is stolen: Stealing a valuable item has a chance to set its level to zero, making it untradable. (There is always a chance for it to not get zero'ed though, keeping it tradable, even for the most expensive items.)

The most common case by far are items that are dropped by monsters when you kill them. Neglecting the 'winner' state (that toggles WINNERS_ONLY items and +LIFE randarts) for now, we are left with three factors which determine the item that you will find on the floor:

- 1) The dungeon floor depth (aka dungeon level).
- 2) The monster race level (the level given in the ~7 monster lore. The actual

monster level can be higher depending on the depth where you encounter it, since monsters get their level boosted if they appear on floors of much higher level than their race level).

- 3) The monster's treasure class table. Each monster type (race) has a table of percentage values for these five treasure types, which you can again see in the ~7 monster lore. The lore displays the first four classes, while the 5th is 'hidden' and is the rest chance not covered by the first four:

-Combat:

Weapons, armour (except boots), shields, ammunition.

-Treasure:

Chests, rings, amulets, dragon scale mails, crowns.

-Magic:

Mage staves, wands, staves, rods, runes, potions, scrolls (except for golem command scrolls which fall under 'Junk' category), books, parchments.

-Tools:

Boots, cloaks, diggers, light sources, flints, food, flasks, trap kits, spikes, climbing sets, picklocks, money belts, devices of theft prevention, tarpaulins, mummy wrappings.

-Junk (rest chance, not covered by the above four categories):

Skeletons/skulls/bones, bottles, shards of pottery, broken sticks, firestones, all golem parts (massive pieces, arms, legs, command scrolls).

Note: Monsters that don't have any treasure class at all are not set to 100% junk, but can instead drop any item of all the five classes.

Example: 'Green naga'.

A Green naga has 25% chance of dropping 'Combat' loot and 65% chance of dropping 'Tools' loot. The remaining 10% chance translates to 'Junk' drops.

The formula for determining the item's level (the item base type level which determines what kind of item you might get to see; not the actual use-level that you will see on the item and that affects trading it between characters) depends on the server configuration but is usually:

$$(\text{dungeon floor depth} + \text{monster race level}) / 2$$

to which (for each item anew) a random tolerance of 0..diff is added, where 'diff' is the difference of above's calculation result to the higher value of the two 'dungeon floor depth' and 'monster race level'. 'diff' caps at 20.

Note that the highest level items in the game at this time are these two level 115 items: 'Massive Piece of Adamantite' and 'Heavy Ribbed Adamantite Armour'.

Example:

You kill a great wyrm of power on the deepest floor of Angband (-3050 ft), so floor level is 127 and race level is 85.
$$(\text{floor} + \text{race}) / 2 = (127 + 85) / 2 = 106$$
 (the result is always rounded down).
Now the higher of the two (floor and race) is 127. The difference of the result (106) to 127 is 21. This gets capped at 20 and is the random 'tolerance' for each item dropped by the wyrm.
The treasure class of the wyrm is 50% treasure and 50% combat.

Let's look at 3 items it drops:

- 1) $106 + \text{random}(0..20) = 106$. An unlucky tolerance roll added 0 to the level average.
The item level 106 is still quite high though: The One Ring might actually drop since it's level 100 (provided we're not a winner yet, who cannot find true artifacts) or a power dragon scale mail (level 100 too) could drop as well.
What cannot drop on this attempt is a Heavy Ribbed Mithril Armour, for example, because it is level 110 (see in k_info.txt spoiler file).
- 2) $106 + \text{random}(0..20) = 126$. A lucky tolerance roll, we got the full 20 added to the level cap of the second item that the wyrm dropped.
This means that this item could be anything that can possibly drop (from the treasure classes 'treasure' and 'combat' that is). So if we have beaten Morgoth and hence acquired a royal title, we might see any piece of royal

armour drop.

- 3) 106 + random(0..20) = 114. The random tolerance roll of 0..20 turned out to be an 8 for this item, closely ruling out Heavy Ribbed Adamantite Armour which is level 115, but allowing all other items of the appropriate treasure classes of this monster.

(5.8) Special abilities of items

FEATHER ('It makes you fall down gently like a feather.')
'Feather Falling'.
Lets you resist gravitation damage somewhat.
Lets you float down gently if you accidentally stumble into pit-style traps.
Enables you to cross 'dark pits' terrain type (see (4.4)).

LEVITATE
('It allows you to levitate.')
Allows you to cross over water areas without drowning. Enables you to hover high enough to pass trees and bushes easily.
Note that levitation automatically also gives feather falling, so see 'FEATHER' above for further benefits granted by that ability.

XTRA_SHOTS
('It fires missiles excessively fast.')
This ranged weapon can fire an extra shot per round, see your number of shots per round go up in 'C' character overview screen.
For trap kits, the number of shots they fire can actually increase by more than one, depending on their pval (the number in parentheses, for example '(+2)' would fire 2 extra shots).

XTRA_MIGHT
('It fires missiles with extra might.')
This ranged weapon fires more damaging shots: Its damage multiplier is increased by 1 above the usual multiplier for this weapon type.
For example a Long Bow of Extra might would show a (x4) multiplier, although Long Bows usually have a (x3) multiplier.
Note that the multiplier may also affect the maximum shooting range.

MANA ('It affects your mana capacity.')
Will increase your total mana points by +x0%. Example:
Gloves of the magi (+3) increase your mana by 30%.
MANA items _add_ to each other, they aren't multiplied.
MANA-increasing items have reduced effect on priests or paladins, because their spells are not so much pure magic but rather a form of praying.
MANA affects your complete mana pool, including the additional MP (mana points) a character gained from 'Magic' skill.

LIFE ('It affects your hit points.')
Will increase your total hit points by +x0%. Example:
Sword of life (+2) increases your HP by 20%.
LIFE items _add_ to each other, they aren't multiplied.
The maximum total +LIFE bonus a character can achieve is +3 (cap).
(For mimics, the +LIFE effect might be less since their HP in player form or monster form might be low. The +LIFE isn't applied to mimics' final HP but the lower base HP.)
LIFE affects your complete hit point pool, including the additional HP a character gained from 'Health' skill.
+LIFE on randarts will only affect player characters if they meet certain conditions, see server options in-game via ~d for details.

AGGRAVATE ('It aggravates nearby creatures.')
Wakes up all monsters in whose radius of awareness you are.
(Does not haste them as scrolls do, compare to (5.9)).

LUCK ('It affects your luck.')
If you are lucky, your chance to find better items increases.
Luck caps at 40, having higher bonus won't help any more.
The higher your luck is, the more diminishing is the effect of increasing it even more.
What does 'better items' mean exactly?
It simply means that you have a higher chance to get good or great items when killing monsters or digging.
'Good' means that an item has enchantments to hitchance, damage or armour class. How much exactly it has isn't affected by luck (well, it is by your personal ooc luck I guess :-p).
'Great' means that an item has ego powers or is an artifact. Luck does not affect how great its ego power or artifact abilities will be!

Note: Luck has NO effect on 'acquirement' and 'artifact creation'.
Note: Luck does NOT affect which base item type drops, ie whether it is a dragon scale mail or a cloth hat.

NO_MAGIC ('Anti-magic shell')

Raises your saving throw to 95%, making you nearly immune to any malicious magical influence (like paralysation or slowness, but also to monsters cursing you). Also prevents you from using any magic device or casting spells. You can still use scrolls and potions though.
For more information about Saving Throw see (6.3).

ANTIMAGIC ('Anti-magic field')

Prevents you from using any magic device or casting spells, also prevents nearby monsters and other players from casting spells (but not from using magic devices). You can still use scrolls and potions though.
The field has less influence on party members who try to cast. Usage of magic devices by party members is not hindered.
The radius is approximately the field power / 9, and is cumulative to the 'Anti-magic' skill. The field power is the chance of suppressing a spell. It caps at 75% and is cumulative to the 'Anti-magic' skill. Make sure to read up on anti-magic skill at (6.2).
The chance to interrupt spells is quartered for your party members, so they are not affected much by your anti-magic field.
The anti-magic field's radius caps at range 9.

BLESSED ('It has been blessed by the gods')

These weapons resist cursing. Priests can use blessed weapons without penalties, even if they are not blunt. They will get their 'Blunt-mastery' skill applied to any blessed weapon, even if it isn't actually blunt-type but a sword, axe or polearm instead.
Blessed weapons will have adverse effects on corrupted characters and on characters of vampire race or hell knight class.

VAMPIRIC ('It drains life from your foes')

Drains life from your victim, which heals you slightly.
For details see '(5.15) Vampirism'.

VORPAL ('Sharp' weapons, 'It is very sharp and can cut your foes.')

Has a chance that the weapon damage dice result is multiplied on hitting, you'll see 'Your weapon cuts deep into your enemy'.
Brand/slay effects will further increase the damage, if applicable.
VORPAL requires an edged weapon, so swords, axes and several polearms can obtain 'VORPAL' mod via "Sharp" or "Spinning" ego power.
Regarding randarts, only sword-type weapons are eligible.
Note that Scythes of Slicing always come with VORPAL mod, be it as base item, ego item or even as randart.

SLAY_WEAP (No message, can spawn other mods/increase dice randomly.)

A special mod for "Weapons of Slaying", see further down in (5.9).

CRIT ('It affects your ability to score critical hits.')

This item adds to your chance to score critical hits.
If the item is a weapon then it will only affect hits done with this weapon in particular, so for example a boomerang that provides +CRIT bonus will not affect your melee attacks.
If the item is not a weapon (eg a piece of armour or a ring) then it will affect all of your physical attacks, including throwing items.
For more information about critical strikes and attacks, see the description of the "Critical-strike" skill in (6.2).
CRIT requires light (up to 100 lbs) swords or polearms via "Perfection" ego power, but can also spawn on random artifact gloves and all types of random artifact weapons -including boomerangs- regardless of their weight.

CHAOTIC ('It produces chaotic effects.')

On hitting, you have a 50% chance to do one of the following:

- drain life (VAMPIRIC, see (5.15)) (very likely).
- earthquake (see (5.13) for details).
(If enabled in the server settings, it can be suppressed with the !E inscription. See (0.3) for !E settings or press ~d in game. Usually, !E only works on the artifact "Grond".)
- confuse target (very likely).
- teleport target away.
- polymorph target.
- clone target aka duplicate the monster it hits. Note that the clone does not give experience, drop items, or give form credit for mimicry users.

Note that most of these have an *extremely* low chance to occur.
Most of the time the vampirism or confusion effect is chosen.

CLONE ('It can clone monsters.')

Has a 1 in 1000 chance to clone the monster it hits.

IMPACT ('It can cause earthquakes.')

Causes earthquakes if the damage is > 50. See (5.13) for details about earthquakes.

(If enabled in the server settings, it can be suppressed with the !E inscription. See (0.3) for !E settings or press ~d in game. Usually, !E only works on the artifact "Grond".)

FUEL_LITE ('It provides light when fueled.')

A light source that needs to be fueled, otherwise it runs out.

WARNING:

If this item provides other abilities besides emitting light, be aware that you need to keep it fueled for it to do so! If it runs out of fuel your character will lose all abilities it provided until you refuel it.

CURSED, HEAVY_CURSE, PERMA_CURSE, AUTO_CURSE, CURSE_NO_DROP, TY_CURSE, DG_CURSE

See (5.14) Curses.

INVIS ('It makes you invisible.')

Turns you invisible. Items 'of y' often have a +mod, which gives you additional stealth. Note that this +mod does not qualify or affect your y in any way, but is purely for an extra stealth bonus. See '(5.16) y' for details.

BLOWS ('It affects your attack speed.')

This item adds EA (extra attacks) to your number of blows per round.

SH_ELEC ('It produces an electric aura.')

Surrounds you with a lightning aura, damaging monsters each time they hit you in close combat.

SH_COLD ('It produces an icy aura.')

Surrounds you with a frost aura, damaging monsters each time they hit you in close combat.

SH_FIRE ('It produces a fiery aura.')

Surrounds you with a fire aura, damaging monsters each time they hit you in close combat.

REFLECT ('It reflects bolts and arrows.')

Gives you a 75% chance to reflect shots, arrows, bolts and missiles fired at you, 45% chance to reflect magical bolt-type spells and 60% to deflect any physical projectile from traps you triggered. Reflected attacks will hit grids closely around their origin, possibly damaging/killing the monster who shot at you.

Weapons of Spinning

On activation spin around, hitting every monster around you in a radius of 1, with an extra stun effect.

EASY_USE (of Simplicity, 'It is especially easy to activate.')

You have a much higher chance of succeeding to use the magic device. Also see (6.10) for more information about the 'Magic Device' skill.

CHARGING (of Charging) ('It regenerates its mana faster.')

This magic device (rod) will take only 1/2 of the usual time to fully recharge.

'of the Istari' rods.

Combination of EASY_USE and CHARGING.

'of Plenty' wands and staves.

These have more charges than usual, and will also gain more charges from recharging than their normal counterparts. (See (5.21) about recharging.)

WINNERS_ONLY

This item can only be equipped by winners (kings/queens/emperors/empresses) and fallen winners (those who lost their title because they died).

This item can only be found by certain characters, see server options in-game via ~d for details.

(NO_SEED

An ego item that is never created randomly (in terms of abilities or power) and that is a lesser type and therefore allowed to stack with other similar ego items. These types are currently:

Cursed/indestructible rings,

Fireproof/waterproof scrolls and books,

Any type of ammunition.)

Items with other (more powerful) ego powers than these listed above will not stack in your inventory even if the items are identical.

INSTA_ART

This item always is an artifact; it has no base-class that can spawn non-art items. Example: Long Sword base class can spawn regular long

swords, but also 'Elvagil'. A Phial however will instantly be 'artified' and turn into Phial of Galadriel or Undeath. There are no base-type non-art phials in the game.

SPECIAL_GENE

These artifacts are 'special artifacts' that cannot be dropped by regular monsters but require a certain key monster to be killed. For example the Dragonrider Coat of Mardra can only drop from Mardra (there is no guarantee that she will always drop it though).

(5.9) What does item xxx do exactly?

Some items might look bad (Mushrooms of Unhealth), but keep in mind that you can often throw ('v') these items to damage or impair an enemy. For more information about items and especially ego items see (7.4).

Weapons & Armour

Blade of Chaos Resists chaos and produces chaotic effects (see (5.8)).
Bluesteel Blade Cannot rust (not damaged by water attacks) and are especially sharp (see 'VORPAL' under (5.8)).
Dark Sword Dark Swords have a so-called 'anti-magic field', which prevents the user from using magic devices or casting spells, and also has a chance to interrupt nearby monsters and players who try to cast spells but doesn't affect their magic devices. You can still use scrolls and potions though.
The chance to interrupt spellcasters is 30% minus 3/5 of the to-hit and to-dam values of the dark sword. Example:
A Dark Sword (+3,+7) has $30 - (3+7) * 3/5 = 24\%$ chance of interrupting spellcasters. The chance is further quartered for party members, so they are hardly affected by your anti-magic field. Usage of magic devices by party members is not hindered. The radius of the anti-magic field is several fields (chance to interrupt spells, divided by 9), getting smaller if the chance is smaller than 30%.
Dark Swords never give more than 30% AM, even if tohit and todam boni added together result in a negative number. They also never give 'negative anti-magic', 0% AM is the minimum, even if tohit+todam are greater than its AM. AC boni on Dark Swords won't affect the anti-magic field. The anti-magic chance and field radius of a dark sword stacks with the 'Anti-magic' skill (see (6.2)).

Note that if you dual-wield dark swords the stronger AM field will override the weaker one, so they don't stack.

Similarly, if there are multiple players around nearby who have anti-magic fields affecting the same monster then only the strongest AM field will work, overriding the weaker ones.

Demon Hammer Slays demons.
Hunting Spear Slays animals.
Mace of Disruption Slays undead.
Scourge of Repentance Slays undead.
Scythe of Slicing Slays dragons and animals.
Shadow Blade Resists darkness, cannot be damaged by acid or water, provides a fixed stealth bonus of +2.
Slaughter Axe Slays animals.
Thunder Axe Slays giants, provides lightning brand and resistance.

Weapons of Morgul These are terribly cursed weapons that aren't good for anything, just try to get rid of them. Since they have a heavy curse on them, you need to either use a scroll of *remove curse* or use enchant scrolls to break it. For details about the enchant-scrolls trick, which is usually much cheaper, see paragraph '(5.14) Curses'. Wielding a weapon of Morgul will allow you to see the invisible but also infect you with the Black Breath, drain your experience and aggravate nearby monsters. Note that this weapon can auto-recurse itself when you move it between equipment and inventory, so when you uncursed it drop it to the ground right away!
If you find a weapon of morgul, inscribe it '!w' to

prevent wielding it accidentally.

Weapons of Nothingness Similarly terribly cursed as weapons of Morgul. You are unable to strike while wielding this weapon. Fortunately you can just drop or destroy these weapons via 'd'/'k' keys just like any other items, right away. See 'Weapons of Morgul' right above on how to break the curse of this weapon to get rid of it. Note that this weapon can auto-recurse itself when you move it between equipment and inventory, so when you uncursed it drop it to the ground right away!

Weapons of Slaying
(SLAY_WEAP) These weapons can have greatly boosted damage dice and sometimes poison brand. If it's a sword, axe or slice-type polearm it could also get a 'vorpal' effect - see 'VORPAL' under (5.8).

Magic ammunition (Magic Arrows, Magic Bolts, Magic Shots).
Those will return into your quiver magically, so just having one will already serve, as long as it isn't destroyed by some elemental attack..
Artifact ammunition of any type auto-returns too, same as magic ammunition.

Silver ammunition *Slays* undead.

Ethereal ammunition Magically returns after being fired, has a small chance to fade away instead though.

Blasted armour Armour that has the prefix "blasted" has much less +AC bonus than usual, in most cases the +AC value is deeply in the negative numbers. However, other than bad +AC the armour is not cursed or impaired in any way, and may still be usable, especially if you use scrolls of enchant armour to 'repair' it.

Dragonrider Coat Resists heat & cold.

Elven Cloak Increases your stealth, searching ability and luck. For details about luck see LUCK flag in (5.8).

Elven Gloves Regenerate hit points and mana points.

Multi-hued Dragon Scale Mail Gives base + poison resistance (base means fire/cold/lightning/acid) and two random immunities out of those five. For example one MHDSM might give fire and cold immunity, while another MHDSM gives poison and lightning immunity.

Royal Armour Super-heavy armour that can only be worn by (fallen) winners, 'winner' meaning queens, kings, empresses and emperors. (These armour pieces usually have a level requirement of 51 or more and can have special boni not found on other armour.) 'Royal armour' is not a base item name itself but just describes various types of adamantite and mithril heavy armour or shields that will display "It is to be used by royalties exclusively." in violet colour when inspected/examined.

Serpent Scale Mail Resists acid.

Shadow Cloak Makes you hard to spot for other players, regarding
a) them seeing you
b) them being able to look at your current equipment. Shadow Cloaks work especially well to further disguise yourself while being invisible vs. someone who is able to see invisible creatures/players. See '(5.16) y'.

Potions

Augmentation Raises all your stats.

Berserk Strength Temporary effects: Increase CHP and MHP by 30. Removes fear. +5 bonus to-hit, +10 bonus to-dam, -10 malus to to-ac.

Boldness Removes fear and keeps your heart boldened for a while.

Chauve-Souris Turns you into a fruit bat. Quaff another one to be restored to your original form. A wand/rod of polymorph might help too. Make sure you don't resist nexus if someone tries to polymorph you back. Or just use 'Morph Restoration' service. Characters with 'Fruit Bat' body modification are immune.

Cure Light Wounds

Cures blindness and cuts; heals 3d8 HP.

Cure Serious Wounds Cures blindness, cuts, confusion; heals 6d8 HP.

Cure Critical Wounds Cures blindness, cuts, confusion, stun; heals 14d8 HP.

Curing Heals some HP, removes blindness/confusion/stun, cures poison/cuts/hallucinations, heals some insanity, cures being gorged, restores all your stats (except exp).

Detonations / Death Better not drink it (or you deserve it). Also, handle with caution! Make sure those won't shatter in your backpack when you're hit by potion-damaging effects, or you might not see the next sunrise. If thrown (press 'v' to throw an item) these potions show the strongest effect by far of all potions - devastating! Accordingly useful to be used in fumes traps.

Enlightenment Illuminates and maps the whole level and reveals all objects. It also identifies all of the user's items.

Enlightenment Raises your intelligence and wisdom, detect treasures, objects, secret doors, stairs, traps. Identifies all items. Tells you about yourself like a potion of Self-Knowledge.

Experience Gives you additionally half your current experience plus 10, but only up to a maximum of +100,000 points. So you'll get the most out of it if you quaff it when you reached 200,000 exp. (Ok, 199,980 - thanks Sav...) However, some players prefer to quaff it earlier, when it's especially hard for them to reach the next level for some reason, maybe harder than if they were at 200,000 exp already.

Heroism Temporary effects: Increase CHP and MHP by 10. Removes fear. +12 bonus to-hit.

Invulnerability Will turn you partially invulnerable (40% chance to fully deflect any attack, 50% damage reduction if it still hits) and increases armour class by 100 temporarily.

Learning Gives you 1..3 (random) additional skill points to spend.

Life Heals 700 HP, removes blindness/confusion/stun, cures poison/cuts/hallucinations, cures Black Breath, restores all your stats and experience.

Lose Memories Lose 25% experience (if Hold Life is missing).

Resistance Gives you temporary resistance against heat, cold, acid, electricity and poison. (Stacks with permanent resistance to lower the damage to 1/9 (1/3 temp * 1/3 perm)).

Speed Temporary speed increase by +10.

Healing Cures blindness, cuts, confusion, stun, poison; heals 300 HP.

Healing Cures blindness, cuts, confusion, stun, poison; heals 700 HP.

Restore Life Levels Restores your experience, if it has been drained. You can see that your experience has been drained by it being displayed in yellow colour instead of the usual light green. Note that this potion does not restore experience you lost by dying (there is no way to restore experience loss by death).

Restore Mana Restores 500 MP.

Restore Mana Restores 1000 MP.

Ruination Take 10d10 damage. All stats are decreased by 25 (restorable).

Self-Knowledge Tells you everything about yourself and identifies your items.

Scrolls

Acquirement Gives you a great item, generated randomly (may sometimes be very great and sometimes less great). Reading it on deeper dungeon levels produces better results in general (although the outcome is still pretty random). Note that while some towns also have a high level, reading this scroll in town won't guarantee a 'great' item, which will be guaranteed if you read it in the dungeon. What you usually do: Either try to quickly visit a really deep dungeon level just to read the scroll, grab the item and get out of there. Or sell it to a town store for good cash. Acquirement is not affected by 'luck'. Acquirement does have a chance to produce artifacts.

Acquirement Same as Acquirement, but gives you two or three great items.

Aggravate Monsters Wakes up all monsters within about twice the maximum sight range (a constant defaulting to 20, so aggrav. radius is ~40).

	Hastes all monsters in your line of sight (same as SHRIEK spell or traps of aggravation or the "/scream" command).
Blessing/Holy Chant/Holy Prayer	Increases your AC by 8/14/20, also increases your to-hit bonus. (Temporarily)
Blood Bond	Inscribe this @P<playername>, for example @PGandalf, then read it to form a blood bond between you and that player. (Only one of you has to read a BB scroll, it's working bidirectional). Everyone on the server will receive messages about that blood bond been formed: "<player A> blood bonds with <player B>". If you don't see this message, you did something wrong. Get another scroll and repeat the blood bonding until you see the correct confirmation message. Your characters will automatically be hostile to each other, so you can fight in a friendly duel. This even works in town, which otherwise is a safe zone from PvP. The loser won't suffer a real death while blood-bonded, but just get teleported away. The hostility will automatically be cancelled when the blood bond ends or when a player logs out. Everyone on the server will be informed about the result: "<A> wins the blood bond against ".
Cancellation	Don't use it! It will heavily disenchant and blast all sorts of magic items in your inventory and render them worthless, including magic devices. Artifacts (and Stormbringer) are unaffected. Your equipment is unaffected.
Cheques	These are automatically generated in player stores when someone buys an item. They can be 'I'nspected to check their value or 'r'ead to cash in the money. For more information see (4.10a).
Deeds	Some of the parchments are deeds, which are used as rewards for various purpose, such as events (see (4.13)) and PvP fights of PvP-mode-characters (see(6.13)). Press 'r' to read a deed, which will usually tell you what to do with it. In most cases, you have to turn it in at the mayor's office in Bree (one of the '+' doors in town).
Destruction	Causes a local earthquake, nearly completely wiping the area of monsters and objects (see (5.13) about earthquakes). Extremely powerful magic which causes a searing blast of light and a terrible shockwave that will blind you and knock you and everyone else out. Use this as a last resort! This magic will fail inside vaults and in towns or in the area surrounding a town within a radius of 3 worldmap sectors. It will also fail on dungeon floors that do not allow *destruction* magic explicitly (orange floor feeling saying "The walls here seem very solid.", also see (4.8)). (You do not get experience, loot or credit for monsters erased by *destruction*, same as for genocide-type spells.)
Enchant	Sub-types: weapon to-dam, weapon to-hit, armour. Will attempt to enchant weapon/ammunition or armour. The higher the item is already enchanted the more unlikely it will succeed another time. The chance to succeed will also drop if the scroll is used on a stack of items, instead of a single item, depending on the stack size. It is easier to enchant a stack of ammunition than enchanting a same-size stack of regular weapons/armour though.
Enchant	Sub-types: weapon, armour. Much more likely to enchant up to +15, and likely to enchant by several points at once. The chance to succeed will drop if the scroll is used on a stack of items, instead of a single item, depending on the stack size. It is easier to enchant a stack of ammunition than enchanting a same-size stack of regular weapons/armour though.
Fire/Ice/Chaos	Fires a ball of the according type around you. Make sure you resist it or you will take damage too.
Genocide	Removes all monsters of a certain kind from the current level. Drains your HP for each one removed. The race will be determined by the monster which stands closest to you when firing off the spell. For each monster you will suffer randomly from just 1 up to 4+(monsterlevel/8) points of damage, which cannot be absorbed by any magic shield

or other protective effect!

Depending on the server configuration, the caster's remaining hit points are usually halved (as an additional extra penalty) after the spell finished.

Monsters have a chance to resist genocide, depending on their level. Monsters inside vaults, Uniques, and monsters that are immune to teleportation attacks cannot be genocided.

(Genocide-type spells do not yield experience or loot.)

Golem Creation Allows you to create a golem which follows you and which you can control to some extent, see (8.3) for more information.

Life Resurrects another player's ghost if standing on a directly adjacent field to you when you read it. Does not work inside vaults, and only over solid ground.

Also restores your experience points if they were drained.

Since it was often asked: Non-everlasting and everlasting players can revive each other without problems.

Lottery This might be your chance today to win the Jackpot!

Just read it, if you win any money, it will appear under/around your character on the floor. You will always get a message that tells you if you won or not.

A common question is if someone ever won the first prize and how much it is:

Yes, several people have won it, although it happens extremely rarely. The prize at the time of writing this is about 1.5M Au.

Obliteration Removes all monsters that are close to you.

Drains your HP.

All monsters within a radius (equal to your sight range) around you are annihilated. For each monster you will suffer between 1 and 3+(monsterlevel/8) points of damage, which cannot be absorbed by any magic shield or other protective effects! Depending on the server configuration, the caster's remaining hit points might be halved (extra penalty) after the spell finished (this penalty is enabled by default).

Monsters have a chance to resist genocide, depending on their level. Monsters inside vaults, Uniques, and monsters that are immune to teleportation attacks cannot be genocided.

(Genocide-type spells do not yield experience or loot.)

Parchments These contain informations about the game, they won't disappear if you read them.

Protection from evil Repels evil creatures that try to attack you in melee. See the prayer 'Protection from evil' in (6.8)!

Recharging Recharges a magical device (rod, wand or staff, see (5.21)).

Remove Curse Breaks lesser curses on items, allowing you to unwear or destroy them. Note that many items can be sold for good cash as soon as they are uncursed!

Also, non- or uncursed items that induce random teleportation can be inscribed .. to have the teleportation stop (compare (0.3 Important Inscriptions).

(Scrolls give you the message:

'You feel as if someone is watching over you.'.)

Remove Curse Breaks heavy curses. Note that curses (including heavy ones) on weapons or armours can also be broken by enchanting one of their boni some points above +0 manually. (The enchant service of shops won't help!)

Rune of Protection Creates a warding glyph on the floor that stops monsters from crossing the field or summoning on it.

Rumour Makes a random rumour come to your character's (and everyone else's characters') mind. Has no further effect and is not necessarily true even.

Wilderness Mapping Maps the wilderness area around the worldmap sector you are currently within. These scrolls also sometimes carry an inscription telling the location of a hidden dungeon.

Word of Recall Use it to quickly travel from the town or the wilderness into a dungeon or tower within your current sector.

It can also be used to travel between towns or on the worldmap in general. See "(0.3) Important Inscriptions, Word of Recall" for more info about Word of Recall! ("Word of Recall", "WoR") Word of Recall scrolls can be exchanged between an everlasting and a non-everlasting player!

Vermin Control Stops breeders on the map from multiplying. Doesn't have effect on certain non-natural breeders such as Unmakers.

Annihilation	Wand only: Drains 10..20% life from your target. Unique monsters can resist. The damage drained caps at 1200.
Clone Monster	Duplicates a monster. The duplicate, aka 'clone', does not give experience, drop items, or count as form credit for mimicry users.
Curing	Cures being gorged, poison and cuts, removes blindness/confusion/stun/hallucinations.
Destruction	See 'Scrolls'.
Detection	Detects treasures, objects, traps, secret doors, stairs and non-invisible creatures.
Dragon's Breath	These wands fire a ball of dragon odem (more powerful than normal ball spell wands.) - randomly on each cast one of: Fire, frost, lightning, acid or poison.
Drain Life	Wand/rod: Drains 10..20% life from your target, giving you 25% of the drained life force. Undead and nonliving monsters are unaffected, unique monsters can resist. The damage drained caps at 900.
Enlightenment	Magically maps your surroundings.
Genocide	See 'Scrolls'.
Havoc	Fires balls or beams of random type, the exact outcome is hard to tell.. it's very powerful though. Beams may be fired either at your target or in all directions, balls might be fired either on your own position, at your target, or in all directions.
Healing	Staves: Heals 250 to 400 hit points, depending on magic device skill, cures stun and cuts. Rods: Heals 100 to 400 hit points, depending on magic device skill, cures stun and cuts.
Holiness	Dispels nearby evil. Also protects you from evil for a while. Cures poison/cuts, removes fear/stun, heals you somewhat.
Magi	Restores your intelligence and 500 mana points.
Perception	Identifies a specific item.
Perception	*Identifies* a specific item, you guessed it..
Polymorph	Polymorphs your target randomly into another form. Doesn't works on players who resist nexus.
Power	Dispels nearby monsters.
Probing	Tells you hit points, melee attacks, speed and armour class of monsters in your line of sight.
Restoration	Restores experience points (aka live levels) and drained stats, ie STR/INT/WIS/DEX/CON/CHR.
Starlight	Casts 8 beams of light in a star-shaped pattern.
Teleport To	Attempts to teleport your target towards you, placing it on an adjacent grid next to you. Some monsters are immune and will give an 'unaffected' message, all monsters have a chance to resist in which case it'll give you a 'resists' message.
Wonder	Wands of wonder cast random magic spells.

Jewelry

Talisman (Amulet)	Increases your luck, helping you finding better loot. (See LUCK flag in (5.8) for details about luck.)
Amulets of Adornment	They might be looking fancy, but they don't do anything and have no effect on your character.
Amulet of Anti-Magic	See (5.8), 'NO_MAGIC'
Amulet of Anti-Teleportation	If worn it will suppress all attempts to teleport, phase or recall the wearer, regardless whether initiated by a monster or by himself. It will also prevent certain effects of unresisted nexus attacks.
Amulets of Brilliance	increase intelligence and wisdom, provide light.
Rings of Cunningness	increase strength and intelligence.
Rings of Might	increase strength and constitution.
Rings of Ready Wit	increase dexterity and intelligence.
Rings of Toughness	increase dexterity and constitution.
Rings of Sustain Ability	sustain strength and dexterity.
Rings of Sustain Brilliance	sustain intelligence and wisdom.
Rings of Sustain Cunningness	sustain strength, intelligence and charisma.
Rings of Sustain Might	sustain strength and constitution.
Rings of Sustain Ready Wit	sustain dexterity, intelligence and charisma.
Rings of Sustain Steadiness	sustain wisdom and constitution.

Amulets of Sustenance sustain all six attributes, provide 'Hold Life' aka resistance to experience-draining attacks, and provide slow digestion.
Sustenance of a stat will prevent it from being drained by various sort of attacks, potions, or other effects. For most things it works 100% of the time, but for some effects it just reduces the chance of a decrease to occur.
Sustaining STR and DEX for example will ensure that you don't lose attacks/round, so wearing a ring of Sustain Ability can be helpful for melee fighters, especially if they enter an ironman dungeon which they cannot leave early in case they need to restore drained stats.

Elemental rings (flames, frost, acid, lightning)
Provide the according resistance and can be activated for temporary resistance too, thereby temporarily giving you "double resistance" (see (5.17) for details).
They also brand your physical attacks with the according element.

Rings of Lordly Protection Resist poison, disenchantment, life drain and give free action (immunity to paralysis).

Amulet of the Moon Gives infra-vision, the power to see invisible, and it can be activated to sleep monsters nearby.
It also improves your +hit and +dam boni.

Rings/Amulets of Slow Digestion will slow your food digestion so you have to eat less often. Also prevents instant paralysation if your food state hits red 'weak'.

Amulet of Terken Gives the power to see invisible, free action, and improves your searching (usually by quite a lot).

Misc
--

Ale and wine Will satisfy your hunger somewhat, and may have random side effects:
Confusion, stun, hallucinations, 1 point of sanity damage, paralysation, fear, blindness (methyl? ew), vomitting if your stomach isn't relatively empty, temporary stat decrease (except for strength), slowness, heroism, berserk, speed.
Note that the unique dwarven ale of the Khazad is vastly superiour to normal ale or wine, and will mostly affect the drinker positively, not ever causing negative side effects besides possible confusion.

Chests Chests may contain treasures or items. Usually, chests you find will have hidden traps on them. So what you do is to hit 's' to search for traps while standing next to the chest, or use any trap detection magic.
When you have discovered the trap, hit 'D' to disarm it, or again use any sort of disarming magic.
The disarmed chest is finally safe to open with 'o' key.
Happy looting.
Note that only the chest's level affects what kind of items you may find in it. It does not matter where you actually are when you open it. A player's 'Luck' value has no effect on what will come out of it either.
On average, large chests tend to contain items rather than money while small chests mostly contain money.
Also see (5.7c) for more information.

Climbing set Allows you to travel over mountain fields.
Info for mimics & co: In order to be able to use it, your appearance form must have arms and fingers. (Equip it!)

Device of theft prevention When equipped, greatly reduces chance of thieves succeeding in stealing items from your backpack.

Empty bottles You can /fill these at fountains to turn them into potions. (See (0.2b) for more details.)

(Small) Firestones These can be eaten by Draconians and players in dragon forms and have various random effects (small firestones have reduced duration):
- If the player isn't a Draconian but he is currently in dragon form he will get some mana refilled.
- If he is a Draconian, the following effects can apply:
 - Adrenaline: Consume way more food.

	Get STR/CON/DEX bonus.
	Get to-hit/to-dam bonus.
	Sometimes get EA.
	Get AC malus.
- Biofeedback:	Consume more food.
	Regenerate HP / heal cuts faster.
	Reduce damage from arrows/missiles, shards, sound and ice shards.
- ESP:	You can see telepathically.
- Physical Instability:	Probability Travel.
- Fury:	40 more HP, speed bonus, to-dam bonus, to-hit/to-ac malus.
- Speed-up:	Speed bonus.
- Heroism:	10 more HP, to-hit bonus, resist fear.
- Temp res:	Temporary base and poison resistance.
	If you eat too many of them over a short period of time you might get poisoned by adrenaline overdose, with lethal outcome.
Flint	Prevents your light from going out by automatically refilling it right when it would've reached 0 turns. For this to work you'll need to carry appropriate items in your inventory that will be used up in the process, eg a flask of oil or another lantern for refilling a lantern or another torch for refilling a torch.
Fortune Cookie	Gives you a line of wisdom.
Guild key	See (6.9).
Dwarven lanterns	Make you resist fear. Don't need to be fueled.
Feanorian lamps	Make you resist fear and see the invisible. Don't need to be fueled.
Lembas (elvish waybread)	Satisfies your hunger, cures poison and hallucinations.
Mattock/Pick/Shovel	Diggers, improving your digging capabilities. (+to-hit, +to-dam) on digging tools as well as a high weight help to further increase their effectiveness. Main factor is the (+diggingpower) mod though. (Equip it!) If you lack any of these valuable digging tools, axes and swords can help you hacking down trees or bushes. For hacking away webs or ivy, certain polearms used for slashing (scythes and sickles) may help too, just as much as swords or axes. (see 'Digging' skill in (6.2) and (5.20) for more information about digging).
Money Belt	When equipped, greatly reduces chance of thieves succeeding in stealing your money.
Mushrooms of paranoia	cure paranoia
	Cause/remove fear, cause/remove hallucinations.
Mushroom of Unmagic	Removes all magical effects from your body if eaten.
Mushroom of Restoring	Restores your stats and your experience if drained.
Mushrooms with bad effects	are also often poisonous.
Mummy Wrapping	Reduces your charisma slightly, and prevents other players from seeing your equipment except for your melee and/or ranged weapon. Also makes you look dark like being infected by Black Breath. (Equip it!) Vampires start with a mummy wrapping, because it can protect them from the sunlight. If they are moving on the world surface (meaning not in a dungeon/tower) while it's day, the sun will burn them if they don't resist light or wear a mummy wrapping. Hint: Polymorphing into a vampire bat may improve hit point regeneration rate.
Picklock	When equipped, improves your trap-disarming ability.
Rubble ':' on the floor	You can create sling ammo from this. You cannot pick up rubble, just stand next to it (see (6.12)).
Skeletons/Bones/Skulls	You can craft ammunition from these if your Archery skill is sufficient (see (6.12)).
Spell scroll	Although called "scrolls" they actually persist and can be used infinite times. They may however get destroyed by certain damage effects (most notably fire and acid) same as regular scrolls. Spell scrolls ignore water damage though, which can harm regular scrolls.
Spell crystal	They are like "spell scrolls", except they are used for mindcrafter spells. A specialty of spell crystals is that they ignore fire damage (and water damage, same as spell

scrolls).

Codex, Spellbook, Grimoire

These are magic books that may contain magic spells of any type and school. However, these books start out empty, devoid of any spells and it's up to the player to add spells of his choice to them.

To do so, he needs to find or buy spell scrolls in the book store (orange '9' in town), then press 'A' to activate the Codex, Spellbook or Grimoire, then choose the spell scroll he wants to transcribe into the book. The scroll will vanish and the spell will be permanently and irreversibly added to the book.

Condition for this to work is that the book still has free space left, and that the player has actually learned the spell he wants to transcribe.

Codices can carry the least amount of spells (3), spellbooks being intermediate (4), while Grimoires have the most space (5).

(Note that you cannot use these books if your game client version is below 4.4.2!)

Sprig of Athelas Eat this one to cure Black Breath (see (1.3a) for more information about Black Breath), also cures poison/stun/cuts.

Tarpaulin When equipped a tarp prevents your inventory and equipment from taking water damage when crossing water fields or when you are attacked with water-based effects.

Note that your weapon is not included in this protection when you for example attack a water-based monster with it.

(5.9a) Activatable items

Many items can be activated (press 'A' to try). These items are generally called 'Magic Devices'. (Apart from these items, magic devices also include wands, staves and rods, see (6.10) for more information.)

The chance of successful activation may or may not depend on various factors, such as..

- your magic device ability vs the item type base level, your magic device ability consists mainly of your 'Magic Device' skill and also somewhat of your intelligence.

See (6.10) for more information on the Magic Device skill.

- whether you have trained your Anti-magic skill

- if you have the item equipped

An activated item will usually have a cooldown (timeout) until it can be activated again. Items that need to be equipped to be activated usually won't recover while they aren't equipped.

Many artifacts can be activated, as well as items of certain ego powers. But there are also some base item types that provide an activation effect.

Base and ego types that can be activated and aren't described elsewhere:

Cloaks of immolation: Temporary fire resistance.
 Cloaks of frostweaving: Temporary frost resistance.
 Cloaks of Lordly Resistanc: Temporary base+poison resistance.
 Dragon Scale Mails: According breath attack.
 Weapons of the Thunderlords: Teleportation.
 Weapons of Spinning: Spin attack.
 Fury weapons: Berserk.
 Noldor caps: Treasure detection.
 Spectral weapons: Wraithform (see (5.22)).

Serpent amulets: Poison breath.
 Moon amulets: Sleep monsters.
 Rage amulets: Berserk.
 Elemental rings: Breath the ring element and temporary resistance to it.
 Teleportation rings: Explode for teleportation.

(5.9b) Artifacts and artifact resets

(For information about the 'timeout' on true artifacts, see 'Artifact resets' further below.)

Artifacts of any type cannot be enchanted by any means, nor harmed by elemental attacks of any type. Also they have a high chance to resist disenchantment effects. (If the player actually resists disenchantment already then they are completely safe.)

Artifact types in general

Some items are 'named', those possess especially great magic powers and are also called 'Artifacts'.

Different from other items artifacts will pseudo-ID as 'special' (given sufficient combat/magic/archery skill) or as 'terrible' if they are cursed.

The artifact name can either be given as a real name, for example:

The Dagger 'Nimthanc'

or it can be in the form of a description like for example:

The Whip of Gothmog

The 'The' indicates that this item is one of a kind, aka an artifact.

To find out all about the magic powers of an artifact it needs to be *identified*, for example by a 'Scroll of *Identify*' or in one of the *ID* shops that occur in most towns, which will usually cost around 2000..3000 gold.

Some artifacts can be 'A'ctivated for a special effect. This will be shown in the list of its powers that you get when *identifying* it.

Artifact ammunition never breaks or (in case of boomerangs) falls down to the floor instead of returning. Artifact weapons are harder to get disarmed.

There are two classes of artifacts, 'true artifacts' (also called 'static artifacts') and 'random artifacts' or short 'randarts':

True artifacts

True artifacts are predefined in the a_info.txt file and will always sell for their defined value even if they have not been *identified*.

You can search a list of all true artifacts in game, by pressing ~ 6 .

True Artifacts are unique. If an artifact is owned by a player, noone else can find it anymore until it's lost (for example if the player dies) or sold to a shop, or if the player drops it to the floor and leaves it behind. Depending on a server's configuration artifacts that are sold to shops usually stay a while in the shop and can be bought by other players before they finally disappear from the stock.

Usually true artifacts may not be dropped into a house (will just disappear!) and may not be carried by winners, ie characters that have beaten Morgoth. Since static artifacts are predefined and have fixed abilities, their number therefore is limited. Thanks to the existence of random artifacts (see below) this won't be able to cause any shortage of artifacts that can be found though.

Static artifacts will also be erased if they are left on the ground and the dungeon level or worldmap sector gets 'unstaticed', that means it gets reset because no players have been on it for a while (can be a few seconds for world map sectors or dungeon floors that are left without any players on them, and up to many hours in case someone ghost-died on a dungeon level, which can render the dungeon level 'static' for that time to allow others to retrieve the loot).

Note that some cursed true artifacts can be sold to stores after you removed the curse.

Random Artifacts

Random artifacts are composed randomly and even if they happen to bear the same name might have totally different powers. Randarts need to be *identified* to sell for what they are really worth.

Randarts can be dropped in houses and used by anyone just fine, with the exception that randarts that give a hit point bonus can only be found/created by winners (characters that have beaten Morgoth), and that the hit point bonus will not apply if a non-winner character happens to use them.

As was just mentioned, randarts can actually be created by players, using a 'Scroll of Artifact Creation' which are somewhat often sold in the 'Expensive Black Market' in Minas Anor, but also may very rarely spawn in normal black markets.
The advantage of creating an artifact is that the player can determine the base item type he wants to use. For more information about artifact creation see (8.4).

Note that randarts that don't auto-curse themselves can be sold after you removed the curse (except if the base item type is already worthless).

Artifacts vs Nazgul

Artifacts greatly resist Nazgul, which cause most other weapons to break more or less instantly. So even if an artifact weapon you find seems not very appealing in particular you might want to keep it just for slaying Nazgul. (See (1.3a) for more information about Nazgul.)

Note: 'The Stormbringer' is not a real artifact but it will show the same resilience as true artifacts and random artifacts vs Nazgul.

Bonus from wearing similarly named artifacts

If you wear/wield multiple artifacts of similar name, you will receive a luck bonus (see (5.8), 'LUCK', for details about luck). For example if you equip
The Whip of Gothmog (which happens to be a true artifact)
and also
The Hard Leather Armor 'Gothmog' (which is actually a random artifact)
You'd get a small luck bonus, or 'set bonus'. The more artifacts of similar name you equip the greater the luck bonus will be.
The exact luck boni for those 'artifact sets' starting at two items are:

Number of artifacts equipped	Luck bonus
2	+ 3
3	+ 6
4	+10
5	+15
6	+21
7	+28
8	+36
9 or more	+40 (cap)

..which is actually the sum of all numbers from 1 up to the number of artifacts you have equipped. Eg 2 artifacts -> 1+2 = 3. 4 artifacts -> 1+2+3+4 = 10.

Multiple equipped sets don't stack, only the biggest set counts!

Artifact resets

The old system of resetting all true artifacts at once every 3 months has been replaced by a new "fluent" reset system:

Artifacts will last for 5 weeks after they have been found (ie dropped by a monster/chest/just being generated on the dungeon floor, and picked up by a player), after which they will "time out" and disappear. This timer is specific for each single true artifact, depending on when it is found (again).

No compensation is given when an artifact times out and disappears, since that would encourage hoarding, so sell an artifact to a store in time before it actually vanishes.

To check the timeout of an artifact, inspect it ('I' to inspect).
For your character to 100% "know" if an artifact is a true artifact or not it needs to *Identify* the item. So this will be required to see the timer on it.

The timer will also continue to run out while the owner/carrier of an artifact is offline.

Trading artifacts between characters has no effect on the timeout.

Grond and Morgoth's crown do not time out.

Artifacts that can only be found by winners (kings/queens/emperors/empresses) have twice the timeout delay (10 weeks).

All artifact timeout delays are further doubled on the Ironman server (5 weeks for regular true artifacts, 20 weeks for winners-only true artifacts).

The Ring of Phasing has no timeout (!) but will instead immediately reset when someone else kills Zu-Aon. Until then its owner can keep it indefinitely.

(5.10) Destruction of items by elemental attacks

Items in your inventory can be destroyed if you are hit by an elemental attack. Those attacks can even have a very slim chance of damaging an item that you have equipped!

There are two different cases, inventory items and equipped items:

-Inventory items can get destroyed or in some cases damaged (disenchanted) or discharged (magic devices) by various elemental attacks, depending on the item type and element type.

Having resistance will reduce the chance of inventory items getting destroyed somewhat. To protect your inventory effectively though you will need to have double resistance*.

Being immune to an element will also protect all your inventory from any damage from that element.

-Equipped items can get damaged by certain elemental attacks (armour) or they can get damaged when used to attack an elementally affine monster (weapons) or when blocking attacks of such a monster (shields).

Having resistance will reduce the chance of equipment items getting damaged somewhat. Having double resistance* will greatly reduce the chance of damage. Being immune to an element will also protect all your equipment from any damage from that element.

(* "Double resistance": Static resistance gained from an equipped item or an intrinsic character class/race resistance or a resistance acquired by training a skill, plus temporary resistance gained from either consumables (usually potions) or castable spells or activatable items that grant you temporary resistance on activation - also see (5.17).)

Some items have IGNORE_xxx flags which let them ignore certain elements, completely preventing them from being destroyed or damaged by that element.

All artifacts, random and static ones, cannot be harmed by elemental attacks of any type.

Here is a table of items and which elements they are susceptible against: "Impact" happens if you fall into a pit, smashing some potions on hitting the floor. Items that IGNORE_COLD also resist impact damage. Usually items that contain wood, leather or stuff are susceptible to fire and acid, while things that consist only of metal are just susceptible to acid.

	Acid	Elec	Fire	Cold	Impact*	Water
Arrows	x		x			
Bolts	x		x			
Pebbles						
Shots						
Slings	x		x			
Bows	x		x			
Crossbows	x		x			
Wooden boomerangs	x		x			
Metal boomerangs	x					
Swords	x					
Axes	x		x			
Blunt	x		x			

Polearms	x		x			
Leather caps/Hats	x		x			
Metal caps/Helmets	x					
Crowns	x					
Leather shields	x		x			
Shields	x					
Boots	x		x			
Gloves	x		x			
Cloaks	x		x			
Soft Armour	x		x			
Hard Armour	x					
DSM Armour						
	Acid	Elec	Fire	Cold	Impact	Water

Scrolls	x		x			x
Parchments	x		x			
Potions/Flasks			x	x	x	
Bottles			x		x	
Lamps	x		x			
Wooden chests	x		x			
Metal chests	x					
Skeletons	x		x			
Junk	x					
Rings		x				
Amulets						
Wands		x				
Staves	x		x			
Rods						
Spell Scrolls	x		x			x
Spell Crystals	x					
Beginner Handbooks	x		x			
Handbooks	x		x			x
Tomes	x		x			
Greater Crystals						
Custom Books	x		x			

*Impact-based attacks:

These do not hurt items in your inventory. For example impact hounds breathing at you will not destroy any potions in your backpack.

However, there are some cases where impact-type destruction can happen to your inventory items:

- 1) Falling through a trap door/chasm without having 'Feather Falling'.
- 2) Rocket attacks, if you do not resist both, shards AND sound!
- 3) Inferno/detonation damage, if you do not resist both, shards and sound.

However, inferno and detonation damage cannot be caused by monsters.

Items ignore certain elements if they have the according resistance due to ego powers, for example a leather shield of resist fire will ignore fire.

Some tomes or spellbooks will resist certain elements, for example a Tome of the Eternal Flame cannot be harmed by fire.

(5.10a) Equipment damage from elemental attacks

 Armour can get damaged when an elemental monster attacks you or when you get hit by elemental magic. Blocking an attack with a shield may damage it in the same manner. Weapons may take damage if you hit an elemental monster with them. Armour might also rust from moving through water without a tarpaulin equipped.

Armour/shields getting damage means a reduction of their +AC bonus by 1 point each time, while weapons getting damaged means a reduction of their +damage bonus by 1 point each time.

AC bonus won't drop lower than half the negative amount of the base AC.

Damage bonus won't drop lower than -10.

If the player has resistance to the element, this will cut down the probability

of any equipment damage. Having double resistance (permanent + temporary) will cut it down even further.

To completely prevent any equipment damage, you need to become immune to the element, or the equipped item needs to ignore or resist the element.

The following table lists the elemental damage taken by various item types.

	Acid	Fire	Water

Wooden boomerangs	x	x	
Metal boomerangs	x		x
Swords	x		x
Axes	x		x
Blunt		x	
Polearms		x	
Leather caps/Hats	x	x	
Metal caps/Helmets	x		x
Iron crowns	x		x
Crowns			
Leather shields	x	x	
Shields	x		x
Boots	x	x	
Gloves	x	x	
Gauntlets	x		x
Cesti	x	x	x
Cloaks	x	x	
Soft Armour	x	x	
Metal/steel Armour	x		x
Mithril/adamantite			
DSM Armour			

(5.11) Monsters

All creatures in the game apart from special 'questors' and other player characters are actually "monsters", aka your enemies. Some might exhibit rather neutral looking movement or no movement at all, some might not even inflict damage, but none of them is friendly towards you and all of them will or in some way or another make your survival more difficult.

Right after creating a new character you will already encounter "monsters" of some sort: Townspeople, denoted by the letter 't' and maybe some cats, birds or fish (if you happen to walk nearby the lake).

Since all creatures are basically hostile, you will auto-attack them when you move onto an adjacent grid. Killing townies is a good way to make some easy money. Just beware of mean-looking mercenaries and battle-scarred veterans.

When you enter the training tower or the dungeon you will soon notice the variety of monsters, for example you will probably encounter a "floating eye", denoted by an orange 'e'. These cannot inflict any damage on you but if you get too close they will gaze at you which will in most cases paralyze you!

If you're unlucky or your Saving Throw stat (Shift+C to check) isn't particularly great a floating eye might even lock you in paralyzation forever, making you easy prey for any other monster around.

To check monster information you have three ways:

Press ~2 for monsters you have killed or ~3 for a list of 'unique' monsters.
Press ~7 for the 'monster lore' search. It contains all monsters in the game except for ego-variations (see below).

There are three types of monsters:

- Basic monsters (over 1100 of those), such as "a Hill Orc" or "a Zog".

- Unique monsters (over 200), such as "Azog, King of the Uruk-Hai".

You can recognize these by distinctly flickering (like a colour 'spike').

- Ego monsters (over 50). These are not actually monsters but modifications of basic monsters, for example:

The basic monster "Hill Orc" receives the ego-power "Archer", it will become "a Hill Orc Archer" and instead of trying to punch you in the face will shoot arrows at you.

Ego monsters can also be recognized by flickering: They receive the ego-power colour in addition to their base colour. For above's example that would be

the green base colour of the hill orc and the orange colour of "Archer" ego-power resulting in a green orc that flickers orange.

If the ego-power colour is actually the same as the basic monster colour the resulting ego monster will instead flicker in random colour spikes just like unique monsters do.

Some ego monsters can be extremely nasty at low and mid levels. Among the most feared are probably the (dark-brown) melee-specific egos "Monk", "Warrior" and "Unbeliever" and the somewhat less bad "Chieftain" and "Possessed" animals as well as the dark-green "Archpriest" ego which moves fast, has a powerful curse attack and can summon more monsters.

Monsters have specific loot tables, a base level (r-level, racial level of the basic monster type in general) and an actual monster level (m-level, the real level of a monster standing before you, which can be above its basic r-level, because monsters can appear as levelled-up versions if you encounter them on much deeper dungeon levels than where they usually start to appear). See (5.7c) for loot tables, see (0.4) for details on m-level and r-level.

Some unique monsters are "dungeon bosses", which means they can only be found on the final level of a particular dungeon and when you kill them you will "conquer" that dungeon (press ~8 to check your dungeon info). See (4.5d) for info about dungeon bosses.

Morgoth, the Lord of Darkness is the game boss. To actually encounter him you first need to defeat Sauron, the Sorcerer though. See (1.3b) for details. By defeating Morgoth the player is awarded royal status. There will be two more dungeons that can only be entered by royalty and offer further, insanely hard challenges and new unique bosses.

(5.11a) Monster flags

Most monster flags you find in the spoiler files (press ~7 in-game or open the actual file r_info.txt with a text editor or use Mikael's monster search) are self-explanatory. Here is an explanation of some flags that are important but might not be obvious:

FORCE_MAXHP	The monster always gets rolled at maximum hit points. For example if the monster has 3d6 hit points aka 3 dice with 6 sides each, it could have anything between 3 and 18 hp. But if it has this flag, when you encounter this type of monster it will always have 18 hp.
FORCE_DEPTH	You cannot meet this monster out of depth. It will never appear on a floor of lesser level than itself.
FORCE_SLEEP	Deprecated, has no actual effect in-game. A note about monster sleep in general: Check monster lore (~7) to see which monsters start out asleep and which are awake. Note that monsters inside a pit (see (4.6)) are never asleep.
OOD_xx	The monster cannot occur more than xx levels out of depth. All unique monsters actually have an intrinsic OOD_20 flag even if it's not shown in the monster lore spoilers.
FRIENDS	This monster comes in a pack. Makes life easier for mimics.
RAND_xxx	This monster has random movement. The xxx number is the chance in percent. Several of these flags will stack.
NO_SLEEP	This does not mean that the monster cannot be asleep when you meet it, but that you cannot use sleep spells (et al) on it. (Compare (4.12).)
NEVER_BLOW	This monster will never attack in melee.
NEVER_ACT	This monster will never move or perform any action at all. So this means it is completely harmless.
NO_TARGET	This monster cannot be targetted with target command.
NO_DEATH	This entity can never die.
NO_AUTORET	You won't use auto-retaliation against this entity.
REFLECTING	The monster can deflect bolts and arrows, physical and magical projectiles, prolonging the fight.
HURT_LITE	This monster is susceptible to light attacks.
HURT_ROCK	This monster is susceptible to stone-to-mud attacks.
COLD_BLOOD	You cannot spot this monster with infra-vision.
WEIRD_MIND	The monster flickers on ESP.

EMPTY_MIND	The monster does not show up on ESP.
SHAPECHANGER	The monster changes its appearance randomly and quickly.
CHAR_CLEAR	The monster has no visible appearance, not even if you can see invisible.
UNMAGIC	Will cancel all temporary magical effects on the player, except for mimic form (from polymorph ring) and martyr.
HOLD	Paralyzes you from afar.
FORGET	Blanks your mind, makes you forget the dungeon map and details of your items (unidentifies items).
TRAPS	Can place traps around you (from afar).
DISBELIEVE	Monster has an anti-magic field, the strength depending on its level. Like training the 'Anti-magic' skill, having intrinsic anti-magic from the DISBELIEVE flag will also shorten the duration of certain magical temporary buffs and debuffs on your character! To see which those are and to see more information about anti-magic, see 'Anti-magic' skill in (6.2) and 'Dark Sword' in (5.9).
DROP_GOOD	The monster usually drops enchanted items.
DROP_GREAT	The monster usually drops items with ego powers or artifacts. Hint: Usually monsters that have this flag are pretty powerful, but there are actually some low-to-mid-level monsters that have it too, so make sure to kill these when you see them: Smeagol (level 3), Wormtongue (level 9), Robin Hood (level 10), Boldor (level 15), Azog (level 23), It (level 24, but actually impossible to seek out, you'll rather just meet It by chance), Sandworm Queen (level 30), The Wight-King of the Barrow-Downs (level 35). Azog, the Sandworm Queen and the Wight-King are dungeon bosses, so you will only find them on the final floor of their respective dungeon. (For details on monster stats and flags, press ~ 7 in the game to invoke the monster lore browser.)

(5.12) Monster attack mechanism, Armour Class, damage caps

Monsters may try to attack you in three different ways:

- Hitting you.
- Shooting you.
- Casting a spell that may wound you.

Monster is trying to hit you:

If a monster tries to hit you, the following happens:

- 1) Any shielding magic around you is evaluated and may prevent the attack.
(Note: Disruption shield is currently evaluated later on.)
If this doesn't succeed..
- 2) your character may dodge. If this doesn't succeed..
- 3) your character may try to parry with a weapon or block with a shield.
It will mostly choose the action (either parry or block) where it is more proficient, although it won't always be able to use the preferable method of those two, and sometimes randomly has to rely on the other one.
If this doesn't succeed..
- 4) your armour class is evaluated and might catch the attack, in which case you don't take any damage, ie the monster misses you. If this doesn't succeed..
- 5) your character takes damage, but your armour class will at least reduce it.

Note that some attacks can bypass some of those defenses.
More info further below.

Monster is trying to shoot you:

If a monster tries to shoot you, the following happens:

- 1) Your character may dodge. If this doesn't succeed..
- 2) any shielding magic around you is evaluated and may prevent the attack.
(Note: Disruption shield is currently evaluated later on.)
If this doesn't succeed..

- 3) if you have REFLECTION you will try to reflect the shot.
If this doesn't succeed..
- 4) your character may try to block the shot with a shield.
If this doesn't succeed..
- 5) your character takes damage. Armour class has no effect.

Monster is casting a spell that wounds you:

If a monster casts a spell at you, the following happens:

- 1) Your character may dodge if it's a bolt spell. If this doesn't succeed..
- 2) any shielding magic around you is evaluated and may prevent the attack.
(Note: Disruption shield is currently evaluated later on.)
If this doesn't succeed..
- 3) if you have REFLECTION and if the spell is a bolt spell, you will try to reflect it. If this doesn't succeed..
- 4) if it's a bolt spell, your character may try to block it with a shield.
If it isn't then your character may still try to cover behind a shield.
If this doesn't succeed..
- 5) your character takes damage. Armour class has no effect.

For details about parrying and blocking see (6.11).

Armour class:

Armour class helps you twice:

- It makes monsters miss you more often with attacks that don't bypass armour.
The more AC the better, it's weighed against the level of the attacking monster. If the monster is (heavily) stunned it gets penalties here.
- It reduces the damage if a monster manages to hit you with a physical attack.
This effect caps at 200 AC.

Monsters can score critical hits which can (depending on the attack type) result in a cutting or stunning effect against the player.

A monster scores a critical hit if it inflicts a damage which is very close to its theoretical maximum. Weaker monsters (that don't inflict high amounts of damage) aren't able to score critical hits at all.

The power of the resulting cut/stun depends on the damage too.

So a high armour class helps a lot, to avoid critical monster hits and to reduce their power.

For more information about monster crits, see (4.11).

Basic monsters (that means before any ego-power such as 'Warrior' or 'Holy' is applied as in 'Hill troll warrior' or 'Holy 5-headed hydra') have a cap on melee attacks, which limits their attacks to an average of 700 total damage points per round (Monsters, depending on their race, can perform up to four melee attacks each round they can move/act).

Note that the monster may attack for more damage, it's just the averaged value, the real damage is random and can fluctuate above or below the average.

Wearing armour will further reduce the total average damage you can expect to take per round from that monster. The cap will be used on the monster's raw damage output before the player's AC is factored in.

Sanity-draining melee attacks are capped at 55 points of average sanity damage per blow (not per round).

WARNING: If the monster is an ego-monster (eg the aforementioned 'Warrior' or 'Holy' ego power) this will modify its damage output after the cap was applied. That means that some very powerful ego-monsters may deal even more than cap damage on average per round, although that's very rare.

Note that there are melee attacks that cannot be reduced by armour. It depends on the way the melee attack is performed. See (5.12a) for details.

(5.12a) Monster attack types and brands

Monsters can strike you with branded attacks, for example acidic hits, or hits that poison you if you get hit. If you resist the according brand you won't be affected by it alot, and the overall damage will be reduced. If you're immune you won't be affected at all and only take a physical part of the damage - if there is a physical part. This depends on the attack type.

Here is a list of attack types and brands:

Attack type	Contact/Cut/Stun/Bypasses AC/No Block/No Parry
-------------	--

```

-----
HIT                + + + - - -
PUNCH, KICK, BUTT, CRUSH  + - + - - -
CLAW, BITE          + + - - - -
TOUCH, STING, ENGULF, CHARGE, CRAWL  + - - - - -
SPIT                - - - - - -
GAZE, WAIL, SPORE, BEG   - - - + + +
INSULT, MOAN, SHOW, WHISPER - - - + + +
EXPLODE             - - - + - +
DROOL               - - - - - +

```

(Note that 'Bypasses AC' also means that this attack type cannot be dodged.)

Brand Needed resistance to reduce/avoid its effect
(also called (These help to avoid the effect but do not mitigate damage
'damage type') unless explicitly states that they do.)

```

-----
HURT                Only AC - raw damage.
                     This damage type can be mitigated by AC.
ACID, ELEC, FIRE, COLD
                     According elemental damage.
                     The damage can partially be mitigated by having the particular
                     (double) resistances or immunities and gets amplified by
                     susceptibility.
POISON              poison.
                     The damage can partially be mitigated by having the particular
                     (double) resistances or immunities and gets amplified by
                     susceptibility.
BLIND               blindness.
CONFUSE             confusion (or chaos).
TERRIFY             fear.
PARALYZE            free action.
EXP_xx             hold life.
LOSE_xxx            sustain stats.
EAT_xxx            DEX and stealing skill increase your chance to resist
                     EAT_ITEM (item stealing) or EAT_GOLD (money stealing) attempts.
                     A device of theft prevention makes you immune to EAT_ITEM.
                     A money belt makes you immune to EAT_GOLD.
                     Nothing helps against EAT_FOOD or EAT_LITE.
UN_BONUS            disenchantment.
                     The damage can partially be mitigated by having the resistance.
UN_POWER            no resistance. It drains charges/energy from your items.
                     Additionally it drains some of your mana.

```

Magic Device skill helps to prevent draining though.
See (6.10) for more information about the Magic Device skill.

Mimicking a monster form that has UN_POWER attacks and at the same time is a very proficient caster (at least 1_IN_2 spell frequency) will help to prevent draining too.

Also reduces the remaining duration of a polymorph ring form the player is currently mimicking (this effect cannot be mitigated by magic device skill or un_power-form).

```

TIME                time.
                     The damage can partially be mitigated by having the resistance.
DISEASE             poison.
                     This attack can also decrease your constitution.
INSANITY            none. But certain mimicry forms, skills and classes/races gain
                     some damage reduction in three tiers, see (6.6) for details.
HALLU               chaos.
PARASITE            <currently no effect>
DISARM              'Fighting' ability.
                     Weapons wielded 2-handely are harder to disarm (stacking).
                     Artifacts are also harder to disarm (stacking).
                     Heavily cursed items are quite hard to disarm (stacking).
                     Note that DISARM effects have a chance to be blocked or parried
                     if their attack type can be blocked or parried, which is
                     usually the case (they usually have HIT attack type).

```

Sometimes disarmed weapons land in your backpack, but sometimes you drop them to the ground instead. If there is no empty floor (for example because you're fighting on mountain terrain) they will instead be scattered across the dungeon level and you will have to search it to retrieve them.

FAMINE	none. Makes you hungry.
SEDUCE	none. Makes you take off equipped items. Can have random side effects, if your HP are still above 40% and if no other players or monsters are standing next to you: - drain half of current mana or hit points - drain constitution or wisdom - get a disease (equals poison effect) - lose an item or gold (monster steals it; tools won't help!) - gain some experience - regain some drained sanity, if any.
SHATTER	purely physical damage. Hits & causes an earthquake - very dangerous, see (5.13). This damage type can be mitigated by AC.
LITE	Light or blindness resistance. The damage can partially be mitigated by having light resistance and gets amplified by susceptibility.

Getting hit by higher undead creatures may also infect you with the Black Breath! (See (1.3a) for more information about Black Breath.)

Further, monsters may have one or more spells they can cast. Breathing elements and shooting or throwing boulders belong to those too (but aren't affected by anti-magic fields since they aren't 'real spells' but rather physical actions).

Among the monster spells, such as casting bolt or ball spells, teleporting, healing, trying to blind/scare/confuse/paralyze/slow the player, summoning other monsters for help, or speeding itself up with a haste-self spell, there are some particularly special spells that will be explained here in more detail:

SHRIEK	Not a real spell but a physical action, some monsters can emit an aggravating noise that will wake up all nearby monsters and even haste those within line-of-sight of the shrieker. This can be extremely dangerous and you'll see a light red message in the combat message log when a monster shrieks. If you have the sound pack installed, you'll also clearly hear it, which can help further to react quickly: On shallow levels shrieking might not be that bad, but on deep levels it might well be reason enough to teleport out instantly.
TRAPS	Again not a spell but nasty nevertheless. The monster casts a 3x3 'circle' of traps around you, watch where you step.
UNMAGIC	This can be extremely nasty for istari. Unmagic cancels nearly all kind of magic effects your character is currently under, such as speed from a speed potion and even Disruption Shield. This won't affect classes much such as warriors and archers but is life-threatening if it neutralizes the Disruption Shield of an Istar. (Note: Holy Martyr cannot be cancelled.)
MIND_BLAST	A psionic attack spell that hurts your sanity and can cause confusion and hallucinations.
BRAIN_SMASH	A powerful psionic attack spell that hurts your sanity and can cause blindness, confusion, paralyzation and slowness.
FORGET	This mind blanking spell will create darkness around you and make you forget about some or all of the items you are carrying effectively un-identifying them (except for flavoured items).
HOLD	Although not so special and already mentioned in the text above this spell is listed because it's a ranged paralyzation spell. Ghouls can do this for example, so make sure that you get Free Action as early as possible, definitely before venturing into Mordor though.

(5.13) Earthquakes

Earthquakes will cause ceilings to collapse and the ground to shift and crack, burying items, players and monsters and inflicting a lot of damage. All fields in a certain radius around the epicentre have a certain chance to be filled with rocks, to be cleared from previous obstacles (walls) and turn into empty floor fields, or to remain untouched and unchanged.

Players don't take damage from their 'own' earthquakes, caused by their equipment or items (for example weapons of earthquakes or scrolls of *destruction*).

Earthquakes can deal up to 300 damage if you cannot evade the falling rocks and shifting ground: Depending on the number of unchanged (by the earthquake) empty fields that are adjacent to your character, there is a chance to 'evade' and take much less damage or even none at all. Earthquakes can also stun you.

Items will usually be destroyed/lost. Stairs and void jump gates are immune.

Monsters killed by earthquakes do not yield experience, loot or other credit, same as goes for monsters erased by *destruction* or genocide.

(5.14) Curses

Several items you find will be {cursed}!

Cursed items usually have bad effects that outweigh or dominate their useful abilities, and you cannot take them off once you equipped them, as long as the curse isn't broken. Cursed artifacts and ego items are pseudo-id'ed as {terrible}. Shops won't buy cursed items, they might buy the item after the curse is broken, however.

If you equip an unidentified item and it carries a curse your character will notice 'Oops, it feels deadly cold!'.

Note: Instead of dropping an item which curse you have successfully broken, you may of course also just outright destroy it with 'k' key instead. You cannot destroy artifacts though (for example Rings of Power dropped by Nazgul).

There are different types of curses:

CURSED	can be broken by a regular 'remove curse'. Item cannot be taken off or destroyed (via 'k' key) until the curse is broken.
HEAVY_CURSE	requires a strong '*remove curse*' to be broken. Item cannot be removed until the curse is broken. On weapons, there is a high chance of resisting disarming. See the hint regarding the use of enchant scrolls to break a heavy curse instead of using a *rc* scroll, written at the bottom of this paragraph!
PERMA_CURSE	This curse can never be broken. Item can never be taken off or otherwise removed again! Mimics polymorphing into a form that cannot wear the specific item won't succeed getting rid of it either, instead they will still have the item equipped! There is absolutely no way to get rid of this item. If you find a way then you found a bug =).
CURSE_NO_DROP	these items cannot be dropped from inventory as long as the curse isn't broken. CURSE_NO_DROP occurs together with CURSED or HEAVY_CURSE.
AUTO_CURSE	occurs together with CURSED or HEAVY_CURSE. If the curse is broken, AUTO_CURSE items will automatically recurse themselves as soon as the item is equipped, taken off, or picked up. To get rid of an AUTO_CURSED item that you don't need anymore (d)rop it to the ground after the curse has been broken. If you had the item equipped, don't take it off but (d)rop it to the ground right from your equipment! Otherwise it will recurse itself. To drop directly from your equipment, press '/' key at the "drop what?" prompt, which will switch to equipment (and back to inventory if pressed again).
TY_CURSE	Randomly drains stats sometimes, even if the item is uncursed. (TY_CURSE will stay, even if the 'normal' curse is broken!) Lowers the items value by 15000 Au. This curse will be on hold while you're in a town, and will also occur rather rarely while you're on the world surface, ie not within a dungeon or tower. Note that your saving throw has a chance to suppress it. Having 'Holy Support' skill at 40.000 or better will completely negate TY_CURSE effects. ("It carries an ancient foul curse.")
DG_CURSE	Rarely summons a random monster on you, even if uncursed. (DG_CURSE will stay, even if the 'normal' curse is broken!) Greatly lowers the items value by 25000 Au. This curse will be on hold while you're in a town.

Note that an anti-magic field has a chance to suppress it.
Having 'Holy Support' skill at 40.000 or better will completely negate TY_CURSE effects.
("It carries an ancient morgothian curse.")

If 'CURSED' or 'HEAVY_CURSE' occurs on an enchantable item such as a weapon or armour piece, the curses can alternatively be broken by enchanting the item's stats above +0 manually. (Note: The enchant service of shops CANNOT do this!) Each enchantment of any of their stats (to-hit, to-dam, to-ac) above +0 has a certain chance to break the curse. This can often be cheaper than buying a *Remove Curse* scroll for HEAVY_CURSE items.
This is an especially commonly used trick for getting rid of Morgul weapons. Just pick the stat that is already higher. Example:
A Dagger of Morgul (-33,-15) -> You'd enchant its damage to +0 or higher, since it requires you to buy less scrolls (15+) than going for to-hit (33+).
If the item you want to enchant is among your equipment instead of your inventory, press '/' key at the "enchant what?" prompt, which will switch to equipment (and back to inventory if pressed again).

Vampires and Hell Knights have a special take on heavy curses:
If an item is heavily cursed and it is NOT the "of nothingness" type (weapons) then if a vampire or Hell Knight (true one, not mimicked) equips it its negative boni will flip to positive numbers. Also vampires tend to greatly resist certain bad effects that heavily cursed items may exert, making for example Morgul weapons and some heavily cursed artifacts quite useful.
Note that the curse must be heavy, not normal, for this bonus-flipping to work. Look up the Vampire race description in (6.4) for more information.

(5.15) Vampirism

Weapons and other items that you can equip may be 'vampiric' (see (5.8)), meaning that they drain life from your target.
Mimics who use a vampire form and players of 'Vampire' race will also get a vampiric 'brand' on their melee attacks (see (6.7)).
Vampirism does not work with magic, only with physical attacks.

Vampiric life draining heals you with a part of the damage you afflicted on your target, almost each hit! The more damage you deal and the more attacks per round you have, the more life you will leech back. There's a maximum amount of HP which you can leech from a victim per round, but this cap isn't really reached until your character deals quite a lot of damage, remember:
Leeching is based on a fraction of your damage dealt.

Vampirism does not work on all types of monsters. From some it is not possible to drain life force. Those immune to vampirism are:

- undead monsters
 - nonliving monsters
 - in general, all elementals ('E'), golems ('g') and vortices ('v').
- Although demons and angels don't really 'live', vampirism is able to drain the powers that allow them to exist, and so vampirism works against those too.

The best case is to have vampiric flag on a weapon, that will drain at maximum efficiency. However, it will only drain if you hit the monster with that particular weapon.

If you use other vampiric equipment, like gloves, they will be a bit less efficient than an actual vampiric weapon, meaning that you will leech less frequently (the amount of leeched life per hit is not penalized though) but in turn it will work with any weapon you use (ranged too).

For ranged weapons it doesn't matter whether the bow or the ammunition is vampiric. It won't increase your over all life leeching if both are vampiric either.

Note that vampirism gained from mimicked forms only works on melee combat. Vampires (real ones as well as mimicked ones) usually only are half efficient at vampiric leeching, compared to vampiric weapons, due to half of vampires' attacks being normal hits and the other half being biting (which does the actual leeching).

In general, vampiric flags don't stack from multiple sources! Just the source that fits the situation best (usually weapon/ammo) overrides the weaker ones (usually non-weapons). Here is a table of priority - as was just explained, only the most powerful source is applied, the rest is ignored:

Vampirism source priority table (from best at the top to worst at the bottom)
The best source overrides all weaker ones, which simply get ignored:

Melee		Ranged	
Weapon	100%	Shooter	50%
Vampire bat/mist form	100%	Ammunition	50%
Vampire character race	50% (*)		
Other vampiric forms	50%		
Non-weapons (gloves)	50%/100% (**)	Non-weapons (gloves)	33%
Fruit bat (native only)	50%		
Fruit bat (potion only)	33%		

(Mimicked fruit bats don't get vampirism.)

(*) Training Necromancy and Traumaturgy schools can increase this further, see the skills' descriptions for details.

(**) 100% if on gloves and fighting without weapon and shield (Martial Arts), 50% otherwise.

(5.16) Invisibility

Invisibility on monsters is binary, either they are invisible to a player (if he doesn't have 'see invisible' ability) or they aren't (if he does have it). Note that ESP overrides invisibility, so if an invisible monster isn't empty-minded (or has special ESP-cloaking such as 'telepath' ego monsters) you can spot it with the matching ESP even if you don't have 'see invisible' ability. Some type of magic may detect invisible monster too, while some other creature-detection type of magic actually fails against invisible monsters. Players who don't have 'see invisible' but have infra-vision (and aren't blinded) can also see invisible monsters if they aren't cold-blooded.

For players being invisible it depends:

- Invisibility from spells has a certain power shown in the spell's info.
 - Invisibility from items uses 4/5 of the player's level for power (player level is capped at 50).
 - Invisibility from monster form (mimicry users) is similar to invisibility from items, except that its power is the average of monsterlevel/2 and playerlevel, with monsterlevel capping at 100 and playerlevel capping at 50.
- Invisibility powers from different sources do not stack, the best one overrides the weaker ones.
- Some items that grant invisibility also have +mods on them (for example '+3'), these don't affect the invisibility itself, but are usually just an extra +stealth bonus or some completely different kind of bonus that item also happens to grant (use *Identify* to find out).

The actual effect invisibility has on gameplay will also be affected by player and monster level, the ability to see invisible, and shadow cloaks, as follows here:

A player who is invisible is harder to spot for monsters in the way that they only have a certain chance to see the player on each turn, making them move erratically instead of directly targetting the player. This also helps against casters, archers or breathers who won't be able to target you as well (often) as they usually could. Your invisibility power is continuously compared to the monster's level, causing an internal 'dice roll' that determines whether or not the monster will see you on each turn.

Being invisible costs your body a lot of effort, resulting in getting hungry quickly.

Invisibility won't work at all on monsters that are..

- invisible too.
- game bosses (Sauron, Morgoth, Zu-Aon).
- Dragonriders, they have ESP.
- nonliving monsters with empty mind (not using optical senses).
- able to see through the rogue-specific 'cloaking' ability, these can see through invisibility too (compare (0.2) 'cloaking mode'):
Eyes, angels, Nazgul, nether guards, and unique monsters which are both smart and powerful at once.

All other monsters are randomly affected by the player's invisibility, meaning that they will only sometimes be able to spot him (they will see the player kind of 'flickering').

The closer a monster is, the better its chances to spot the player.

Some monsters have better chances to spot the player, depending on

- distance to the player,
- level of the player (higher level = harder to spot),
- monster class (Dragons, demons, undead, animals, never sleeping monsters and smart monsters are better at it; orcs, trolls, stupid monsters are worse),
- the vision power of the monster,
- the level of the monster,
- player carrying a light source (not affected by vampires' "intrinsic light"), doubles the chance of spotting him,
- player wearing an aggravating item, further triples the chance.

Invisibility also affects other players:

If another player is invisible and of higher level than you..

- you can see him if you can see invisible and he's not wearing a shadow cloak;

- otherwise he'll be completely invisible to you.

If another player is invisible and not of higher level than you..

- you can see him easily if you can see invisible and he's not wearing a shadow cloak;

- you see him 'flicker' if you lack seeing invisible or if he's wearing a shadow cloak (or both). He will fade in and out of your sight.

If you want to look at his equipment with the ' key, then you'll need some timing, might take several tries.

Invisibility (on players) overrides ESP. So it does help in a (blood bond) duel even if the opponent has ESP.

The effect of invisibility is greatly reduced in PvP (you cannot become completely invisible even if your level is higher than the other player) but still gives a slight edge.

Cloaking:

The ability to cloak themselves is exclusive to rogues and automatically acquired at level 15. This will effectively render them invisible, but it is in fact NOT the "Invisibility" that has been described above.

Cloaking overrides any detection mechanism, a cloaked player can only be seen by party members, certain special monsters, or while the cloaking is weakened because the cloaked player performed certain (noisy) actions.

See (0.2) for more information about cloaking.

(5.17) How abilities, resistances and boni stack

(Also see (5.6) for basic information about damage types and resistances.)

The same resistance from two or more items in your equipment don't add to each other. For example you only need one item that provides fire resistance. If you equip two such items you won't get better resistance than with just one item. You cannot get "double resistance" from two items' static resistances. This rule applies to all resistances and abilities that don't use a bonus number to indicate their effectiveness, like faster mana replenishing or hit point regeneration, telepathic powers, slow digestion, etc.

Intrinsic resistances and abilities gained from your class or race, or those acquired from training a skill are also static resistances and will not stack with other static resistances from items.

However, there is a way to further increase your base resistances (fire, cold, acid, lightning) or poison resistance temporarily:

Use an item or spell that provides some temporary resistance. Static resistance and temporary resistance actually stack and their effects are multiplied!

For example if you wield a shield of resist fire and you quaff a potion of resist heat you'll have double fire resistance as long as the potion lasts, resulting in fire damage being cut down to 1/9 instead of 1/3:

$1/3 \text{ static res} * 1/3 \text{ temp res} = 1/9 \text{ total res.}$

This is quite close to having fire immunity, as far as single monster fights are concerned.

Not only potions can boost your resistances temporarily, some items can also be activated for temporary resistance, for example cloaks of lordly resistance or elemental protection rings or certain artifacts. And of course there are some spells that can be cast for temporary resistances.

Note that two temporary resistances to the same element do not stack either, same as how two static resistances to the same element don't stack. Only one static and one temporary resistance will stack in total, ever.

Stat increases or ability increases that are not 'flags' (flag means you either have it or you don't) but that use bonus numbers will add to each other. For example an orcish shield (+2) that increases your strength by +2 and a kolla (+1) which also increases your strength (just by +1) will add up and your character's strength will be increased by +3 in total! Same goes for IV (Infra-Vision), luck, extra attacks, speed, etc.

There are some abilities which are not flags although they might look like it. In fact, they add up / stack. Those are:

- Extra shots (concerning ranged weapons)
- Extra might (concerning ranged weapons)
- Drain mana ('Drains your magic'. Note that 'mana regeneration' (also called mana-charging) does NOT stack. So it can cancel out the effect of only ONE item that drains mana, not of any more). See (4.11a) for more information.
- Drain hit points ('Drains your health'. note that 'regeneration' does NOT stack, so it can cancel out the effect of only ONE item that drains hit points, not of any more. However, the 'Health' skill is able to further increase your regeneration rate). See (4.11a) for more information.
- Drain experience ('Drains your life force'). See (4.11a) for more information.
- Extra light radius

(5.18) Monster auras

Some monsters have auras of flashing lightning, freezing cold or furious flames surrounding them! If a player engages such foes in close combat, each time he lands a blow the aura will retaliate, dealing lightning / cold / fire damage depending on the aura type. Some monsters even have multiple auras. The damage of such auras may be significant. Especially important is the fact, that the faster a player hits a monster, the more he will suffer from its auras.

The damage an aura deals is decided by a dice roll:
[1 + (monsterlevel/26)] d [1 + (monsterlevel / 17)]

Example:

A warrior of level 30 is fighting a storm giant. The storm giant has an aura of lightning surrounding him. The warrior is able to deal 6 blows per round with his current weapon. The warrior has a source of permanent lightning resistance (elvenkind armour), he lacks potions of resistance or lightning immunity though. This means:

Storm giant has monster level 35 (assumed the warrior encounters him on dungeon level 35), so his lightning aura will inflict 2d3 damage each hit. The warrior has lightning resistance, so the damage will be cut down to 1/3, which is 1 or 2.

Since the warrior has 6 BpR, he will suffer between 6 and 12 (6*1 and 6*2) damage per turn while hitting the storm giant.

(5.19) Experience-draining items

Some items, such as randart rings of power (dropped by Nazgul) drain your experience points permanently. Here are some details about that process:

- Experience drain from multiple items stacks, although it doesn't add in a linear way. So, wearing two rings of power won't drain twice as fast as one, but about 1,5x as fast.
- Experience drain is not temporary, so it cannot be restored by potions of restore life levels. To make up for it, you'll have to kill monsters..faster.
- Experience drain won't go further than the experience you need at least to maintain your current character level. If you reach that experience border, experience drain will stop, even if you still have the items equipped. So you will not lose levels from experience drain.

HOWEVER: If a monster or other effect drains your experience below your current level, the experience drain from items will kick in again!

- Experience drain will happen much slower if you're on the world surface, ie not inside a dungeon or tower.
- Experience drain will completely hold while you're in a town, so you can just take any time you want for shopping or sitting out blacklists, without losing any experience at all.

(5.20) Digging

Your chance to successfully tunnel through an obstacle depends on the obstacle and your 'digging power'.

If you're not interested in the exact formula, skip down to (5.20b) which has a table with example values for certain scenarios.

(5.20a) Digging - Exact calculation

Your digging power is calculated as follows:
An equipped item that provides (+X) to digging will add 20*X.
If you have a digging tool equipped, its weight is added (eg 25.0 lb -> +25).
If the digging tool is enchanted to hit or to damage, those values are added.
The power value so far is now multiplied by a value between 1 and 2, depending on your 'Digging' skill (see (6.2)). If the skill is 0, the multiplier is 1, if it's 50, the multiplier is 2. Otherwise the value is linearly inbetween.
After that, a bonus is added depending on your strength:
Ranging from +0 at 3 over +10 at 18/10, +50 at 18/110 up to +100 at 18/***.

If you don't have a digging tool equipped, your total digging power is halved.

If your resulting final digging power is zero, then it is set to 1, so you always have at least a tiny chance of digging through the weaker materials that have a +0 difficulty (see table below).

To successfully dig through certain features, your digging power must be greater than the result of a random number roll "random(0..x-1) + y":

Rubble	200	+	0
Ivy	200	+	0
Bushes	300	+	0
Dead trees	300	+	0
Trees	400	+	0
Sandwalls	250	+	5
Magma	400	+	10
Quartz	800	+	20
Granite	1600	+	40

The +y is a fixed value that gets added to the random roll of (0..x-1), the sum of this is what you have to overcome with your digging power value.
For example you cannot successfully tunnel through quartz if you don't have at least 21 digging power, since you have to overcome the +20.

Example: If you have 21 digging power and try to dig into quartz you'll have to be very lucky and hope for the random(0..799) roll for quartz to actually be a 0 so that the result will be 0+20 which is 20 and therefore smaller than your digging power of 21. So on each turn of tunnelling your chance to succeed would be 1 in 800 in that case.

(5.20b) Digging - Common example values

Some example values, assuming 0.000 'Digging' skill and unenchanted (ie (+0,+0)) digging tools with (+1) to digging:

Without a digging tool..

- You always have a chance to remove rubble and organic material, even without a digging tool. Might take quite a while if your strength is low though.
- You cannot tunnel through granite wall without a digging tool if your STrength is below 18/180.
- You cannot tunnel through quartz without a digging tool if your STrength is below 18/100.

- You cannot tunnel through magma without a digging tool if your STrength is below 18/60.
- You cannot tunnel through sand walls without a digging tool if your STrength is below 18/20.

With a digging tool..

- You can tunnel through all materials other than granite walls with just a basic shovel even if your STrength is only 3.
(For quartz, you have a 3% chance to succeed at 18/50 STR with the shovel and at 18/10 STR with a pick. If you use an enchanted shovel (+9,+9) (+1) however, you already have a 3% chance to succeed at only 5 STR.)
- You cannot tunnel through granite with a basic shovel if your STrength is below 18/30.
- You cannot tunnel through granite with a basic pick if your STrength is below 12.

You can tunnel through all tunneable materials, no matter your strength, with..

- a (+1) shovel that has +hit and +dam enchanted to a total of at least +15.
- a (+1) pick that has +hit and +dam enchanted to a total of at least +6.
- any (+2) digging tool or better (except if it has negative +hit/+dam values).

(5.20c) Digging - Further information

For digging through granite wall without having to wait for ages to succeed, you will definitely want a better digging tool than basic shovels or picks. For example ones 'of Digging', a magical ego power for digging tools. Or higher level diggers such as gnomish, orcish or dwarven diggers or mattocks, which have a higher base digging bonus that just (+1).

Tunnelling into walls that are actually secret doors will be treated as if you were 'searching' instead of tunnelling. You cannot find secret doors in permanent (aka non-tunneable) walls this way though, such as mountains. Tunnelling into known doors will just try to open them instead. If a door is stuck, you will want to 'B'ash it instead of tunnelling, since you cannot just open stuck doors the normal way.

Tunnelling might reveal special floor features, items or gold (walls that are displayed as a '*' symbol will reveal cash worth of gems or precious metal, but those walls might not always show it until you use 'Treasure Detection' or 'Treasure Location' magic), see 'Digging' skill in (6.2) for details. Also see (3.4a) for more information on digging tool mods.

If you haven't got a digging tool equipped, or if it's just a basic shovel (+1) then wielding a sword or especially an axe can work as pseudo-digger when you want to hack down organic material such as trees, bushes, ivy or spider webs. Certain polearms that have a slashing effect (scythes and sickles) can help just as well as swords or axes against spider webs or ivy. (Dual-wielding does not help, so two weapons can't dig better than just one. Wielding a 1.5-handed weapon in only 1 hand will decrease your digging chance though, so take off your shield for best results.)

(5.21) Recharging

Wands, staves and rods are generally called 'magical devices' in the stricter sense, this paragraph is about those and those are the only items that can be manually recharged by the player at will. There are in the broader sense of the word 'magic device' other items too that can be activated to unleash a specific kind of magic, such as certain jewelry, artifacts and special ego-powered items. These cannot be recharged at will however, the user will just have to wait till they are ready again.

While wands and staves use a charges counter to measure if they are depleted or not, rods have an internal charge that is completely depleted on using it and will slowly build up again on its own - depending on the user's magic device skill the depletion may be less severe, the rod will therefore take less time to recharge if it had been zapped by a proficient magic device user.

While electricity or disenchantment based attacks may deplete magic devices, they can usually also be manually recharged when necessary! So wands and staves will need to be actively recharged by the player when depleted, while rods (and other, not manually rechargeable items) will

automatically recharge themselves over time, displaying 'charging' label or just '#' if the item name is very long and there's not enough space.

Recharging can be done via shop service, a scroll, another magic device or a magic spell.

For wands and staves recharging will replenish their charges, while for rods recharging will reduce their 'charging' delay, aka refill their energy.

When an item is recharged the result depends on the method of recharging and the item's base type level. For wands and staves it also depends on the current amount of charges in the device: To minimize the risk of a failure you should only recharge wands and staves that are already fully depleted ie have zero charges left.

In general, higher recharge power and lower base item level result in...

- lower chance for the recharge process to fail,
- chance for gaining a higher amount of charges replenished.

If unlucky, recharging may result in a failure. Even when recharging at highest magic spell level there is still a very slim chance for a failure to occur.

While a failed recharge may drain rods even further, wands and staves may either just get their charges depleted or they may even blow up completely, depending on your (bad) luck.

So only recharge those when they are already fully depleted to minimize that risk.

Means of recharging:

- Scrolls (60 power)
- Thingol artifact (60..100 power, depending on magic device skill)
- Shop service (80 power)
- Magic spell (10..140 power)
- Rune spell (10..100 power)

The power determines both, the chance of succeeding in recharging the item and the degree of recharging done to the item.

Some lesser means of recharging might not be powerful enough to recharge rods.

Staves and wands 'of plenty' will receive about twice as many charges from recharging (with the risk of breaking remaining unchanged) so look out for those!

If you try to recharge a whole stack of devices in one go, the risk for it to fail is actually the same as if you recharged just a single item.

You will get the amount of charges replenished to every single magic device in the stack, at a slight rate of diminishing returns.

In other words: Recharging stacks is okay, it can save you a lot of scrolls of recharging, just don't go too crazy with the stacks size.

(5.22) Wraithform

Wraithform, or "pass wall" form is a character state obtained from the spell "Wraithform" (Udun school) or from certain items (either spectral weapons or items that give permanent wraithform: "It renders you incorporeal").

It allows a character to pass through solid walls easily, but at the same time prevents them from attacking anything else in close combat, except if the target is also able to pass walls (ie possesses wraithform too, or is actually a ghost or other monster that can pass through walls).

Also, spells cast while in wraithform will only deal half as much damage as usual.

Items that provide wraithform are:

- Spectral weapons ('A' to activate them for temporary wraithform).
- Ethereal Dragon Scale Mail and Death Dragon Scale Mail (just wear it and you obtain wraithform until you take it off again).

There is a confirmation message when using the Wraithform spell:

"You turn into a wraith!" when you attain wraithform.

"You lose your wraith powers." when your wraithform runs out.

Wraithform is very powerful since it allows you to move around the dungeon without having to follow its room/passages structure, making it easy to pick encounters or loot items you detected on the ground via detection magic, and to escape dangerous situations easily (just retreat into walls).

(5.23) Item sharing rules and exceptions

The following item sharing rules apply to a standard server configuration.
It is possible that a server runs certain alterations of some aspects.

Trading items between characters of different mode

Usually items cannot be exchanged between characters of different modes, eg everlasting mode, pvp mode and other modes.
Normal mode and unworldly mode characters can exchange items though, they are basically unified as 'non-everlasting' mode aka 'scoreboard mode'.
They too cannot exchange items with pvp mode characters though.
Game pieces are an exception and can always be used by anyone.

(If the server is running a non-standard configuration, it might be possible for everlasting or pvp characters to actually pick up items from other modes but not vice versa.)

Trading zero-level items

Level 0 items, which are either starter items, special boss drops or event reward items can only be used by the first owner and are unusable by anyone else. Certain event parchments can actually be traded despite being level 0.

Exceptions for emergency cases

Certain items can be exchanged freely between incompatible modes to make rescue missions easier:

Torches, food, scrolls of satisfy hunger, oil flasks, Word of Recall scrolls.
These items will get a 100% discount when they are exchanged between modes.

An exception for level 0 items are the following starter items:

Torches, food, scrolls of satisfy hunger.

They too will get a 100% discount and their level will actually change to 1.

Special restrictions

Items usually cannot be sent via telekinesis if the target player does not meet the item's level requirements.
True artifacts usually cannot be picked up by a player who does not meet the item's level requirements.
Some items can only be used by 'winners' (characters who have beaten Morgoth).
These items cannot be sent via telekinesis to a non-winner either.

Dungeon-specific exceptions

In the ironman deep dive challenge (IDDC) and in the Nether Realm dungeon, items can actually be traded between any character mode.
Within the IDDC, item levels don't even have any effect!
For the Nether Realm, the items must have been found within the Nether Realm.
As soon as a character leaves the worldmap sector of the Nether Realm, the items lose their ability to be traded between incompatible character modes.

(6) Character details

(6.1) Attributes

Characters have six 'attributes', also called 'stats', which are strength, intelligence, wisdom, dexterity, constitution and charisma.
These depend on your race and class and the stat assignments you did during character creation process.

Stats are displayed as values from 3 (minimum) to 18.

(Note: This can be changed in TomeNET options, press key =1 and toggle

'linear_stats' option. It is recommended to keep the traditional way though, which represents the D&D system of throwing three 6-sided dice to determine a stat).

Certain effects can drain stats, for example unresisted fire or cold damage can drain your strength, unresisted lightning damage your dexterity, unresisted acid damage your charisma. Also many monsters have stat-draining attacks. Traps can also drain your stats, some temporarily and some permanently. If a stat is drained and can be restored it will be displayed in yellow. In that case buy a potion for restoring that particular stat from town store 5 provided it is not out of stock in which case you'll have to wait a bit or go to another town. Maybe the stat drain isn't even that important to you and you save your money for the time being. Some traps can permanently drain a stat, in which case it gets lowered but remains green instead of turning yellow. In this case a stat restoring potion has no effect, instead you'll need a "stat potion" that increases a stat permanently (up to a certain limit depending on class/race).

It is possible to gain even higher stats, those will be displayed as 18/xxx where xxx is roughly the value above 18 multiplied by 10 (to allow fractions). Examples:

18/10 is like 19 (ie 18+1).

18/120 is like 30 (ie 18+12).

18/47 is like 22. The fraction 0.7 is not factoring into actual gameplay.

If you quaffed the maximum of "stat potions" (potions raising your stats), the maxed out attribute will be displayed in light umber.

An attribute is maxed out at 18/100 +/- racial/class modifiers.

Examples:

Human Adventurer has 18/100 + 0 + 0 = 18/100 cap for all stats, see (6.4) for race boni and (6.5) for class boni.

Draconian Istar has an intelligence cap of 18/100 + 2 (Draconian) + 3 (Istar) = 18/150.

Stats can be raised over the character's cap by equipment. The total possible maximum of an attribute is always 18/220 (40), which is displayed as '18/***' or '***' if using linear_stats.

Strength (STR)

- How heavy may your weapon, bow or shield be? You can't fight with a weapon that is too heavy for you.
- How heavy may your armour be? You will lose mana, boni or combat abilities if it's too heavy for you.
- How much damage do you inflict on enemies in melee combat? (to-mdam bonus)
- Are you able to deliver several blows per round with your weapon? (For details, also see (6.5).)
- How much can you carry in your backpack without getting slowed down?
- How easily you can bash doors open.
- How far you can throw items.
- Allows you to try hard to swim and not drown in deep water.
- How easily you can dig.

Intelligence (INT)

- Has influence on your mana pool size. (class-dependant)
- How well can you cast spells that use INT to determine failure rate?
- Has influence on your ability to activate magic devices.
- Has influence on your trap-disarming ability.
- Do you notice if someone tries to steal from you?
- Also see (6.10) for more information about the 'Magic Device' skill.

Wisdom (WIS)

- How well can you cast priest prayers or other spells that use WIS to determine failure rate?
- Has influence on your mana pool size. (class-dependant)
- How well can you resist malicious influences like poison, paralyzation, or confusion? (Means, your Saving Throw is depending on your WIS. See (6.3) for details about Saving Throw.)
- Wisdom directly increases your sanity. Be careful! If you're very low on sanity taking off a +wisdom item can mean your death, in case your sanity drops to 0 by taking off the item.

Dexterity (DEX)

- Has positive influence on your armour class and on your chance to hit enemies, also quite important for ranged weapons to-hit chance.
- How well can you steal (from shops)? (A high DEX won't help much if your 'Stealing' skill is zero by the way ;)
- Are you able to deliver several blows per round with your weapon?

(For details, also see (6.5).)

- How likely are items or money stolen from you?
- Can you prevent getting stunned from bashing a door clumsily?
- Allows you to try hard to swim and not drown in deep water.
- Has influence on your trap-disarming ability.

Constitution (CON)

- How many HP (hit points) do you have? Very essential.
Note that CON effect caps depending on your character level. Roughly:
At level 20 you can't utilize more than 18/60 CON. That means even if you raise your constitution above that value, your Hit Points won't increase as long as your character is level 20.
At level 30, CON cap is 18/130, at level 40 it's 18/190, and at level 45 and higher the full CON bonus is utilized for determining Hit Points.
- Also reduces the duration of poisonous and stunning effects on you.
- Increases your stamina regeneration rate.
- Reduces drowning (also for aquatic forms outside of water) effects.

Charisma (CHR)

- Do you get good prices in shops? :)
Note that shop prices also depend on racial preferences of the shopkeepers vs their customers. It is said, that Half-Trolls have an especially hard time.
While prices of items and houses are affected by charisma, fees for shop services are not.
- Allows you to resist getting seduced.

(6.2) Skills, opposed skills

If you rise in character levels by gaining experience, you also get skill points to distribute on various abilities. To invoke the skill system overview press 'G' (capital G!).

If you make a mistake while distributing skill points, look up the /undoskills command in (0.2b). "/undoskills" can only be used once per level.

Skills of dark grey colour cannot be used by your character at all.

Skills that are light grey are just dummy skills that serve for organizing other skills in paragraphs.

Skills coloured orange can be used by your character, but are currently still at zero.

Skills that your character can train and that have already been increased above zero will change from orange to white.

Skills that have reached their maximum possible value and therefore cannot be increased any further are displayed in light blue.

You can collapse/expand blocks of subskills by pressing RETURN key while having selected the parent skill of that block. Useful for example for collapsing whole blocks of skills that you cannot or don't want to use anyway.

Here is a list of the available skills and brief explanations to each one:

Note that not every skill is available to every profession (class).

+Combat

Lets you wear heavier armour without mana points penalty.

Lets you wear heavier armour without losing dodge chance (gained from the 'Dodging' skill), or other roguish abilities like boni from dual-wielding, Critical-strike, area-searching and cloaking.

Lets you wear heavier armour without getting a penalty to to-hit or sneakiness from being movement-encumbered.

Note that Combat skill does NOT affect the continuous ranged-to-hit reduction based on armour weight.
(See (5.5) for details about encumberment.)

Note that Martial Arts penalties from heavy armour cannot be reduced by training Combat.

Ability to pseudo-ID items: You can sense if items are terrible, worthless, cursed, average, good, excellent or special. At the beginning you will only feel 'cursed' or 'good'.
Raise combat skill to at least 11 to get more distinctive feelings about melee weapons and armour.
A powerful combattant (combat 31) senses the usefulness of ranged weapons and ammunition more distinctively, even if (s)he's not knowledgeable in archery otherwise.
A very powerful one (combat 41) can also roughly estimate usefulness of magical items. The further you train Combat, the faster you will pseudo-id items.

Increases Fear/Stun/Confuse duration of the target (if attacking causes those).
Reduces duration of Fear/Stun/Confuse effects that are applied to you.

Increases 'Fighting' and 'Bows/Throws' abilities somewhat, thereby increasing your chance to hit with melee, ranged weapons and when throwing an item and reducing your chance to get disarmed.

If your Combat skill isn't zero, then you can press 'm' to check your base chance of parrying (weapon) and blocking (shield), see (6.11) for more details about parry/block.

+Weaponmastery

Slightly increases melee to-dam and to-hit for armed combat: Hit gets increased by 1/3 of your skill, damage by 1/10.
Improves your 'Fighting' ability somewhat, thereby further increasing your chance to hit with melee weapons and reducing your chance to get disarmed.

Slightly increases your chance to score critical hits in armed combat (Note: The skill 'Critical-strike' has much more effect.)

Weaponmastery will also increase your parry chance a good deal (see (6.11) for details):
Up to +10% for 1-handers, +15% for 1.5-handers, +20% for 2-handers.

+Sword-mastery

Greatly improves to-hit/to-dam with swords. At 25 and 50 you will get +1 blow per round while having a sword equipped.

.Critical-strike

Increases your chance to score hits of extremely high damage. This skill improves the chance to score critical hits and adds to critical-hit bonus from your equipment.

NOTES ABOUT CRITICAL-STRIKE SKILL:
Critical-strike skill only helps light swords, not heavier than 10.0 lb., while critical-hits items will work with all weapons.
(The skill effect does not depend on how heavy exactly the weapon is, as long as it's not above 10.0 lb, so that weight threshold is basically an on/off toggle for the skill to apply to your attacks.)
Also, Critical-strike skill will not give you any benefits if your armour is so heavy that you get a flexibility warning (compare (5.5)).

NOTES ABOUT CRITICAL HITS IN GENERAL:

You can always score critical hits, independent on weapon class and crit-skill. Martial artists can score critical hits too, although the Critical-strike skill won't do anything for them (it only helps light SWORDS not heavier than 10.0 lb). The probability to land a critical hit will be small though, if you don't have +critical hit items or this skill to help out. Critical hit bonus on items counts slightly more than the skill.

Crit boni on weapons only apply to the weapon itself, while bonus on other items such as gloves or rings count for all kind of attacks. (Same goes for slaying/brand mods on items by the way.)

For weapon users, the weight of their weapon affects their critical hits:

If your weapon is lighter than 10.0 lb, your chances to score a critical hit will further increase. (However, that increase is much smaller than the effects of this skill or of items that give 'Critical Hits' bonus.)

Above 10.0 lb, the chance to hit your target critically won't be worse than with a 10.0 lb weapon.

Although your chance of hitting critical spots is better with lighter weapons, the damage of your critical strike -IF you manage to execute one- is higher if your weapon is heavier (in detail: the crit class is more likely to be higher for heavier weapons). This effect of getting bigger crits in if the weapon is heavier has no upper weight boundary, so it is true for all weapons up to Grond.

Although Critical-strike skill (if applied) and 'Critical Hits' bonus from items will also (about equally) improve your chances to land a higher-class critical hit, the weapon weight has even somewhat more effect on average on the crit class than either of those two alone. However, for a good improvement in crit-class just from weapon weight alone, the weapon would need to be much heavier than 10.0 lb.

Note that 'critical hit' stacks. 'Critical hit' bonus from items will be actually be somewhat subject to diminishing returns (while the skill won't!) but if we neglect this we can roughly say that +2.500 skill results in +1 crit hit. So for example if you have a ring of critical hits (+7) and gloves that give (+4) and also trained this skill to 10.000 (+4) you'll have a total of roughly +15 critical hit bonus.

.Axe-mastery	See Sword-mastery
.Blunt-mastery	See Sword-mastery
.Polearm-mastery	See Sword-mastery
.Combat Stances	Allows you to switch between one of three types of combat stance. You need to wield a weapon to use stances, certain restrictions apply and are explained further below.

This ability cannot be trained, but it is increased automatically each time your character gains a level.

If you attain the status of King, Queen, Emperor or Empress and are at least level 45, you will learn an additional royal rank version of each stance, which is the most powerful version. If you die and lose your title, you

won't be able to use the stance either. Only warriors, mimics, paladins, rangers and mindcrafters can learn certain stances. On certain skill levels, you will learn a new rank of a stance. A higher ranked stance features more of its benefits and/or less of its drawbacks.

Press 'm' to enter one of the combat stances you have learned. You will learn a couple of ranks of three basic combat stances, when you reach a certain character level i.e. skill. Each stance has advantages and disadvantages, those are:

Balanced stance - the default, no boni/mali.

Defensive stance - you will block more,
- reduce the effect of most combat-induced stun effects (and possibly some others),
- intercept less often,
- deal less damage.
Note: You can use it even without shield - in that case your chance of parrying is increased instead of blocking.

Offensive stance - you can stun opponents depending on your strength, your 'Weaponmastery' skill and your opponent (see (4.12) about stunning),
- intercept more often,
- parry and dodge only rarely,
- get an AC penalty same as for being in 'fury'.
Note: You must wield a weapon that is not too small to be gripped with both hands (COULD2H, SHOULD2H, MUST2H).

(Note: Switching your combat stance costs you half a turn of energy.)

.Dual-wield

The ability to wield two weapons at once. This ability cannot be trained, it's always at 1.000 if your character's class can dual-wield, else at zero. (So it's basically a switch.)

Classes that are able to dual-wield are warriors, rangers and rogues.

Note that both weapons must be 1-handed.

1,5- or 2-handed weapons cannot be used.

Dual-wielding will give you additional parry chance as well as a blows/round bonus (see (6.11) for details about parrying), and of course your character will gain all magical boni from both weapons (such as resistances).

NOTE: If your armour is too heavy (see (5.5)) then you won't receive any bonus and your second weapon will actually be ignored as if you didn't wield it at all ie you won't gain any resistances/abilities/whatever from it.

In combat, a coin is flipped for each blow you deal, determining randomly which weapon will be used for that particular hit.

To avoid confusion: If you use weapons with different blows/round, their BpR will get averaged, and rounded up, then BpR bonus for dual-wielding is added.

Example: 4BpR & 5BpR = 4.5BpR rounded to 5BpR.
+1 bonus BpR for dual-wielding -> 6BpR total.

By pressing 'm' you can disable/reenable dual-wield mode.
While disabled ('Main-Hand mode') you will just attack with your primary weapon exclusively, and not receive any dual-wield specific boni; this can be useful if it deals much more damage than your secondary weapon.
You still gain all magical boni from both weapons while in main-hand mode, as usual.
While enabled ('Dual-hand mode') you will attack with both weapons, picked randomly.

.Martial Arts

Ability to fight with bare hands.
Martial Arts users do not and cannot wield any weapons or they get penalised heavily, except for boomerangs.

They also get an armour class bonus for each unused equipment slot that can take a piece of armour. Until the skill has been trained quite a bit, armour will rather encumber them instead of help. For this reason, martial artists only wear very light armour or no armour at all in the beginning and do not need to rely on armour during the early game.

Slightly raises your character's speed and stealth by +1 for every 10.000 skill increase - the increase might be less or even zero if you are encumbered in some way.

Increases your chance of intercepting an enemy. The effectiveness is about 1/4 of what you get out of training the 'Interception' skill. If you train both, their effect will stack.

In addition to that, training Martial Arts will provide a base interception chance if you don't have the Interception skill available on a character (see 'Interception' skill). These two interception gains from Martial Arts skill add up. (If you do have the Interception skill available, you get a base interception chance depending on your character level instead, to which again the Martial Arts interception bonus gets added. So you're gaining the same total interception chance in both cases, as long as you keep Martial Arts at maximum possible.)

Slightly increases your Dodging skill, simply by increasing your Martial Arts skill, as if 'Dodging' was a parent skill of Martial Arts.

Lets you attack with special combat styles. You get +1 extra attack at 1,10,20,30,40,45,50 each, so up to +7 blows per round in total.

At 10 you receive Feather Falling.
At 15 your character gets fear resistance.
At 20 your character gets confusion resistance.
Gives you 'Free Action' (immunity to paralysis) at skill level 25.
At 30 you're able to swim without problems.
At 40 your movement is perfected enough to cross even highest mountains.
At 50 a martial artist will learn the technique of levitation!

The dice of martial arts special moves (which your character will use automatically depending on your MA skill) are affected by

elemental brands, but slightly less than normal weapons (2/3 as much). Martial arts moves can have high damage dice of up to 8d7. Some moves have special effects such as slowing or stunning your opponent. Your character will use his martial arts moves automatically and somewhat randomly, but mostly choose the most powerful moves available.

Under certain conditions (encumberment) MA abilities cannot be used and lose their effect. About this and for more information about Martial Arts in general, see (5.3a)!

.Interception

Ability to interfere with adjacent enemies. Can prevent them from teleporting, casting, summoning, running away. The monster must be standing right beside you (horizontally, vertically or diagonally).

Classes that have the Interception skill available for training will automatically gain a certain base chance to intercept, even if they haven't trained the skill. Training the skill will then add to that base chance. The base chance depends on the character's level, capped at 50.

This base chance is also gained by classes that cannot actually train Interception but that are able to train in 'Martial Arts'. In this case however the base chance won't depend on their character level but instead on their current skill in Martial Arts.

(So training Martial Arts on such a character would actually increase the total interception chance in two ways at once: Increase the base chance and then add the Martial Arts Interception bonus, see 'Martial Arts' skill for details.)

The higher base level the monster has (rlevel) the harder it is to intercept it. Also, interception chance is recuded greatly while you are blind and you aren't able to intercept at all while you are stunned, confused, paralyzed, resting, cloaked or shadow running (compare (4.11)). Player ghosts cannot intercept either.

Interception works best to prevent shooting a ranged weapon. It's slightly harder to prevent a monster from running away or casting a spell and even somewhat harder to prevent a monster from teleporting or blinking. Some abilities cannot be intercepted at all: Shrieking, unmagic, shooting missiles/rockets, throwing boulders, breathing.

Note that multiple players trying to intercept the same monster does not result in 'stacking' of their interception chances: The player who has (under given circumstances such as being blinded etc) the best chance to intercept will override the others.

Regarding spell suppression, interception combines with Anti-magic in a special way, see 'Anti-magic' skill for details.

+Archery

Improves ranged to-damage bonus somewhat, by +1 for every 5.000 increase in skill. Also increases 'Bows/Throws' ability somewhat, which in turn further increases hit chance.

Allows you to learn some shooting techniques and the ability to craft ammunition, accessible via 'm', see (6.12) for details.

Increases your chance to score critical hits.

At 20 the quality of your handmade ammunition becomes remarkably better.

Lets you pseudo-id ranged weapons and ammunition more often the higher the skill. If increased to at least 11, pseudo-id will give you much more distinctive feelings about the items. Before that, you can only distinguish between cursed and good.

.Sling-mastery

Increases hit chance (while using a sling) by +1 for every 2.000 skill increase. Also increases Bows/Throws ability somewhat, which in turn further increases hit chance.

At 10,20,30,40,50 you will get +1 additional shot per round each (while using a sling).

Also reduces the chance of your sling ammunition to shatter by up to 90% at 50.

Example:

a shot that usually has 10% chance of breaking will only have a 1% chance of breaking if your skill is at 50.000.

At 50 you will get an additional bonus of +1 extra might.

Artifact ammunition never breaks.

Note that the explosion of exploding ammo will still hit "reflecting" monsters.

Slings only (does not apply to bow- or xbow-mastery):

Adds chance for your shots to ricochet, even multiple times, hitting multiple enemies.

Note that magic and ethereal ammo fades away the moment it hits, and never ricochets.

.Bow-mastery

At 12.5, 25, 37.5, 50 you will get +1 extra shot per round each.

Otherwise same as Sling-mastery, except no ricochetting.

.Crossbow-mastery

At 25 and 50 you will get +1 extra shot, at 12.5 and 37.5 you will get +1 extra might. Otherwise same as Sling-mastery, except no ricochetting.

.Boomerang-mastery

At 16.6, 33.3 and 50 you get +1 extra throw.

Increases ranged to-damage bonus when wielding a boomerang by +1 for every 2.500 increase.

Reduces the chance of a boomerang to break or to fall to the ground instead of returning.

Artifact boomerangs never break or fall down.

<< For more information about learning spells, see (6.8)

Most spells will increase in power in one way or the other when you increase their school skill. Often their failure rate decreases, too. >>

+Magic

Increases your base mana by +4 per point.

Lets you pseudo-id magic items, potions and scrolls faster the higher your skill is.

If 'Magic' is at least at 11 points, you will get more distinctive feelings from pseudo-id, before that you only sense 'good' or 'cursed'.

+Wizardry	
.Sorcery	Learn to use spells of ALL magic schools at once, instead of training a particular branch!
.Mana	Learn spells of the Mana branch.
.Fire	Learn spells of the Fire branch.
.Water	Learn spells of the Water branch.
.Air	Learn spells of the Air branch.
.Earth	Learn spells of the Earth branch.
.Nature	Learn spells of the Nature branch.
.Conveyance	Learn spells of the Conveyance branch.
.Divination	Learn spells of the Divination branch.
.Temporal	Learn spells of the Temporal branch.
.Udun	Learn spells of the Udun branch.
.Mind	Learn spells of the Mind branch.
.Spell-power	Increases the power of learned spells by adding a bonus to the spell level. At 50, it will raise spell levels by 40%. (It won't raise the level of spells which you haven't learned yet.) Note that Spell-power ONLY affects spells of the 'Wizardry' schools!
+Prayers	
.Holy Offense	Learn prayers of the Holy Offense branch.
.Holy Defense	Learn prayers of the Holy Defense branch.
.Holy Curing	Learn prayers of the Holy Curing branch.
.Holy Support	Learn prayers of the Holy Support branch.
+Occultism	
.Shadow	Learn spells of the Shadow branch.
.Spirit	Learn spells of the Spirit branch.
+Druidism	
.Arcane Lore	Learn druid magic taught by arcane lore.
.Physical Lore	Learn druid magic taught by physical lore.
+Mindcraft	
.Psycho-power	Learn mindcrafter spells of psycho-power.
.Attunement	Learn mindcrafter spells of attunement.
.Mental Intrusion	Learn mindcrafter spells of mental intrusion.
+Runecraft	See '(6.8b) Runes & Runemastery'.
.Light	Learn to evoke light runes.
.Darkness	Learn to evoke darkness runes.
.Nexus	Learn to evoke nexus runes.
.Nether	Learn to evoke nether runes.
.Chaos	Learn to evoke chaos runes.
.Mana	Learn to evoke mana runes.
.Astral Knowledge	Learn spells of the Astral branch of magic, exclusively available to the Maia race.
+Blood Magic	Blood magic doesn't require mana and doesn't provide spells unlike most other magic schools. Instead it provides passive or innate powers that are fueled by your own blood to work.
.Necromancy	Drains life and mana from killed monsters, replenishing your HP and MP. Only works if you are able to see the target, and if you are not a player-ghost. The amount of points gained depends on the skill and the target's level. To get maximum drain, the skill should be at least half as high as the monster level. Necromancy has no effect on undead and nonliving (constructs) monsters.

(Don't confuse Necromancy with vampirism: Necromancy drains from the monster's soul on its actual death, while any vampiric effects your character might have drain by simply hitting the monster. So vampirism will work fine in conjunction with Necromancy as they are different effects that don't overlap in any way.)

At 50.000 the character gains ultimate hold on his life force, rendering him immune to experience drain.

A natural vampire race character who has both Necromancy and Traumaturgy at 25.000 or higher will get his intrinsic melee vampirism drain rate increased from the usual 50% by +1% for each further point in either school, up to 100% when both schools reach 50.000.

.Traumaturgy

Drains mana from monsters when you inflict damage on them, replenishing your MP. Only works if you are able to see the target. The amount of points gained depends linearly on your skill level and also somewhat on the damage you inflicted. Even if your inflicted damage and/or skill level is rather low, each attack still has a (small) chance of replenishing at least 1 MP. Traumaturgy is most effective with spells that have an area of effect and can therefore hit multiple monsters, such as balls and especially clouds. Traumaturgy has no effect on undead and nonliving (constructs) monsters.

A natural vampire race character who has both Necromancy and Traumaturgy at 25.000 or higher will get his intrinsic melee vampirism drain rate increased from the usual 50% by +1% for each further point in either school, up to 100% when both schools reach 50.000.

.Aura of Fear

Monsters that hit you are stroke by fear. Undead and non-living monsters and those that resist fear (NO_FEAR) are not affected. The chance for the aura to trigger depends on your skill alone. Whether it has effect on your foe or not only depends on its rlevel compared to your skill - uniques and powerful monsters receive a small bonus in their favour. It is automatically enabled when you train the skill; you can disable the aura in 'm' menu. Being blood magic, auras will feed from your blood. This means that the speed of your hit point regeneration will be reduced while the aura is active. If your skill is at least 20.000 you obtain fear resistance.

.Shivering Aura

Monsters that hit you are stunned. Monsters that are immune to cold and those that resist stun (NO_STUN) are not affected. The chance for the aura to trigger depends on your skill alone. Whether it has effect on your foe or not only depends on its rlevel compared to your skill - uniques receive a small bonus in their favour. At a skill of 30 the aura is so strong that your melee attacks (weapon as well as martial arts will be branded by it (cold brand). It is automatically enabled when you train the skill; you can disable the aura in 'm' menu. Being blood magic, auras will feed from your

blood. This means that the speed of your hit point regeneration will be reduced while the aura is active.

.Aura of Death

Monsters that hit you are hit by waves of plasma and ice, alternating randomly. The chance for the aura to trigger depends on your skill alone. At a skill of 40 the aura is so strong that your melee attacks (weapon as well as martial arts) will be branded by it (alternating fire or cold brand). It is automatically enabled when you train the skill; you can disable the aura in 'm' menu. Being blood magic, auras will feed from your blood. This means that the speed of your hit point regeneration will be reduced while the aura is active.

.Mimicry

Ability to shapechange into a monster! To learn a monster form you must kill an amount of it equal to its level, while your Mimicry skill must be at least half as high as the monster level for you to get credit.

Example: To learn Uruk form, you need to kill 16 Uruks because Uruk is a level 16 monster (see ~7 for monster lore to check level) and your Mimicry skill must be at least 8 while you kill them, or you won't gain any knowledge.

You also inherit the monsters abilities, weaknesses and resistances!

See section (6.7) for more info. To find out details about a monster form, press ~ 7 in game or consult a spoiler file. (See (7.4) for more info about spoiler files.)

For each point that Mimicry is trained above 30.000 the character's mana pool will expand by an extra +5 MP (so up to +100 MP at 50.000).

The further Mimicry is trained above 35.000 the faster a player can shapechange. Usually it takes a full turn to change into another form (or back to player form), but each point above 35.000 will cut this down by 5%, so at 50.000 Mimicry shapechanging will only take 1/4 turn.

.Magic Device

Mainly reduces fail chance when trying to use magic devices (wands, staves, rods, activatable items - see (5.9a)), increases their power and speeds up recharging of rods you carry. See (6.10) for more information on magic devices, the skill and the ability. Note that it is not possible to achieve 100% success rate with any device. It is possible to gain more than 99% chance though, which will be displayed accordingly on inspecting the device.

.Anti-magic

Generated from your strong disbelief in magic an anti-magic field surrounds you, preventing nearby monsters and players from casting spells (but does not prevent them from using magic devices). This effect is cumulative with the anti-magic field of a Dark Sword. (See (5.9) for more info about dark swords.) It's capped at 75% chance of interrupting enemy spells. The capped chance is further quartered for party members, so they are hardly affected by your anti-magic field. Usage of magic devices by party members is not hindered.

The radius of your anti-magic field is approx. the field's power / 9 and caps at range 9. Each point in Anti-magic adds 1% to your AM chance, so the max gain is +50% from skill. If you use a dark sword that gives the maximum amount of anti-magic they can give (+30%) then you only need Anti-magic skill at 45 instead of 50 to reach the anti-magic cap value of 75% (30% from dark sword + 45% from skill = 75%).

Note: While ball/bolt attacks are spells, breathing is NOT.

Warriors that specialize in Anti-magic are called 'Unbelievers' (The anti-magic powers result from their strong disbelief in magic).

Note that as soon as you invest a point into this skill you won't be able to use any spells or magic devices (wands, staves, rods, items that can be activated) anymore!

Being anti-magic still allows you to use scrolls and potions though.

Training the Anti-magic skill will shorten the duration of certain magical temporary buffs and debuffs on your character, which are: ESP, space/time anchor, probability travel, wraithform, infra-vision, see invisible, invisibility, haste, slowness, resistances, invulnerability obtained from a potion, deflection, shield.

Regarding spell suppression, Anti-magic fields combine with interception in a special way: The total chance to suppress a monster's attempt to cast a spell will yield diminishing returns if the monster's attempt gets hindered by both, Interception and Anti-magic. This means that having high values in both, Interception and Anti-magic, will still give benefits for spell suppression, but the total chance of suppression that results from applying both to a single spell casting attempt will actually come out somewhat reduced.

+Sneakiness

Slightly increases your character speed (+7 at 50, so approx +1 every 7..8 points). Slightly increases perception and searching. Slightly reduces speed loss while in searching mode, and very slightly while in rogues' cloaking mode.

.Stealth

Increases your stealth, which determines if monsters can hear you from a distance or if you can sneak past them. The stealth gain is half as much as from items that give +Stealth.

If your character is really bad at stealth, like Draconians, it might seem as if the skill doesn't help. But if you invest a lot of points you will eventually see an improvement ;).

.Stealing

Ability to steal items from stores. If you get caught, you will be on the 'blacklist of merchants' for a minute up to 2 hours, depending on the item you tried to steal from a shop. During this time it's impossible to steal, and you will get BAD prices (blackmarket-like) in shops. You'll also be on the 'watchlist', meaning that you can shop normally, but are unable to steal until the shopkeepers stop to watch you so intensely. The watchlist runs out slower than the blacklist.

The time period you'll be on these lists solely depends on the item's `_base_` value (so it does not matter whether you got caught in a normal store or in the black market.) Price discount applies though, reducing the base value and therefore the blacklist time too.

Blacklist times, very roughly:
Murderous look - 1 hour +
Gazes at you angrily - 40 min +
Looks at you suspiciously - 25 min +
Looks at you disapprovingly - 10 min +
Cool glance - less than 10 min.

Note that usually people don't want to be seen with stolen goods, which means that very expensive items, depending on their value, have a certain chance of their level becoming 0, making them untradable. (Note: Even if you were stealing Morgoth's crown, which has a value of 10 million Au, you'd still have at least a 5% chance of it retaining its original level.)

Your chance to steal an item from a shop depends on your dexterity, your stealing skill and the price and weight of the item. Stealth and invisibility are also somewhat helpful. For example it's nearly impossible to steal a large piece of wood without the store owner noticing it, although it's not worth much. There's always a minimum chance of 5% to fail. You need to be at least level 5 to steal and at least level 10 to steal anything of somewhat higher value.

You have a chance to successfully steal an item even if your stealing skill is 0 and your dexterity low, so everyone could give it a try.

If a shop offers an item more expensive than it actually is (black market) that has no effect on stealing. The 'normal' item value is used to calculate the chances. However, if an item is offered at reduced price, it'll be easier to steal it!

It's more difficult to steal from certain stores, eg stores that are found in the dungeon or that don't belong to the basic town stores (numbered 1-9, including the rune repository). It is even impossible to steal from expensive black market (the one located somewhat hidden in Minas Anor), secret black market (the one you can only find in dungeons), rare footwear shop and rare jewelry shop (both in dungeons), or from a dungeon town's temple, potion store or black market.

It's a good idea to wear as many +DEX items as possible while trying to steal from a shop, since DEX is the main factor besides the skill.

Stealing items which have a base value (without discount applied!) not higher than your `stealing_skill * 10` (eg 50 Au->5.000 Stealing) are especially easy to steal. Also, if you still get caught on such an item, the blacklist time will be much shorter too. Some potion/scroll break points regarding this:
?Identify: 50 Au.
!Cure Critical Wounds: 100 Au.
?Enchant Weapon/Armour: 125 Au.
!Speed: 200 Au.
!Restore stat: 300 Au.

!Healing, ?Teleportation: 400 Au.
!Resistance, !Restore Mana, ,Athelas: 450 Au.
?Wilderness Mapping: 500 Au.

Trying to 'steal back' an item that was already owned by a player, ie an item that has been sold to the shop, is especially hard.

.Backstabbing

Lets you backstab enemies, afflicting high damage. Works if the opponent is asleep or running away in fear, exposing his back to you. Also works when you are cloaked (only once per monster though, so re-cloaking won't help) or shadow running. Increasing this skill increases the damage your backstab attacks deal.

Backstabbing requires sword-type weapons or Martial Arts skill, in which case it transforms into neck-twisting. That means your target must possess a neck, read: A head and a torso.

If you dual-wield, you will also dual-backstab if the moster is either asleep, or you perform the attack from cloaking mode or shadow run. Although you'll deal somewhat less damage with each stab, since they are executed both at once you will do more overall damage than with a single weapon.

Note: Weapon weight or whether it's 1-h, 1 1/2h or 2h weapon does not matter for backstabbing.

Backstab hits and critical hits do not stack. If you roll a critical hit on backstabbing, the damage is compared to what the pure backstab would do and the higher one is used.

Vampires will feed especially much from backstabbing a sleeping opponent to death.

.Dodging

Ability to evade attacks. In order to get any benefits from dodging skill at all, your armour mustn't be too heavy. If it is, you will get a flexibility warning (compare (5.5)). Also, you must not be using a shield.

A low dodging skill will already help greatly against monsters of similarly low level, so it is helpful right from the beginning of your character's career.

There are various attacks that can be dodged: Melee attacks mostly, bolts, arrows and the likes (both magical and physical) shot by enemies or traps at you. And it slightly helps to dodge rubble coming down during an earthquake.

Your actual chance to dodge an attack depends on the total weight you are carrying around with you, where inventory usually weighs most and will encumber you the most.

Your equipment also musn't be too heavy, although your weapons are allowed to weigh quite a bit, as long as your armour isn't too encumbering. However, for weapons, armour, and inventory always goes: The lighter, the higher your chances will be.

And of course your dodging chance depends on your dodging skill, which (after penalized by the weight of all your stuff) is compared to the opponent's level or trap level.

(For dodging monsters, the rlevel (0.4) of that monster type is important. Any additional

levels the monster may have gained due to dwelling deeper than usual will not affect your dodge chance.)

You can check your average dodging chance against opponents of same level by pressing 'm' and choosing "Check dodge chance". Depending on the server version you might see textual descriptions instead of raw numbers: "Almost no chance" means less than 5%, "Slight chance" -> less than 14%, "Significant chance" -> less than 23%, "Good chance" -> less than 30%, "Very good chance" -> less than 40%, otherwise "High chance" (may occur in actual game play if opponent is much lower than you).

Against monsters that have way higher level than you, you receive a minor penalty. You can still dodge them quite effectively though.

Dodging also gets slightly increased by the "Martial Arts" skill (see above in this skill table).

Dodging improves in a linear manner, for example your chance to dodge any monster (of similar or higher level than yourself) is pretty much half as high at 25.000 dodging as at 50.000 dodging.

As a rule of thumb, your dodge chance (at maxed dodging skill) will usually cap at 67% for monsters of equal level and at 50% chance for monsters of twice your level.

.Calmness

Ability to not get hindered by enemies. Monsters can try to intercept some of your actions, the Calmness skill counters these interception attempts. In detail: Monsters can interfere if they are standing on an adjacent grid (ie right next to you) and if you try to..
-shoot with ranged weapons,
-use a void jumpgate,
-set a monster trap.
Calmness does not depend on the enemy's level.

.Trapping

Improves your ability to set traps:
Gives you a higher chance to successfully place a trap if a monster is close to you and trying to interfere. Also, monsters will have a harder time to discover your traps.
Last but not least you learn to optimize your traps for higher damage output.
(Note that 'Magic Device' or 'Runecraft' skill have no effect on trap damage output, even if it is loaded with a device or a rune.)
See (4.7) for details about monster traps.

Trapping also improves your disarming ability, making it safer to pick locks and to disarm traps via the manual disarm command. (The experience you gain from manually disarming traps is not affected by the skill but only by the traps' level).
The chance to identify a trap on disarming it will also increase with higher Trapping skill.

Last but not least Trapping gives you a chance to salvage a trap kit from any trap when you disarm it!

Hint: Inscribe all your trapping components '!= ' for easy auto-pickup.

+Health

Increases your hit points by 2 for each point. Note that this gain stacks with +LIFE items (compare '+LIFE' in (5.8)).
Increases your hit point regeneration rate: $(\text{skill_level} * 2)\%$ chance to regenerate 1.5x the normal amount of HP per turn (stacks with other regeneration effects and item flag).
Increases your stamina regeneration rate.

Helps you to recover from temporary stats drain, hallucination, blindness, confusion, poison and cuts faster.

If you spend 10 points into Health, your sanity will be displayed as a bar.
At 20 points you'll get the percentage displayed. At 40 the value will be shown.

For mimicry users, Health skill is less effective than for other classes, because the hit point bonus is applied before the player's base hit points and monster form hit points are averaged to calculate the mimic's final amount of hit points in a particular a monster form.

.Swimming

Allows you to swim even while carrying more weight and to better protect your items from water.

Skill maxes at 01.000, with the ability to swim improving steadily while increasing it. At 0.700 you become able to swim very swiftly if no monsters are within sight, enabling you to 'run' through water.

For more details about swimming see (4.15).

.Climbing

You need this at 01.000 to be able to climb.

.Digging

How well you are able to dig. Also affects your chance to find items (from digging only), and chance for those items to be good or even great, and it affects the amount of cash generated from mining mineral veins.

In particular, every 10 digging skill you will have a chance to find an additional pile of cash from mining a treasure vein, up to 6 piles if you're lucky at skill 50.000 (provided your dungeon floor depth is greater than half of your digging skill, otherwise the number of piles is limited to $\text{depth}/5$, eg 5 piles for dungeon level 25, while starting at dungeon level 26 you may uncover the full amount of 6 piles if your skill is actually 50.000).

Depending on the skill, you might also uncover unusual features such as fountains or staircases or somewhat more often (compared to finding just random items from digging) find chests, runes or heavy material pieces suitable for golem creation.
The quality of objects found also depends on your digging skill.

Certain tools such as shovels, picks and mattocks will also increase your digging speed greatly (independant of the skill), see (5.9). Also, when hacking through trees and bushes, axes will help a lot and swords somewhat, in case you have no good digging tool at hand. 2-handed weapons even more than 1-handed. For hacking away webs or ivy, certain polearms

used for slashing (scythes and sickles) may help too, just as well as swords or axes. See (3.4a) for more information on digging tools and (5.20) for technical details on digging.

The abilities Swimming, Digging and Climbing are also granted by items you can find. Those are for example items that grants you levitation, so you may just hover across water instead of swimming across. Wands of stone-to-mud will turn any obstacle to mud that you could dig through, and some boots or a climbing set might grant you the ability to climb highest mountains. Dwarves also learn this ability automatically when they reach level 30.

Here is what the numbers mean (we will use the Axe-mastery skill for this example:

+Combat	10.500	[0.800]
+Weaponmastery	5.250	[0.800]
.Axe-mastery	15.000	[0.500]

As we can see this player has 10.5 skill points in Combat, 5.25 in Weaponmastery and 15 in Axe-mastery. He just reached a new level and hence gained 5 skill points. Now he decides to invest them all into Axe-mastery. He presses <DOWN> key until the Axe-mastery line is selected. Now he presses <RIGHT> key 5 times to invest all his 5 spare skill points here. Axe-mastery will be increased by 0.500 points per invested skill point (hence the [0.500] on the right), leaving him at 17.5 Axe-mastery now. Since sub-skills always slightly affect their parent skills, Weaponmastery and Combat will also be raised slightly. The result might look like this:

+Combat	10.750	[0.800]
+Weaponmastery	6.250	[0.800]
.Axe-mastery	17.500	[0.500]

Opposed skills

Some skills don't go well together, and will have negative influence on each other when increased, decreasing their opposite!

Take care on the following combinations:

Weaponmastery	<->	Sorcery
Archery	<->	Sorcery
Martial Arts	<->	Sorcery
Anti-magic	<->	excludes any type of magic and magic devices, including mimicry. However, a mimicking player won't lose his current form on training in Anti-magic. He just won't be able to transform ever again by using his mimic powers. His form CAN still change though, if he is zapped with a wand of polymorph, quaffs a potion of Chauve-Souris, uses Morph Restoration service of a shop or.. dies, three things that he probably wants to avoid at all costs in order to keep his 'final' form.

(6.2a) Maiar skill modifications

Maiar start with a low-profile skill chart, which gets boosted or diminished depending on their alignment (enlightened vs corrupted) on initiation.

(Low-profile means that their "good" and "evil" skills - the four holy schools, necromancy, traumaturgy and the three auras - are all reduced to 70% of the character classes' usual ratio.)

When a skill's ratio has been modified on initiation, the skill will automatically be set as close as possible to its previous value, and the extra skill points will be refunded, so the character does not "lose" any skill points by training skills prior to initiation.

Skills that become disabled on initiation will not be nulled and hence will continue to have effect, although the character won't be able to increase them any further after that.

Modifications for becoming 'enlightened':

Necromancy, Traumaturgy, aura of death and Shadow become disabled.

Sword-, Blunt- and Polearm-mastery skill x 1.3.

The four holy schools x 2.1.

Spirit school x 2.1.

Divination school x 1.7.

Light and Mana runes x 1.7.

Fear and Shivering Aura x 3.0.

Modifications for becoming 'corrupted':

The four holy schools and Spirit become disabled.

Axe-mastery and Martial Arts skill x 1.3.

Fire, Air, Conveyance school x 1.7.

Udun school x 2.0.

Darkness and Nether runes x 1.7.

Shadow school x 2.1.

All Blood Magic schools x 3.0.

Paladins/priests:

The four holy schools get completely reset, disabled and their points are fully refunded.

Note: After a skill's gain ratio has been boosted as stated above, it will be capped against a maximum value of 2.000, which cannot be exceeded.

(6.3) Abilities

Depending on your race and class, you will be better or worse at certain generic abilities. You can see your abilities in the character screen (press 'C').

Miscellaneous Abilities can range from Bad to Legendary:

Bad	(red)	(or 'Very Bad' if negative, no real difference)
Poor	(red)	
Fair	(yellow)	
Good	(light green)	
Very good	(light green)	
Excellent	(light green)	
Superb	(light green)	
Heroic	(light green)	
Legendary	(light green)	

Some of those abilities have a maximum value after which they cannot be increased any further. Such abilities show 'legendary' in different colours than just light green. Instead they use:

Legendary (dark green) This means it's good enough to deserve being called 'legendary'.

Legendary (golden) This means, that you have reached the absolute highest possible value for this ability.

Here is a list of detailed information about miscellaneous abilities:

Fighting

How well you can fight (hit chance; further boni like skills or +hit from equipment are added to the ability) or how easily you get disarmed ("You lose the grip of your weapon(s)!").

(Note that any +tohit bonus increases the displayed Fighting ability:

The displayed value is the sum of your actual ability and your hit boni.)

Bows/Throw

How well you can shoot/throw.

(Note that any +tohit bonus increases the displayed Bows/Throw ability:

The displayed value is the sum of your actual ability and your hit boni.)

Saving Throw

How well you can resist attacks that have influence on your status other than just hit points (except for monster curses, which can be prevented too). Saving throw is rolled (possibly modified) against:

-Fear and paralysation melee attacks

-Confusion, fear, blindness, slowness, paralysation spell effects

- Non-friendly teleportation effects
- All nexus/morph effects (except polymorphing from bat form back to normal)
- Unmagic effects
- Direct damage curses (the ones screamed by monsters at you)
- Suffering damage from dispelling effects
- Psi attacks of all sorts (damage and effects), including mind-blanking and the terribly adverse effects of an encounter with an eldritch horror, which can be: Confusion, hallucination, insanity, paralyzation, amnesia and (sometimes permanent) loss of intelligence and wisdom.
- The draining effects of an ancient foul curse (TY_CURSE)
- Seasoned traveller trap effect.

Stealth

Determines if monsters will immediately wake up if you're nearby or if you are able to sneak past sleeping monsters without waking them.

Perception

Determines how often you have a chance to spot hidden traps or doors on adjacent fields without even searching for them. Whether you really discover something will depend on your Searching ability.

Searching

Determines how easily you spot hidden traps/doors on adjacent fields while searching for them (with 's' or 'S'), or when you automatically notice them due to your Perception ability.

Disarming

How well you can disarm traps (without setting them off), and how likely you avoid known traps if you accidentally step on them again. (Note that manually disarming traps like this will yield experience points if successful, while disarming via magic or magic devices won't.)

Magic Device

How well you can use magic items like wands, staves, rods (these are often especially hard to use) or activate magic items like Dragon Scale Mails. See (6.10) for more information.

Blows/Round

How often per round you are able to strike with your weapon. This depends on your strength, dexterity, your class, your weapon. Spending points in specific weapon masteries will give you an additional blow at 25 and at 50 (like Sword- or Blunt-mastery). Tables of blows/round limits are at (5.3a) for Martial Arts, and at (6.5) and (6.5a) for melee weapons.

Shots/Round

How often per round you are able to use your ranged weapon. Spending points into specific archery skills will give you additional shots (see (6.2) for details). Mimics may get additional shots per round if the monster form they use has the ability to shoot with ranged weapons (see (6.7) for details).

Infra-Vision

How far you can see warm-blooded monsters in the dark. 10 ft equal a distance of 1 field. IV can be very helpful for spotting monsters outside of your light radius that don't carry a light source themselves.

These miscellaneous abilities can also change when your character progresses, depending on your +hit and +dam (concerning Fighting and Bows/Throws) or your character level or certain skills you invest points into. How much an ability changes when a property of your character (skill, level or weapon enchantments) it depends on changes, depends on your class: The relative numerical modifiers are given in the class table in (6.5). Here is a list which ability changes depend on which factors: (The factors in relation to the values in (6.5) are marked by underscores. All other factors listed here are further modifications, independent of (6.5).)

Fighting	_'Combat'_, _'Weaponmastery'_, melee +hit boni
Bows/Throw	_'Combat'_, _'Archery'_, ranged +hit boni
Saving Throw	Wisdom, _level_, AM-shell
Stealth	Mimic form weight, stealth items, _'Stealth'_, cloaking, 'Martial Arts'
Perception	search items, _'Sneakiness'_,
Searching	search items, _'Sneakiness'_, cloaking
Disarming	Intelligence, dexterity, _'Trapping'_,
Magic Device	Intelligence, _'Magic Device'_,

For age, height, weight, social class and gender see (6.14).

Apart from those generic abilities, there are several class- or race-specific active or passive abilities, given in the race/class descriptions in (6.4) and (6.5).

(6.4) Races

Depending on your race, you might need different amounts of experience to gain a new character level. You also might have certain intrinsic abilities.

For Beginners a powerful yet simple race/class combination like Half-Troll, Half-Orc or Dwarven Warrior is strongly recommended. (Warrior being by far the most straight-forward and most forgiving class in the beginning.)

The Maia race is not recommended for beginners due to its complexity.

The Yeek race is not recommended for beginners because it's extraordinarily weak in all fields (its only upside being that it needs the least amount of experience of all races to gain levels).

The Vampire race is not necessarily recommended for beginners due to its various quirks that you'll need to pay attention to (feeding, light sources, certain healing/curing effects that instead damage vampires).

List of all races (make sure to read the paragraph about your race, when you create a character!):

- Human

Humans are allrounders with no special weaknesses or strengths.

Humans have no experience penalties and tend to go up levels faster than most other races. No racial adjustments or intrinsics occur to characters choosing human.

Humans get a bonus on 'Climbing', a slight bonus on 'Climbing' and a large bonus on 'Interception'.

- Half-Elf

Half-elves tend to be smarter and faster than humans, but not as strong.

Half-elves are slightly better at searching, disarming, saving throws, stealth, bows, and magic, but they are not as good at hand weapons.

Half-elves resist light intrinsically.

They get bonus on 'Bow-mastery' and 'Interception', a small bonus on the 'Nature' and 'Spirit' and a small malus on the 'Shadow' school.

- Elf

Elves resist light effects intrinsically and see invisible creatures.

Elves are better magicians than humans, but not as good at fighting.

They tend to be smarter and faster than either humans or half-elves and also have better wisdom.

Elves are better at searching, disarming, perception, stealth, bows, and magic, but they are not as good at hand weapons.

Elves get bonus on 'Bow-mastery', 'Magic', 'Stealth', 'Dodging', 'Calmness', 'Sneakiness' and the magic 'Water' and occult 'Spirit' schools, a large bonus on the magic 'Nature' school and a malus on 'Shadow'.

- Hobbit

Hobbits have their dexterity sustained. Further, they get a dexterity bonus from not wearing shoes! Hobbits, or Halflings, are very good at shooting, throwing, and have good saving throws. They also are very good at searching disarming, perception, and stealth; so they make excellent rogues, but prefer to be called burglars. They are much weaker than humans, and no good at melee fighting. Halflings have fair infra-vision, so they can detect warm-blooded creatures at a distance. Hobbits resist black breath somewhat. They get bonus on 'Sling-mastery', 'Sneakiness', 'Dodging' and a large bonus on 'Stealth'.

Note:

Since hobbits have low hit points you might consider training the skill 'Health' to make up for it, depending on which class you choose to play.

- Gnome

Gnomes are intrinsically protected to paralysis effects. Gnomes are smaller than dwarves but larger than halflings. They, like the hobbits, live in the earth in burrow-like homes. Gnomes make excellent Warlocks & Sorcerers, and have very good saving throws. They are good at magic, searching, disarming, perception, and stealth. They have lower strength than humans so they are not very good at fighting with hand weapons. Gnomes have fair infra-vision, so they can detect warm-blooded creatures at a distance. Gnomes receive bonus on 'Crossbow-mastery' and 'Magic' and a large bonus on 'Dodging' and 'Digging'.

- Dwarf

Dwarves can never be blinded and at level 30 they learn to travel across even the highest mountain regions.

Dwarves are the headstrong miners and fighters of legend. Since dungeons are the natural home of a dwarf, they are excellent choices for a warrior or priest. Dwarves tend to be stronger and tougher but slower and less intelligent than humans. Because they are so headstrong and are somewhat wise, they resist spells which are cast on them. Dwarves also have very good infra-vision because they live underground. They do have one big drawback, though. Dwarves are loudmouthed and proud, singing in loud voices, arguing with themselves for no good reason, and screaming out challenges at nearby foes. In other words, dwarves have a miserable stealth. They receive a bonus on 'Axe-mastery' and 'Climbing' and a huge bonus on 'Digging'.

- Half-Orc

Because of their preference to living underground to on the surface, Half-orcs resist darkness intrinsically. They make excellent warriors and decent priests, but aren't good at magic. They are as bad as dwarves at stealth, and horrible at searching, disarming, and perception. Half-Orcs are quite ugly, and tend to pay more for goods in town. Half-Orcs do make good warriors and rogues, for the simple reason that Half-Orcs tend to have great constitutions and lots of hit points. They get a slight bonus on 'Backstabbing', a large bonus on 'Weaponmastery' and a bonus on 'Necromancy' and occult 'Shadow' magic and receive penalties on 'Magic', 'Sorcery' and 'Spirit' and a slight penalty on 'Swimming'.

- Half-Troll

Half-trolls have their strength sustained. They are very strong, but also very stupid and slow. They make great warriors and iffy priests. They are bad at searching, disarming, perception, and stealth. They are so ugly that a Half-Orc grimaces in their presence. They need to eat often but they also regenerate hit point especially quickly (same as if wearing an item providing regeneration, doesn't stack with item ability). Thanks to their thick skin, they also get an (albeit very small) bonus to armour class. Half-Trolls get bonus on 'Blunt-mastery', 'Health'. They receive a penalty on 'Critical-strike' and 'Swimming' and large penalties on 'Climbing', 'Swimming', 'Archery', 'Magic' and 'Sorcery'.

- Dunadan

Dunadain have their constitution sustained. Dunadain are a race of hardy men from the West. This elder race surpasses human abilities in every field, especially constitution. However, being men of the world, very little is new to them, and levels are very hard for them to gain. A Dunadan gets bonus on 'Combat', 'Archery' and 'Interception' and a small bonus to 'Magic' and 'Swimming'.

- High-Elf

High-Elves can see the invisible and resist light and the flow of time intrinsically. They are a race of immortal beings dating from the beginning of time, masters of all skills, strong and intelligent, although their wisdom is sometimes suspect. They do very well in all professions. There are few things that they have not seen already, and experience is hard for them to gain.

High-Elves receive boni on 'Bow-mastery', 'Magic', 'Stealth', 'Dodging' and the magic 'Nature' school, a large bonus on 'Calmness', a slight bonus on 'Swimming' and on occult 'Spirit' magic and a malus on 'Shadow'.

- Yeek

Being weak and losing many childhood fights, they have learned the ability to float gently to the ground. They have intrinsic feather falling.

Often having to escape from precarious situations, yeeks are able to pass through dense forest quickly.

Yeeks are the least powerful of all the races. They suffer disadvantages in all stats and have attributes similar to humans. However, to compensate Yeeks learn, and thus gain levels, extremely quickly. Yeeks don't receive boni or mali on any skills except that they are good at 'Swimming'.

Note:

Since yeeks have low hit points you might consider training the skill 'Health' to make up for it, depending on which class you choose to play.

- Goblin

Goblins have a decidedly mixed reputation. They are almost always grinning, and more often than not you cannot tell whether or not they are eyeing you like a side of meat. They are as sturdy as Dwarves and are quite agile making them good fighters, rogues, and mimics. Being creatures of the night, Goblins have natural resistance to darkness. They receive bonus on 'Boomerang-mastery', 'Stealing' and occult 'Shadow' magic and a malus to 'Spirit' and all four holy schools.

- Ent

The Ents are a powerful race dating from the beginning of the world, eldest of all animals or plants who inhabit Arda. Spirits of the land, they were summoned to guard the forests of Middle-earth. Being much like trees they are very slow but strong and do not have to eat as often. Because they consist of wood, they are quite susceptible to fire and they don't drown in water. As the Shepherds of the Trees, they can learn to sense the presence of others, such as animals at level 10, orcs at 15, trolls at 20, giants at 25, dragons at 30, demons at 40 and all evil-minded creatures at level 50. At level 4 Ents learn to see invisible things. In general, they accumulate experience very slowly and they do not eat normal food but they are able to consume liquids. Trees will slightly bend aside to let ents pass through. Ents are able to slowly replenish their nourishment by rooting themselves into the ground by entering 'R'esting mode, provided it's natural ground such as grass, earth, mud or water. Their food state will go up to 'Full' that way. They cannot eat normal food but will feed greatly from drinking potions that provide nourishment. They can never be gorged though. Ents intrinsically resist the force of unleashed water and their bark skin provides a small bonus to armour class. They get bonus to 'Health', a slight bonus to 'Spirit' and a large bonus on 'Calmness' and on the magic schools 'Earth', 'Water' and 'Nature'. They receive a large penalty on 'Fire' school, a penalty on 'Axe-mastery' and a small penalty on 'Sword-mastery'. They cannot train 'Climbing' at all.

- Draconian

These humanoid half-breeds of dragon and man surpass common humans in all ways, except that they are really bad at moving stealthily. Similar to dragons, they can eat firestones to temporarily boost their powers. (See (5.9) for firestone details.) Draconians need a very long time to gain further experience and need to eat often. They have feather falling intrinsically from birth. At level 5 they can spot dragons anywhere on the level. At level 6 they acquire an intrinsic telepathic vision of all nearby creatures, the radius expands as they gain levels. At level 30 they learn how to levitate. Unlike other races, draconians are susceptible to the void connecting void jump gates and may get hurt by it when they travel through it, perceiving it as "cold" even if they resist or are immune to normal frost. Armour can help to mitigate this effect somewhat. Draconians possess a certain lineage trait from birth, providing them with intrinsic resistances and an elemental breath (learned at level 8) which they can use if they have sufficient stamina (costs 3, accessible with 'm') and which is a physical ability of theirs, not a magic spell. 'Breathe element' inflicts damage equal your current hit points divided by 3 and capped between 350 and 500 depending on your element, with the basic element types doing the most damage and shards and sound doing the least. This breath weapon cannot be used while polymorphed, except if the form is a reptile (including Hydras) or an actual dragon (including dragonriders). The resistances and other abilities obtained from a trait remain active even while polymorphed. Thanks to their scaly hide they receive a small bonus to armour class, especially the metallic lineages - bronze, silver and gold. Draconians receive a bonus on 'Attunement', 'Polearm-mastery' and 'Magic devices' and a slight bonus on 'Swimming'.

Table of their traits:

Lineage	Breath	Resistances/abilities
Blue	Lightning	lightning, brand (5), aura (15), immune (25)
White	Frost	frost, aura (15), immune (25), susceptible to fire
Red	Fire	fire, immune (25), susceptible to cold
Black	Acid	acid, immune (25)
Green	Poison	poison, immune (25)
Multi-hued	Random of those above	lightning (5), frost (10), fire (15), acid (20), poison (25)
Bronze	Confusion	confusion (5), paralysis and electricity (10), reflection (20); a small extra AC bonus
Silver	Inertia	cold (5), acid (10), poison (15), reflection (20); a small extra AC bonus
Golden	Sound	fire (5), acid (10), sound (15), reflection (20); a small extra AC bonus
Law	Shards	shards (5), paralysis (10), sound (15)
Chaos	Chaos	confusion (5), chaos (15), disenchantment (20)
Balance	Disenchantment	disenchantment (10), sound (20)

Hint: Make sure to set your breath attack to a hotkey when you learn it.

- Kobold

These somewhat smallish dog-faced humanoids resist poison intrinsically. They are able to take most roles, being somewhat better at archery than close combat. Their intelligence is somewhat suspect, and although they do not pick up careers as mages or other very elaborate professions, they can become shamans or druids. They can see in the dark thanks to infra-vision, have extraordinarily sharp senses, and can move very silently, making them hard to spot. They are also good at disarming traps. Kobolds receive a bonus on 'Trapping', a large bonus on 'Swimming' and a slight bonus on 'Sneakiness'.

- Dark-Elf

Dark-Elves dwell below the surface in huge caverns of their underground city. The children are already drilled to become sworn enemies of most other races of the underground, and also of the hated Elves and High-Elves who live on the surface under the burning light of the sun. Overthrowing rivals by treachery and murder are acknowledged ways in their society, as long as no one is left alive who might bring charge against the victors. Dark-Elves are good fighters and sorcerors, but also decent priests. Dark-Elves intrinsically resist darkness, but are susceptible to light. At level 20 they learn to see the invisible. They get bonus on 'Stealth', 'Dodging', 'Sneakiness', 'Backstabbing', a large bonus on occult 'Shadow' magic and a malus on all four holy schools and the occult 'Spirit' school.

- Vampire

These powerful undead creatures move out in the night to hunt living prey and suck its blood to sustain themselves. Vampires resist darkness, but are susceptible to light and certain purifying and anti-evil effects, be it on items such as scrolls, on magic devices, or on equipment such as weapons and light sources (which may drain their hit points if equipped, even if the vampire acquired resistance to light). Vampires fear the sun light and any kind of items giving off powerful light (radius of 3 or more, artifact lights, or light sources that are blessed, evil-slaying or undead-slaying). Besides from light sources aside they fear all items that are blessed or *slay undead*. Any such item will burn them, draining their hit points. Exceptions are cursed lights and items and the "Stone of Lore" - these will not harm them. They start with a mummy wrapping, because it can protect them from the sunlight. If they are moving on the world surface (meaning not in a dungeon or tower) while it's day, the sun will burn them if they don't resist light or wear a mummy wrapping. They don't actually need a light source, since they are able to determine their close surroundings even in complete darkness. This ability grows when the vampire rises in character-levels, starting at torch-wide radius and growing to lantern-wide radius already when reaching level 10. Regarding items, Vampires do not suffer a hit point drain from wielding a spectral weapon. They are even able to wear or wield heavily cursed items such as Morgul weapons and benefit from them, turning their negative boni

into positive ones! The only exception are weapons of Nothingness, which won't do them any good either. Since Vampires are immune to Black Breath, using a Morgul weapon will not pose a problem to them. Vampires are good fighters and decent mages. However, they are unable to conjure holy fire or utilize magic of water or nature school. Neither can they make use of mimicry techniques (with the exception of vampire bat, see below) or holy or spirit spells. They are unable to try and suppress magic, but can make use of items that provide anti-magic effects. Aside from darkness they also resist sanity-draining effects somewhat, cold, time, nether, they're immune to poison and it's hard to drain their life force - this is also true for life force drained by items a vampire has equipped: Those will drain exp at only half the normal rate. Vampires have a high chance to resist the adverse effects of encountering an eldritch horror (see (6.3) under 'Saving Throw' for details on those). They also intrinsically have partially life leeching (vampiric) attacks (see '(5.15) Vampirism' for more information) which they can further improve by training in both Necromancy and Traumaturgy (see skill details). Being undead, vampires don't drown as easily as other races, but the water still has a somewhat damaging effect if they cannot swim at all. At level 20 they become able to turn into a vampire bat (mimicry code 391). Vampire bats are fast, can fly (basically as effective as 'levitation') and are more resistant to sun burn than the humanoid vampire form, making them useful for travelling, although they move slightly erratically. At level 35 they can become able to turn into vampiric mist (mimicry 365). In mist form, they can pass closed doors, traps without triggering them, have maximum stealth and be granted a shivering aura (or have their existing shivering aura boosted). They will also gain the 'invisibility' effect (as from items) against monsters, but not against other players. (Note: This invisibility effect will not result in the usual purple colour of the player's symbol, it's still there though.) However, Vampires cannot perform a lot of physical actions in mist form, such as fighting, and the creeping mist moves slower than they would in their normal form. Vampires cannot eat normal food, instead they need to feed off living creatures. This means that you need to kill monsters in melee range (though not necessarily by using melee attacks - spells or arrows work fine too) in order to satisfy your hunger, which might be quite easy for melee classes but sometimes a hassle for ranged/caster classes. On the plus side, a vampire won't get gorged by drinking too many potions. At level 40 they will also start to need less and less food to sustain themselves. Vampire royalties will require the least amount of food, independant of their level, enabling them to survive a very long time without feeding - even an item granting 'Slow Digestion' will not improve this any further. Vampires hate 'Blunt' weapons, are bad at 'Swimming', get a penalty on 'Divination' magic school, but receive a bonus on 'Mental Intrusion' and a large bonus on 'Shadow', 'Necromancy' and all aura skills and a small bonus on 'Traumaturgy'. They cannot use certain magic schools at all as described above. As undead, Vampires gain a moderate skill bonus for 'Nether' runes but in turn find it hard to improve in 'Light' runes.

Hint: In case you lose your mummy wrapping and the general store doesn't have one in stock, you can order one there (press 'o' key in the store).

- Maia

The Maiar are lesser spirits who are associated with one or more Valar, the greater gods. Being of divine origin they can shape themselves in fashion of elves or humans as they see fit, often acting as powerful wizards to guide elves and man by gaining their trust. Appearing in such shape, their abilities will seem somewhat superior in all aspects and they also possess infra-vision.

Maiar have a choice of ascending to enlightenment, or submit to corruption of the promise of demonic powers. To determine their fate, they must kill either a candlebearer, a servant of good (to become corrupted), or a darkling, a harbinger of demonkind (to become enlightened) before reaching level 20 or they will lose the ability to stay in the realm and their physical form will be destroyed.

They will also meet such a fate of being destroyed by indecisiveness if they kill both of these kind indiscriminately before having reached initiation, so take care. After they underwent initiation at level 20, they may just kill all of them indiscriminately, same as any other monster. Using but their mind they can easily perceive both good and demonkind telepathically. The servants and harbingers of those factions that Maiar

need to slay occur from dungeon level 12 to 20 (which correspond to -600..-1000 ft in dungeon 'Barrow-Downs' for example, since that dungeon starts at level 1). In the IDDC, they appear from level 10 to 20. If a Maia generates the dungeon level, there will be a guaranteed spawn, so if you are in a party with non-Maiar, make sure you are the first one taking the staircase so you generate the level.

Maiar are able to train in the 'Astral' school, an exclusive divine magic which has spells of different effect depending on the caster's alignment. Some astral spells use intelligence for determining their spell failure rates, some use wisdom. Initiation to either enlightened or corrupted beings, or during their first few character levels the lack thereof, will decide the effect of astral spells. Maiar can be any class that can utilize mana. They get the best shop prices of all races since they are either greatly respected or feared by all other creatures. They gain experience extremely slowly, and rarely need to feed before initiation. Afterwards they have no more need for any worldly food at all (and they cannot become gorged either). Alignment-dependant boni are..

Enlightened:

Gain time resistance (all initiated Maiar, enlightened and corrupted).
Able to see invisible and resisting light, while being susceptible to evil-based attacks.
Intrinsic light aura that adds to any light source's radius.
+1 bonus AC for every 2 levels above 20 (caps at 50).
At level 50 they will be able to levitate, become resistant to poison, electricity, cold and be enveloped in an aura of frost and lightning; also, their melee attacks will slay evil opponents intrinsically.
Able to almost instantly sense curses on items.

Necromancy, Traumaturgy, Aura of Death and Shadow become disabled.
Sword-, Blunt- and Polearm-mastery skill ratios x 1.3.
The four holy school ratios x 2.1, Spirit x 2.1, Divination x 1.7.
Light and Mana rune ratios x 1.7, Fear and Shivering Aura ratio x 3.0.

Corrupted:

Gain time resistance (all initiated Maiar, enlightened and corrupted).
Resist fire and darkness while being susceptible to good-based attacks.
+2 bonus HP for each level above 20.
At level 50 they will become resistant to poison, immune to fire, and be enveloped in a fiery aura.
Able to take off lightly cursed items.

The four holy schools and Spirit become disabled, priests and paladins also get the four holy schools reset.
Priests: Sword-mastery is enabled at receives the same skill ratio as Blunt-Mastery, then it gets boosted by x 1.3 (as replacement of non-existent Axe-mastery for this class).
Paladins: Sword-mastery ratio x 1.1.
Axe-mastery and Blunt-mastery ratios are swapped!
Blunt-mastery ratio receives a x 1.1 bonus; because its ratio ends up lower than before, its points will be all refunded.
Axe-mastery and Martial Arts skill ratios x 1.3.
Fire, Air, Conveyance school ratios x 1.7, Udun x 2.0, Shadow x 2.1.
Darkness and Nether rune ratios x 1.7, all Blood Magic ratios x 3.0.

Maiar start with a low profile skill chart which gets boosted on initiation depending on their alignment, never exceeding 2.000 though. Their skills will be adjusted on initiation so that they remain as close to their previous values as possible while the character gets back any skill points that are freed up due to higher skill ratios after the initiation took place, see (6.2a) for details.

Maia get a bonus on 'Sneakiness' and 'Stealth' no matter the alignment.

Here is a table showing boni/mali of the different races:

(Di:Disarming,	MD:Magic Device,	ST:Saving Throw,	St:Stealth,
Pe:Perception (sight range),	Sr:Searching,	Fi:Fighting,	BT:Bows/Throw)

STR	INT	WIS	DEX	CON	CHR	HP	die	Exp%	Infra-Vision
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	Di	MD	ST	St	Pe	Sr	Fi	BT		
Human	0	0	0	0	0	0		10	100%	0ft
	0	0	0	0	10	0	0	0		
Half-Elf	-1	+1	0	+1	-1	+1		10	110%	20ft
	2	5	3	1	11	6	-1	5		
Elf	-1	+2	+1	+1	-2	+2		9	120%	30ft
	5	9	6	2	12	8	-5	15		
Hobbit	-2	+2	+1	+3	0	+1		8	115%	30ft
	15	12	18	4	15	12	-10	20		
Gnome	-1	+2	0	+2	+1	-2		9	125%	40ft
	10	18	12	3	13	6	-8	12		
Dwarf	+2	-2	+2	-2	+2	-3		11	130%	50ft
	2	9	9	-1	10	7	15	0		
Half-Orc	+2	-1	0	0	+1	-4		11	115%	30ft
	-3	-3	-3	-1	7	0	12	-5		
Half-Troll	+4	-4	-2	-4	+3	-6		12	135%	30ft
	-5	-8	-8	-2	5	-1	20	-10		
Dunadan	+1	+2	+2	+2	+3	+2		10	170%	0ft
	4	3	5	0	13	3	15	10		
High-Elf	+1	+3	-1	+3	+1	+3		10	230%	40ft
	4	20	20	3	14	3	10	25		
Yeek	-5	-5	-5	-5	-5	-3		8	80%	0ft
	0	0	0	0	10	0	0	0		
Goblin	0	-1	-4	+4	+2	-5		10	120%	30ft
	2	-3	-3	0	8	2	12	-5		
Ent	+8	-4	+2	-4	+8	-4		14	320%	0ft
	-4	0	20	-6	4	5	5	-20		
Draconian	+4	+2	+2	+1	+3	+2		12	350%	50ft
	0	7	10	-5	10	10	15	5		
Kobold	-1	-1	0	+2	+2	-2		8	115%	50ft
	10	5	0	4	15	15	-5	10		
Dark-Elf	0	+2	+1	+3	+1	-6		10	150%	80ft
	7	3	6	4	6	10	15	15		
Vampire	+2	+2	-1	+2	0	+3		11	270%	150ft
	-2	3	20	2	13	-4	10	-10		
Maia	+2	+3	+3	+1	+1	+2		11	400%	100ft
	3	20	3	0	5	1	15	5		

(6.5) Classes/Professions, titles, melee blows/round

Depending on your class, your start-up equipment and your skill tree will vary. For example a warrior cannot learn magic spells.

Classes most straight-forward/most forgiving to play for starters are:

- Warrior
- Rogue (dual-wielding sword-type weapons makes them powerful early on)
- Paladin (similarly tough as warriors)
- Druid (utilise their shapeshifting powers they gain every 5 levels!)
- Mindcrafter (just make sure to get Psionic Blast spell macroed right away)

Intermediate starting difficulty:

- Archer (easy when teaming up with a meat shield who keeps monsters at bay)
- Mimic (mostly plays straight-forward like a warrior, but need to hunt for monster forms which can be hard for beginners, especially if they don't know much about monsters)
- Ranger (can do well in many fields such as melee, ranged weapons and spells, somewhat similar to an adventurer).

Hardest classes for beginners to play maybe:

- Adventurer (cause it's a jack of all trades so you can end up mediocre in every regard if you don't know what you're doing)
- Shaman (triple-relation of forms, combat skills and magic spells)
- Priest (weak in almost all regards the beginning, but great early on party asset if he gets the 'Cure Wounds' spell and uses it to heal his party members from the back line)
- Istar (glass cannon in the beginning, so if you are out of mana at the wrong time you could die fast)
- Runemaster (needs some time to get a grip of the spell system, and has not that high hit points, ie glass cannonish).

List of all classes (make sure to read the paragraph about your class, when you create a character!):

- Warrior

A warrior is a hack-and-slash character, who solves most of his problems by cutting them to pieces, but will occasionally fall back on the help of a magical device. His prime stats are strength and constitution, and a good dexterity can really help at times. Warriors will be good at melee and bows, but bad at most other skills. They don't learn any magic but can train to use magic devices; also they may dual-wield two one-handed weapons at once, although they will need to use light armour for this strategy to be effective (see (6.2)).

Provided his strength is high enough, a two-handed weapon will usually be preferable over dual-wielding when a warrior seeks to forego defense to maximize damage, because two-handed weapons will still allow the use of heavy armour which dual-wielding doesn't.

Warriors have more melee attacks per round than any other class.

They may decide to become 'Unbelievers' by spending points irreversibly into the 'Anti-magic' skill. As soon as they spend the first point here they will immediately become unable to use any magic wand/staff/rod!

The full opposite of sorcerers, unbelievers so strongly despise magic that not only do they refuse to use magic spells, they refuse all training in the use of magic items, which leaves them almost totally incompetent when trying to use a magic item, although they can still quaff potions and read scrolls. Because they are so unattuned to magic, trained unbelievers will suppress any sort of magic from occurring around them at high probability, which is dubbed 'anti-magic field'. They can further strengthen it by wielding a Dark Sword (see (5.9)).

Warriors can also choose to become monk-like fighters, by training the 'Martial Arts' skill. This will require them to wear no armour or only very light armour later on.

The warrior class is recommended for beginners because it's forgiving in the early game and you can do fine with just a macro for potions of cure wounds and maybe also a macro for phase door scrolls until you reach a somewhat higher level.

Hint: On character creation increase your strength to 18/30 at the very least to get a decent attack speed (3 blows per round with very light weapons). Pick one of the four weapon masteries (Sword/Blunt/Axe/Polearm), or Martial Arts if you don't want to use weapons, and always keep it maximized!

Make sure to create a macro for your fighting techniques 'Sprint' and 'Taunt' when you learn them, which you do pretty early on. They are great for catching annoying monsters that try to keep their distance to you. (See (6.12) for details about fighting techniques.)

Dual-wield trick if you lose your items on death:

If you die and revive, you could save a lot of money by foregoing heavy armour for attack power. Just buy some cheap, light armour and two cheap and very light 1-handed weapons which you wield both at once (Dual-wield)! The lightest weapons of each class are:

- Daggers (Sword-mastery)
- Whips (Blunt-mastery)
- Cleavers (Axe-mastery)
- Spears (Polearm-mastery)

Dual-wielding requires light armour. This should be adequate until you find some heavy armour in the dungeon, then you can switch back to 1-handed weapon with a shield (or to a 2-handed weapon if you have excessive enough strength to get at least 2 blows per round with it).

(For details on the benefits of dual-wielding, see (6.2).)

- Istar (the Quenya word for "mage")

Istari use intelligence primarily, determining how much mana they have to cast spells and how low their failure rate is.

They are the all-around best magicians, having both devastating and highly useful supportive spells (at least for their own benefit) of very wide variety.

On the downside, they are the worst fighters, being unable to use any weapon but a Mage Staff comfortably, and until they learn how to effectively use the 'Disruption Shield' spell they are very vulnerable. A high-level istar can be very powerful, but getting there can be a difficult journey.

Hint: An istar has very few hit points compared to other classes, making survival difficult in the beginning. That's why this class is not recommended for beginners.

- Priest

Priests use certain divine magic, uttered as prayers. Unlike mages they have a fair fighting potential with blunt or blessed weapons. If a priest wields a blessed weapon he will get his 'Blunt-mastery' skill applied to it even if it's not actually a blunt-type weapon.

Priests can learn many spells that are helpful to their party members. They use mainly wisdom for their prayers, determining the amount of mana and how low their failure rate is.

A Priest is a character of holy devotion. They explore the dungeon only to destroy the evil that lurks within, and if treasure just happens to fall into their packs, well, so much more to the glory of their church!

They are very good with magical devices, preferring to call them

instruments of their god, but are not as good as istari in their use.

Priests also have excellent saving throws due to divine intervention.

Although weak in the beginning, they can make decent fighters who strongly prefer blunt weapons over edged ones. They are not able to train in edged weapons, and if they wield one that isn't blessed, they receive an additional severe penalty.

Priests are especially adept at sensing curses on any sort of item, an ability that grows with their character level, perfecting this at level 35 at which they are able to notice curses almost instantly.

Wisdom is the priest's primary stat and they get a bonus on 'Holy Curing'.

Hint: Note that their spell Holy Light can be used to deal decent damage after it's been brought up a few levels. Orcs are said to fear it a lot. Priests aren't easy to play in the beginning, since they don't deal much damage and also can't take a lot of punishment, so they aren't recommended for beginners.

If you're a team player and want to support your team right from the beginning, get the spell 'Cure Wounds' as soon as possible and macro it.

There are rumours of ultimately corrupted priests which have lost all their holiness and align with the forces of hell instead.

- Rogue

A Rogue is a character that prefers to live by cunning, but is capable of fighting their way out of a tight spot. The master of traps and locks, no device is impossible for him to overcome.

Their primary stats are intelligence and dexterity, intelligence being very important if they aim to become proficient at magic, while dexterity makes up in combat prowess for what their strength might be lacking.

Rogues have very high stealth allowing them to sneak around many creatures without having to fight, or to sneak up and get the first blow, backstabbing his opponent.

Rogues are especially fond of dual-wielding two light one-handed weapons at once (see (6.2)). They prefer light armour, since dual-wielding and many of their special abilities won't work with heavy armour or two-handed weapons (see (5.5)).

A rogue's perception is higher than any other class, and usually they notice traps or secret doors without needing a search. Rarely will a rogue be unable to avoid or disarm a trap. Rogues also have the unusual ability to train stealing from shops and their fellow men, a dangerous but sometimes very rewarding profession.

Searching (or entering searching mode) will actually search within a radius instead of just the adjacent grids, another special trick of this class - this way it becomes much easier to find staircases without mapping magic.

Rogues are better than warriors or paladins with magical devices, but still can not rely on their performance. They can also learn a few magic spells.

When searching for hidden traps, doors and stairs, they may spot them more easily, even from a distance, which increases when the rogue gains levels.

At level 15, rogues will learn another special ability: Cloaking mode.

(Press 'V' to make your character prepare for cloaking up / uncloaking.)

By cloaking their physical appearance and body warmth pattern perfectly, which takes a certain time to get prepared, they become completely untrackable to almost any monster, for exceptions see (0.2).

Attacking, taking damage (with the exception of floor grid induced damage such as fire damage from lava) and a couple of other actions immediately break cloaking, again see (0.2) for details.

Being masters of cloaking, at level 30 they become able to see through any similar cloaking or shadowing techniques employed by their opponents

(monsters only).

Hint: Make sure to create a macro for your fighting techniques 'Sprint' and 'Taunt' when you learn them, which you do pretty early on. They are great for catching annoying monsters that try to keep their distance to you. (See (6.12) for details about fighting techniques.) Always keep your Sword-mastery skill at maximum (if you don't go for an unusual build that uses Martial Arts instead).

- Mimic

Mimics are melee fighters who can learn how to shapechange and use the form of any monsters (except for unique ones) they slay, thereby inheriting nearly all of the monster's abilities. That way they may even cast spells the monster was able to use or breathe elements like the monster did. Their primary stats are same as the warrior i.e. strength and constitution with dexterity coming in handy too.

Intelligence is not of primary importance but it can help somewhat to increase the mana pool for making use of monster spells/breaths, and it also affects the success chance when attempting to use a monster power. Mimics learn forms by killing an amount of that monster type that is the same as the monster's level. Further, their 'Mimicry' skill must be at least 1/2 of the monster level or you won't gain knowledge from the kills.

Example: To use the form of an Ancient Bronze Dragon (level 40) the mimic has to kill 40 of them and have a mimicry skill of at least 20.

To find out the level and special abilities of a monster form, press '~' followed by '7' and look it up, then consult section (6.7) for how the monster details translate into mimic abilities.

To find out how many monsters you already killed and how many you need in total to learn a form, press the '~' key followed by '2'.

To polymorph into a form, press 'm' key, like casting a magic spell. (Forms that have DISBELIEVE ability are skipped when using the normal 'Polymorph Self' spell. You have to use 'Polymorph Self Into..' if you want to use these forms.)

A list of useful low-level humanoid forms for weapon-using mimics is given in (6.7c) because weapon-using mimics have a somewhat harder time to find usable forms early on than martial artists who might just utilize easy-to-get forms such as fruit bat, wild cat, crow or spiders right away for great effect.

Mimics can get the highest amount of hit points of any class, even in the very long run i.e. at very high character levels far above 50, provided they acquire an appropriate high-level form (preferably level 80 or better). Low- and mid-level forms won't help high-level mimics that much to keep up their advantage in hit points, i.e. the extra hit points they gain from such forms will diminish as they continue to rise to very high character levels.

Hint: Maybe there's a friendly mimicry-user around who can forge some 'Rings of Polymorphing' for you from forms he or she no longer uses. As for all shape-shifters going with fruit bat body modification is not recommended, since it will restrict your equipment even if you polymorph. Pick one of the four weapon masteries (Sword/Blunt/Axe/Polearm), or Martial Arts if you don't want to use weapons, and always keep it maximized.

- Archer

Archers aren't good at fighting, but can deliver extremely high damage with their ranged weapons. They can die quickly too, however.

Archers are to bows what warriors are to melee. They are the best class around with any bow, crossbow or sling and their primary stat is dexterity. An Archer is very bad at melee, being only better than mage-like classes. Archers will receive an array of special techniques to their disposal from training the 'Archery' skill, such as setting up a precise sniping shot at a target asleep or how to craft ammunition from rubble or from the bones of their opponents (see (6.12)), accessible via 'm' key or macro wizard.

The first thing you should do when you created your character is making a macro for firing your bow. Press % and then z to start the macro wizard, and then c to create a firing macro.

Even though archers start out with just a long bow for ranged weapon, they also get one of each of the 3 base types of ammo in the game (magic arrow for bow, magic bolt for crossbow, magic shot for sling) so you can buy any ranged weapon of your choice in the town stores and will have the matching

type of ammo to go with it right from the start - press 'w' key to load it into your quiver.

Hint: Enchanting your ranged weapon to-damage is especially effective, because the enchantment will be multiplied by the weapons multiplier, so buy enchant to-dam scrolls from the alchemy store as soon as you can afford them.

Also make sure to have an ample supply of 'Scrolls of Phase Door'.

Pick one of the three ranged masteries (Bow/Crossbow/Sling) and always keep it maximized.

Note you can determine the order in which ammunition is listed in your backpack by simply dropping it and picking it up again in your preferred order.

- Paladin

Paladins are a combination of warrior and priest. Holy knights that fight evil with a variety of melee weapons and divine support.

Their primary stats are thus strength for fighting and wisdom for making use of divine prayers, with constitution and dexterity helping as usual. Paladins are nearly as strong as pure warriors and also highly proficient with shields which they use to deflect incoming attacks - although there is certainly no rule stating that they may not instead choose to use huge two-handed weapons for bestowing divine retribution upon their foes.

Paladins however are not very good at missile weapons. They are poor at stealth, perception, and searching. They are better than warriors with magical devices and have an outstanding saving throw due to divine protection. On the downside they lack the proficiency of warriors when it comes to handling ranged weapons and they do not benefit as much from equipment that increases their mana pool as priests do.

While they may train in all sorts of holy schools, they are slightly less adept at 'Holy Curing'.

Hint: Note that the spell Holy Light can be used to deal decent damage after it's been brought up a few levels. Orcs are said to fear it a lot.

Also make sure to create a macro for your fighting techniques 'Sprint' and 'Taunt' when you learn them, they are great for catching annoying monsters that try to keep their distance to you. (See (6.12) for details.)

Pick one of the four weapon masteries (Sword/Blunt/Axe/Polearm), and always keep it maximized. Unlike priests, paladins cannot train Martial Arts.

- Death Knight

Death Knights are unfortunate souls who were paladins in life. Unable to die in peace they rose again as bloodthirsty, undead warriors.

They have the same abilities as paladins in all regards but they are not able to utilize any kind of prayers and are susceptible to holy effects, instead they command unholy blood and shadow magic.

Death knights resist fear intrinsically.

- Hell Knight

This ultimately corrupted paladin can only be brought into existence when an astral spirit forsakes enlightenment and turns demonic instead.

Imbued by the powers of chaos and hellflame, these warriors represent absolute treason without remorse.

They have the same abilities as paladins in all regards but they are not able to utilize any kind of prayers and are susceptible to holy effects, instead they command blood magic and heretic magic of flame and chaos.

Similar to Vampires, Hell Knights can wield some heavily cursed items to great effect, flipping their negative boni to positive ones. (With the same exception as for vampires: Weapons "of nothingness" will do them no good either.)

Hell Knights have a very high chance to resist the adverse effects of encountering an eldritch horror (see (6.3) under 'Saving Throw' for details on those).

- Ranger

Second only to adventurers regarding versatility rangers excel at a lot of skills: They are able to fight well in close combat and may even dual-wield two one-handed weapons at once which requires light armour to be efficient. This goes well with magic or archery which also would suffer from heavy armour.

Devoted to nature in a similar way as druids rangers will avoid corrupted magic such as necromancy. They are however very adept at most other types of magic and also skilled trappers. Last but not least rangers display great performance with ranged weapons, able to train 'Archery' skill up to

10.000, which apart from increasing their damage dealt also unlocks various special techniques to employ as they see fit.

Rangers have good stealth, perception, searching, saving throws, and are good with magical devices. Rangers can find several different ways out of any situation. They use intelligence for spellcasting same as mages, they need strength if they rely on fighting in close combat, and they should have good dexterity if they aim at training ranged weapons.

At level 8 rangers learn to find paths passing thick woods, and at 15 they have become very able swimmers as well.

If you're planning to make use of ranged weapons, the first thing you should do when you created your character is making a macro for firing your bow. Press % and then z to start the macro wizard, and then c to create a firing macro. Buy arrows (to use with a bow) in store 1 or store 3 in town and put them in your quiver (w key). Crossbows require bolts, slings shots.

Hint: Make sure to create a macro for your fighting techniques 'Sprint' and 'Taunt' when you learn them, which you do pretty early on. They are great for catching annoying monsters that try to keep their distance to you.

(See (6.12) for details about fighting techniques.)

Since rangers can dual-wield and you start with light armour which is required for dual-wielding you might want to buy a secondary weapon right away, for example a cheap dagger, or even dispose of your starter weapon completely and go with two cheap, light weapons instead. (See (6.2) for details on dual-wielding.) This will increase your BpR by 1 or even 2! Note you can determine the order in which ammunition is listed in your backpack by simply dropping it and picking it up again in your preferred order.

- Adventurer

Adventurers are hardy and versatile, they have no preferred way of fighting or magic, and can adapt to any situation at hand.

They have no big big strengths nor weaknesses.

Adventurers can train nearly all skills, but do not excel at any specific one. The size of their mana pool depends on both their intelligence and their wisdom in equal parts.

Adventurers are often hybrids that combine various features of different and more distinct classes in one character, creating unusual mixtures of abilities.

Hint: Adventurers are difficult to play for beginners because to fully utilize them you need to know exactly what you are trying to achieve and how you want to distribute their skill points to make them effective.

- Druid

Druids are able to call upon the mystical powers of nature. Their wisdom is of primary importance to determine their mana and success chances when casting spells. Apart from the druidic schools, the other magic schools available to druids use intelligence for determining spell success chance. Druids fight using Martial Arts, which is the only melee skill they are able to train, as well as a variety of magic spells. Martial Arts means weaponless combats, not even ranged weapons, and only light armour, if any at all. (Martial artists actually get bonus armour class for each slot of armour that has no item equipped in it.)

Druids can shapechange into several forms (mostly animals) without having to fight or kill them in order to learn those forms. Instead they learn one or more new forms automatically every five character levels.

Even while transformed, druids can still equip all items they could equip in untransformed form, even if the monster form usually cannot use them. Because of this, going with a 'fruit bat' body modification in character creation would be especially ineffective for druids, because the fruit bat item restrictions would carry over to the druid forms, making otherwise usable slots unavailable.

Despising the use of weapons they aren't as superb at close combat as warriors, but their Martial Arts training will make up for that and allow them quite a respectable performance.

Druids learn how to quickly pass through thick forest at level 10 -- note though that they can already do this at level 5 by simply polymorphing into an animal ('m' key), since all animals can pass forest easily.

To review which forms you can transform into, use the /ex command.

To see an overview of the forms and their abilities, see (6.7b).

Hint: Druids have a powerful ranged area attack spell they can use very early on, Toxic Moisture. Look for it in the book store right away.

Also make sure to create a macro for your fighting technique 'Sprint' when you learn it, which you do pretty early on. It is great for catching annoying monsters that try to keep their distance to you. (See (6.12).) As martial artists, druids do not require any armour early on in the game, it could even lower their AC instead of improving it. Always keep your Martial Arts skill maximized.

- Shaman

Shamans are able to call upon both spiritual and magical powers, whatever they deem most appropriate. Their mind is also trained in a very versatile manner, allowing them to collect energy from intelligence or wisdom, whatever currently is easiest for them! Shamans are able to shapeshift same as mimics (see mimics above for details about how to learn forms) but they are limited to animals, trolls, giants, dragons and dragonriders, angels, hybrid creatures, golems, spirits, elementals and ghosts. However, they may use the latter three types while still wearing their full equipment and they are always able to move straight even if the creature in whose shape they appear usually moves erratically - these two are feats that mimics cannot achieve. Shamans learn elemental ('E') and semi-elemental ('X') forms especially quickly (one kill counts as three). Note that shamans cannot use non-living or undead forms except for ghosts, spirits, elementals and golems. While they are excellent at magic they have weaker combat abilities than rangers or paladins but still don't need to hide from a melee if trained properly. Their spiritual abilities allow them to easily train various aspects of necromancy as they see fit. Accordingly at level 20 shamans learn to perceive the invisible.

Hint: Maybe there's a friendly mimicry-user around who can forge some 'Rings of Polymorphing' for you from forms he or she no longer uses. In the beginning shamans have few hit points and skill point distribution isn't easy either, that's why this class is not recommended for beginners. As for all shape-shifters going with fruit bat body modification is not recommended, since it will restrict your equipment even if you polymorph. Note that all 'O' Ogre type monsters count as 'giants' too, so their forms are usable in shaman mimicry.

- Runemaster

Runemasters use arcane symbols or 'runes' to summon pure elemental magic. They use their intelligence and dexterity to both manipulate and protect themselves from the fickle and dangerous forces of their art. Runemasters are not the most dedicated or systematic of adventurers, and often rely on trickery and sleight-of-hand. Because of this, and their tendency towards thievery, they are often mistaken for rogues. This roguish nature allows them to train in rogue-specific weapon proficiencies and skills, although their lack of dedication leaves 'Weaponmastery' as an unattainable goal. Runemasters are unable to train in the martial arts, but are adept with boomerangs. High level users of runecraft may eventually enhance their armor and weapon with runic 'sigils', applying some resistance or boni according to the involved element. Elemental resistances are of particular importance to runemasters, who suffer a backlash of the according element instead of outright spell failure.

For more information about runecraft, see '(6.8b) Runes & Runemastery'. Note that physical runes are not required to cast most runespells. However, having the physical runes are required for Sign, Sigil, and Enhanced spells. The last rune of a stack may be preserved with the !R inscription, to prevent unintentional loss of access to these spells.

Hint: Runespells cause backlash of the active element on spell failure. For that reason you might use basic elemental spells in the beginning, against which you can easily acquire the required resistance, for example by buying a ring or amulet from the magic store. If you want to test rune combinations that pose a risk of going wrong badly, do so in the arena of the 'Arena Monster Challenge' event so you will get away unscathed.

- Mindcrafter

Mindcrafters are great melee fighters who additionally train the use of telepathy to unleash spells formed by their psychic powers. Their intellect is superior compared to primitive warriors, making them calm and silent fighters who are hard to read and are dangerously sharp.

They have a lot of possibilities to positively or negatively influence the minds of others. However, their repertoire is more limited when they are up against creatures of little or no intelligence. Their primary attribute is intelligence, which determines their spell fail rates as well as the majority of their mana pool. Also somewhat affecting their mana pool are charisma and wisdom, although they are not mandatory for becoming an able telepathy user. Aside from intelligence as primary spell-casting stat they will also want decent strength for engaging in close combat. Putting on heavy head gear (above 4.0 lb) will negatively impact their amount of psychic energy. Mindcrafters will learn to resist sanity-draining effects a bit at level 10, somewhat better at level 20 and even better at 40. They also have a high chance to resist the adverse effects of encountering an eldritch horror (see (6.3) under 'Saving Throw' for details on those), they also resist mind-blanking attempts and psionic attacks in general much better than other classes. A lot of their spells can actually be cast while blinded (or even confused), and their targetted spells often do not require a clean line of sight, since they manifest wherever their mind is focussed on (e.g. Psionic Blast). Their spells also cannot be reflected by monsters for that same reason. Some of the mindcrafters' spells that interact with party members will require them to prepare and open their mind for telepathic contact. This is done by the party members pressing the 'p' key. Pressing it again will close off their mind again, disabling further telepathic attempts. The effects of some necromancy skills are distracting to mindcrafters, so training them will require more effort. They are able to detect 'Telepath' ego monsters via ESP which usually are able to conceal their presence telepathically versus all other classes. Similarly at level 30 they become able to pinpoint opponents that attempt to make use of cloaking or shadowing techniques (monsters only). Mindcrafters learn to judge their own sanity much more accurately as they gain levels, getting a more detailed sanity display at level 10, 20 and 40 (same as other characters get when they actually train 'Health' skill to 10, 20 or 40).

Hint: Mindcrafters have a powerful ranged attack spell they can use very early on, Psionic Blast. Look for it in the book store right away. Also get the spell 'Autokinesis I' early on, which is a form of phase door. Pick one of the four weapon masteries (Sword/Blunt/Axe/Polearm), or Martial Arts if you don't want to use weapons, and always keep it maximized.

As you gain levels, you will get new profession titles. These are displayed between your class name and your character level in the main window. If you die and become a ghost, the title will change to 'Ghost' until you get revived. Titles change every 5 levels, the final title is received on level 50. From level 60 and upwards there are special titles available every 10 levels.

Here is a table showing boni/mali of the different races: 'Blows/Round' is the maximum number of melee attacks per round a character can have basing on strength and dexterity and on the weapon's weight. To that maximum of blows per round further boni are added, like extra blows from a specific weapon-type mastery or from rings of extra attacks or magical influence from priest prayer 'Zeal'. Note that these blows/round limits don't count for Martial Arts users (as long as they fight barehanded). See (5.3a) for a table of MA attacks. "Parrying" is done with weapons, while "blocking" is done with a shield; See (6.11) for details about parry and block.

(Di:Disarming, MD:Magic Device, ST:Saving Throw, St:Stealth, Pe:Perception (sight range), Sr:Searching, Fi:Fighting, BT:Bows/Throw)

	STR	INT	WIS	DEX	CON	CHR	HP	die	Exp%	Max. base blows/round	
	Di	MD	ST	St	Pe	Sr	Fi	BT		Parrying/Blocking	
	Di	MD	ST	St	Pe	Sr	Fi	BT	(relative modifiers, see (6.3))		
Warrior	+5	-2	-2	+2	+2	-1		+10	+0%	6	
	25	18	18	1	2	14	70	55		superb	superb
	10	7	10	0	0	0	45	40			
Istar	-5	+3	0	+1	-2	+1		+0	+35%	1	
	30	36	30	2	20	16	34	20		bad	bad

	7	13	9	0	0	0	15	15			
Priest	-1	-3	+3	-1	0	+2		+5	+20%	4	
	25	25	32	2	8	16	48	35		fair	fair
	7	10	12	0	0	0	20	15			
Rogue	+2	+1	-2	+3	+1	-1		+5	+15%	5	
	45	28	28	5	32	24	60	66		superb	fair
	15	10	10	0	10	10	40	40			
Mimic	+1	0	0	+1	+1	-4		+6	+30%	5	
	25	34	28	1	18	18	60	46		good	good
	9	10	10	0	0	0	40	25			
Archer	+1	0	+2	+3	+1	-1		+5	+10%	3	
	30	22	28	2	20	24	56	72		fair	fair
	8	7	10	0	0	0	30	50			
Paladin	+3	-3	+1	0	+2	+2		+8	+30%	5	
	10	21	54	1	16	13	60	40		good	superb
	2	8	10	0	2	0	35	10			
Ranger	+2	+2	-1	+1	+2	0		+7	+35%	5	
	34	32	30	5	30	30	50	60		superb	fair
	12	10	10	0	5	15	30	45			
Adventurer	0	0	0	0	0	0		+6	+25%	4	
	20	22	20	3	15	15	50	50		fair	fair
	10	10	10	0	5	5	25	25			
Druid	+1	0	+2	-2	-2	+1		+5	+35%	4	
	30	35	30	4	25	25	50	44		poor	poor
	8	11	10	0	5	10	20	25			
Shaman	0	+1	+2	-2	0	0		+3	+40%	4	
	10	30	30	4	30	20	45	23		poor	poor
	0	11	10	0	5	3	20	12			
Runemaster	0	+2	-2	+2	-2	0		+4	+40%	4	
	30	32	20	3	30	26	45	40		fair	poor
	0	12	10	0	5	5	25	30			
Mindcrafter	+2	+2	0	0	0	+1		+6	+25%	5	
	30	28	36	3	35	14	55	45		good	fair
	0	9	5	0	3	3	26	25			

For melee characters, it's especially vital to know how many blows per round they will get right after character creation, to avoid them being unnecessarily weak during low-mid levels.

So a melee-oriented character should make sure to start with sufficient STrength and DEXterity to be able to get at least 2 blows/round with the lightest possible weapons. (Getting more BpR with heavy weapons is a luxury that will have to be put aside until later in the game.)

Note that a (heavier) startup weapon at 2 BpR might beat a very light weapon at 3 BpR for a few levels at the beginning, maybe up to 4 or so. So you can wait for a little a bit until spending \$ on it.

(6.5a) Start-up Blows/Round Table

Here is a table, showing you some BpR numbers you can expect your newly created character to have, depending on certain combinations of class, STR, DEX, given for both, lightest possible weapon and startup weapon: (Don't forget that some classes can dual-wield, adding an extra +1 BpR on top!)

Note: 'Light' weapon may refer to as low as 3.0 lb (varies depending on STR and DEX - any weapon that weighs at most 3.0 lb will definitely work).

Class	STR	DEX	Light weapon	Startup weapon
Warrior	18	10	2	1
	18/10	all	2	1
	18/30	all	3	1-2 (depends on weapon)
	18/40	18/10	4	2
	18/50	all	3	2
	18/70..110	*	3-4	3 (depends on weapon)
	and for spears (no special treatment, just weight related):			
	18/40	18/10	3	
	18/70	10	3	
Istar	-			
Priest	18/10	10	2	1

	18/50	10	3	2
Rogue	15	18/10	2	2
	18/10	18/50	3	3
	18/20	18/10	3	3
Mimic	similar to priest, also:			
	18/30	18/10	3	2
	and for polearms (spears):			
	18/70	10	3	
Archer	-			
Paladin	18/10	10	2	1
	18/20	10	2	1-2 (depends on weapon)
	18/30	10	3	2
	18/20	18/10	3	2
Ranger	similar to priest, also:			
	18/50	10	3	2-3 (depends on weapon)
	18/30	18/10	3	2-3 (depends on weapon)
Adventurer	similar to paladin, also:			
	18/30	18/10	3	2-3 (depends on weapon)
Druid	-			
Shaman	similar to priest			
Runemaster	similar to rogue			
Mindcrafter	similar to ranger			

So if you're playing a melee-oriented characer, make sure you start with at least 2 BpR (in some cases you might have to buy very light weapon and discard your starter weapon to achieve this)!

If you think it's strange that 'Mimic fights similar to Priest' keep in mind that this is not about actual melee potential, but rather about some sort of 'blows/round improvement curve' displayed by a class. If a class is busy studying other things in parallel (magic), its learning curve gets less steep. This, however, doesn't determine its final performance, which is actually given by the 'Max. base blows/round' shown further above, and other parameters.

(6.6) Sanity (or insanity)

Your sanity can have the following values:
Sound, Sane, Weird, Insane, Mad, Vegetable.

If you spend 10 points on your 'Health' skill, the sanity display will turn into a bar, displaying exacter values. At 20 points you'll get the percentage displayed. At 40 the value will be shown.

At the beginning, your sanity is always 'Sound'. That means you are completely sane. Monsters or traps can reduce your sanity. If your sanity drops below 0, your mind will be qualified as an unthinking vegetable, this means your character is permanently dead, so be extremely cautious! Fortunately there are potions available that cure your sanity, although they are not very common and cannot be bought in shops. Wisdom helps against insanity by inceasing your 'sanity capacity'. As you gain levels, your sanity capacity will also increase. However, this means IF your sanity drops to dangerous regions, you will need more potions to cure it.

If your sanity is lowered, there's an increasing chance that flashbacks will storm your head, leaving you with mad visions for a while..
("A flashback storms your head!")

When your sanity suffers from an attack, you'll see a light red message in the message window telling you so, instead of the usual white or yellow combat messages, to make it easily visible.

Certain classes such as priests or mindcrafters may depending on their skills

be able to cure insanity.

There are no items granting any insanity resistance, but there are certain ways to reduce incoming insanity damage, depending on the flags of a mimicked form or your race, class or skills, in three tiers:

Mimicry: UNDEAD/WEIRD_MIND/MIND_BLAST/RES_PSI = tier 1.

Mimicry: NONLIVING/EMPTY_MIND/BRAIN_SMASH/IM_PSI = tier 2.

Mind school skill: Level 40/50 = tier 1/2.

Hereticism + Traumaturgy skills: Both level 15/30/45 = tier 1/2/3.

Mindcrafter class: Level 10/20/40 = tier 1/2/3.

Vampire race: Tier 2.

Player ghosts: Tier 3.

Insanity reduction also helps resisting the adverse effects of encountering an eldritch horror (see (6.3) under Saving Throw).

(6.7) Mimicry details

If a mimic polymorphs into a certain monster form, abilities and stats will be averaged between the normal ('@') body and the form. In most cases if the form is performing worse than @-form in a certain field, the @-form will dominate and the ability will be only slightly worse than normal, if even at all.

The averaging is done because the mimic with all his equipment polymorphs into the target form. It's not like the polymorphing is done first and afterwards armour, weapon or jewelry is equipped.

So wearing a ring of protection for example won't plainly add to the mimic's AC but just contribute to the @-form AC which is then averaged in the process of determining the final form's AC.

How exactly stats are calculated is written below for each case.

If a mimic wields a weapon while using a form which usually cannot use weapons the number of blows per round will be set to 1 (regardless of extra attacks). (This only really applies to druids, shamans or perma-cursed weapons (5.14)).

Apart from blows-per-round, all the other resistances and abilities of a perma-cursed item will be applied normally though, so you could wear the Massive Iron Crown of Morgoth to get all the resistances and ESP with a form that usually cannot wear any head gear.

To find out the special abilities of a monster form, press ~ 7 in game or consult a spoiler file. (See (7.4) for more info about spoiler files.) It's abilities will transform to the mimic's body as follows.

Form aspects as specified in ~ 7 monster lore:

(Make sure to keep your r_info.txt spoiler file up to date, as the lore displayed via ~7 is derived from it.)

W: depth : rarity : corpse weight : experience for kill

depth:

The depth is also the basic level of these monsters. It tells you how many of them you need to kill to learn mimicking their form.

The level has additional use for calculating the mimic's final hit points regarding very high character levels (see 'hit points' below).

corpse weight:

The weight of the form has impact on its stealth. A huge form that weighs a lot will give a stealth penalty, while small and light forms may give a bonus.

I: speed : hit points : vision : armor class : alertness

speed:

110 means normal speed. If the monster is faster, the mimic will receive a speed bonus of 30% of the monster's speed above 110.

If the monster is slower, the mimic will receive a speed malus of 20% of the monster's speed malus below 110.

So a monster moving at 130 speed will give the mimic +6 speed.

hit points:

The monster's hit dice xdy are multiplied and then somewhat capped against ~2500, so HP gain might decrease in higher regions. (Cap details: The monster HP is calculated by the following formula before further calculations are made: monster HP = 50000 / ((50000 / hdice*hsides) + 20).) Now, if the mimic's HP are less then the result, the mimic's HP will become approx. 2/5 of that capped monster HP + 3/5 of the player's original

HP. If the mimic's HP in player form (code 0) are higher than the monster HP then the monster HP will not have any adverse effect, instead the normal HP will stay.

A specialty: Players in very high character levels can see their hit points 'overtake' the monster form hit points, if the monster form level isn't very high in comparison. Example: While a green dragonrider will provide a great HP boost, if the player himself has reached say level 70 and has lots of HP even in normal form, the green DR hit points won't add much anymore. If however the monster has high hit points and also a very high level, the monster HP will 'stay ahead' of the player hit points ie keep adding a steady bonus that will put him well ahead of his player-form hit points. So players of very high character level who want to retain a large bonus of hit points will want to look for forms of monsters which are also of relatively high level.

armour class:

Mimicking a monster is already a very difficult task. By changing shape, the usual armour class of the monster will magically influence the armour class of the player.

Depending on the body parts of the monster, its AC has different influence on the player. The following formula helps:

body_influence = 0.

if the monster has a head, body_influence is increased by 1.

if the monster has a torso, body_influence is increased by 3.

if the monster has arms, body_influence is increased by 2.

if the monster has legs, body_influence is increased by 1.

calc_ac = monster_AC * 14 / (7 + body_influence)

Now if calc_ac is smaller than the player's AC, the final AC will be (3/4 player_base_AC) + (3/4 player_magical_to_AC) + (1/4 calc_ac).

Otherwise, the final AC will be

(1/2 player_base_AC) + (1/2 player_magical_to_AC) + (1/2 calc_ac).

vision:

Searching ability of the player =

(player_searching / 2) + (monster_vision / 10)

Perception of the player =

(player_perception / 2) + (monster_vision / 10)

E: hands : torso : arms : finger : head : leg

These values indicate how many pieces of equipment the player can wear while using this form. For example snakes can only wear a helmet (E:0:0:0:0:1:0).

NOTE: Mimics can never wear MORE items than in their normal form. So even a form with 8 legs would allow only 1 pair of boots to be equipped! In the monster lore (~7) some monsters may show 'tentacles'. These count for three limb-types together: Hands regarding wielding a weapon, fingers (can wear rings) and arms (can wield shields). Tentacles are not fit for wearing gloves though.

B: attack method : attack effect : damage

attack effect:

POISON,DISEASE,FIRE,COLD,ELEC,ACID:

If the monster poisons or infects with disease, this will result in a poison brand. Similar it's for fire/cold/lightning/acid attacks.

BLIND won't work on monsters that have NO_SLEEP, otherwise the target will be confused.

HALLUCINATION and CONFUSE won't work on monsters that have NO_CONF, otherwise the target will be confused.

TERRIFY won't work on monsters that have NO_FEAR, otherwise it'll scare the target.

PARALYZE won't work on monsters that have NO_STUN, otherwise it'll stun the target.

EXP_xx means the monster drains life on attacking. The player will receive HOLD_LIFE (resist life-draining attacks) from this form.

SHATTER will result in a bonus to player's STrength attribute.

LOSE_xxx will give the according sustenance.

Monster effects (like poisoning or paralyzing) are applied to the player's attacks with a probability that corresponds to their rarity over the up to 4 monster attacks per round.

Example for 'Ghoul' form:

If the monster has 3 blows per round and one of them is poisoning, the other two are paralyzing, the mimic will have 1/3 chance to do a poison branded attack and 2/3 chance to do a stunning attack.

These effects won't be applied if one of the following conditions

is met:

- a) The player is doing a ranged attack.
(Effects only work with melee attacks!)
- b) The player uses a weapon but the monster doesn't have an equipment slot for melee weapons, because it has no arms or is immaterial.

Melee to-damage bonus also depends on the monster form:

The monster damage dice for each attack are multiplied and the products are all added up, the result is divided by 4.

The result is now capped against 200, the closer this graph comes towards 200 the flatter the curve will become. Let's call the resulting monster damage value 'monDam':

This value is now compared against the player's melee to-damage bonus.

If (monDam > meleetoDam) then newToDam = 1/2 meleetoDam + 1/2 monDam.

If (monDam < meleetoDam) then newToDam = meleetoDam.

So, very similar to how HP are averaged, the monster damage has no influence if it's lower than the player's melee to-damage bonus, but it may provide a great boost if the monster is more powerful than the player.

F: flag list

The flags are translated to mimic abilities as follows:

RES_xxx	Gives the mimic the specific resistance.
IM_xxx	Gives the mimic the specific immunity! If a form offers more than 1 immunity, the immunities will be checked against the preferences you set, if none match or if you set it to none then one will be picked randomly. The remaining ones will turn into resistances. Potions of self-knowledge are helpful here to find out which one you got, or you could just suffer damage of the according type on purpose to test it out. You can set the desired immunity in 'm' menu -> 'Use innate power' -> 'Set preferred immunity'. It will be picked if the form you polymorph into can provide it. If you are already using a form that can provide the immunity that you switch to, that immunity will become the active one immediately without the need for re-polymorphing. Note that two immunities are actually exempt and don't translate directly: IM_TELE gives teleport resistance (like RES_TELE) instead. IM_PSI gives insanity reduction (like EMPTY_MIND) instead.
PASS_WALL	Will allow the mimic to pass walls like a ghost. These immaterial forms also drain the hit points of their user.
KILL_WALL	The mimic will dig *easily* through walls.
REGENERATE	Faster hit point regeneration (same as item ability, doesn't stack with regeneration obtained from item flag).
REFLECTING	Gives 'reflect' ability to the player, see (5.8) for details. (Side note about monster reflection in general: The 'REFLECTING' flag on monsters gives them a flat 50% chance to reflect physical or magical projectiles.)
CAN_SWIM	The player can pass water fields without problems.
CAN_FLY	The player can levitate.
STUPID	-2 intelligence.
SMART	+2 intelligence.
NO_CONF	Confusion resistance.
NO_FEAR	Fear resistance.
NO_SLEEP	Free action.
NO_STUN	Sound resistance.
NO_CUT	The player can't be cut and won't bleed continuously from wounds.
DISBELIEVE	Will increase the player's anti-magic field by ((monsterlevel / 2) + 10) percent. The range of the anti-magic field is increased by ((monsterlevel / 50) + 2) fields.
ARROW_1, ARROW_2, ARROW_3	The player will receive an extra shot per round with slings or bows since the monster seems to be good at shooting. If the monster shoots 1_IN_3 or better (better means faster, ie higher frequency, that is 1_IN_2 or 1_IN_1), the player will receive an additional extra shot (with crossbows too).
HURT_ROCK	Means that this creature has a rock-like skin and body. Takes damage from Stone-To-Mud and takes more damage from 'disintegration' attacks, but at the same time resists shards!
WILD_WOOD	The player (like the monster) can pass trees.
WILD_MOUNTAIN or WILD_VOLCANO	

The player (like the monster) can climb mountains.
WILD_TOO without any other WILD_xxx flags:
Combines all WILD_xxx effects (such as WILD_WOOD and WILD_MOUNTAIN)!

INVISIBLE The player becomes invisible (see (5.16) for details).
AURA_FIRE or AURA_ELEC
The player receives an aura.
SUSCEP_FIRE/SUSCEP_COLD/SUSCEP_ELEC/SUSCEP_ACID/SUSCEP_POIS
The player is susceptible against these attacks. Dangerous!
WIERD_MIND/RES_PSI
Insanity attacks are reduced a little bit. See (6.6).
EMPTY_MIND/IM_PSI
Insanity attacks are reduced somewhat. See (6.6).
AQUATIC Gives superb water resistance.
NEVER_MOVE Using this form, the player won't be able to move (except for teleportation/phasing/recalling).
RAND_25 The player has +10% chance of moving randomly.
RAND_50 The player has +20% chance of moving randomly.
OPEN_DOOR This form can open doors.
Note that forms can open doors even if they don't have this flag, provided they have fingers and are able to wield weapons (a good example are Minotaur/Maulotaur forms of druids).
BASH_DOOR This form can bash doors
(useful to forms that cannot open doors, see OPEN_DOOR flag).
HURT_LITE This form will take 2x damage from light attacks.
HAS_LITE If this monster either doesn't have a torso or can actually breathe light, it will give you +1 light radius.

For all racial flags such as ANIMAL, SPIDER, EVIL, DEMON etc please see the list of racial abilities further below.

S: spell list

These spells can be cast by the monster. Most of them are available to the mimic too, called 'mimic powers', some of them may have slightly different effects when used by the mimic. For a list of all available mimic powers see (6.8a).
The chance to successfully use such a monster power is affected by the mimic's intelligence (INT).
Depending on how frequently the monster is able to cast spells, the player gets boni on mana and on intelligence or wisdom stat!
This only applies if the spells are in fact magic spells, not if the monster cannot do anything except firing missiles, shrieking or shooting arrows (etc).
If the creature is able to cast 1_IN_3, the player receives +1 stat and +20% Mana bonus (of base mana, same way +MANA items work).
If the creature is able to cast 1_IN_2, the player receives +3 stat and +35% Mana bonus (of base mana, same way +MANA items work).
If the creature is able to cast 1_IN_1, the player receives +4 stat and +50% Mana bonus (of base mana, same way +MANA items work).

About specific spells:

BR_xxx (breathing) will give the according resistance to the player (if that specific attack CAN be resisted at all).
BR_PLASMA gives fire immunity and resistance to electricity and sound.
BR_GRAVITY gives feather falling.
BR_INERTIA gives free action.
MIND_BLAST Insanity attacks are reduced a little bit. See (6.6).
BRAIN_SMASH Insanity attacks are reduced somewhat. See (6.6).
The mana costs of mimic powers are fixed, the success chance is relatively fixed too although it benefits somewhat from 'Magic' skill.

Especially interesting spells of mimics are 'Blink' (Phase Door) and 'Teleport'. These usually cost very little mana and can be very helpful, so you might want to create macros for them.

Further, certain races get additional fixed abilities (even if they are not explicitly mentioned in ~7):

Bats	Feather falling.
Elves	Resist light.
Dark-Elves	Resist darkness.
Hobbits	Dexterity bonus of +2 for not wearing shoes. (Or 'Halflings'.)
Gnomes	Free action.

(Dwarves	Blindness resistance, climbing at level 30.)
(High-Elves	Resist light, see invisible.)
Yeeks	Feather falling.
(Ents	Slow digestion, speed - 2, sensitive to fire, see invisible at level 4, can swim easily, pass trees.)
All animals	Able to pass trees.
All spiders	Able to pass mountains, able to pass spider webs.
All ghosts	See invisible, Infra-vision +4 (stacks with undeads' +1 bonus). Ghosts are susceptible to light. Almost all ghosts can pass solid walls.
All orcs	Resist darkness.
All trolls and giants	Sustain strength.
All monsters with stone skin (HURT_ROCK flag)	Shard resistance.
All dragonriders	ESP_DRAGON at level 5, feather falling, levitation at level 30.
All evil creatures	Becomes susceptible to certain 'good' or 'holy' effects.
All undead creatures	Resist darkness, blindness, poison (usually immunity, depends on ~7 flags), time and nether; can't bleed (no_cut), infra-vision +1, insanity attacks are reduced by a little bit (see (6.6)). Drowning damage taken is halved. Becomes susceptible to 'life', which concerns some healing or cleansing effects mostly. However, at the same time they become gorged less quickly when for example quaffing lots of healing potions quickly. Take 2x damage from holy orbs or holy fire and suffer from many 'good' effects/spells (even more so than demons). Suffer less often from black breath infection and consequences.
All greater undead creatures	See 'All undead creatures' above, and in addition they get another +4 bonus to infra-vision (ie +5 in total).
All greater demons (capital 'U')	Resist poison (usually immunity, depends on ~7 flags) and time. Take 2x damage from holy orbs or holy fire and suffer from a couple of 'good' effects/spells (similar to undead).
All non-living creatures	Resist poison (usually even immune, depends on ~7 flags) and fear; insanity attacks are reduced somewhat (see (6.6)).
All vampires and vampiric monsters (vampire bats and others)	Vampires are susceptible to light. Chance to drain life on attacking in melee. Vampire bats and mist have 100% chance to do a vampiric attack, real vampire forms (and vampiric ixitxachitl) have 50% chance (half their attacks are hits, the other half is biting). For details see '(5.15) Vampirism'.
All angels	Resist light, blindness and poison (usually immunity, see ~7 flags), resist fear, resist confusion, free action, some resistance to insanity-inducing attacks (see (6.6)), see invisible. Note: 'Fallen Angel' doesn't get light resistances.
Mist and fume	Feather falling.

Keep in mind that by changing forms you can potentially lose abilities that you had in player form, because they were bound to your normal form.
Example: An ent mimic won't drown in water, but if it polymorphs into an orc, it loses the intrinsic ability to pass water since orcs aren't made of wood.

Attributes and miscellaneous abilities can also be affected by certain aspects of the monster form you use:

(Note that all bonus aspects stack, so a troll might get much more than just +1 to strength, because he's also quite heavy and therefore gets another bonus.)

STR	Melee damage: -1..+4 (-1 won't apply if creature is very heavy though)
	Earthquaking melee hits: +1 each
	Body weight: +1..+3
	Bears: +1
	Trolls: +1
	Giants: +1

INT	Dragons (mature and higher): +1 Cast speed (1_IN_1 to 1_IN_3): +1..+5 (will also give up to +50% base mana) STUPID creatures: -2 SMART creatures: +2
DEX	Halfling forms when no boots are worn: +2 Rogues: +1..+2 Monks/Master warriors: +1 Ninjas/Mystics: +2 Cats: +2
CHR	Dragonriders: +1 Small, non-nasty animals: +1 Spiders, orcs: -1 Trolls, giants: -2 Nonliving/evil creatures: -1 Undead/demons: -2 GOOD creatures: +2
Stealth	Body weight: -4..+3
Infra-Vision	Undead in general: +1 Ghosts specifically: +3

Intrinsic abilities that aren't kept when changing forms:

Characters keep certain racial abilities even if they change form, while some other abilities might not persist through polymorphing. The following abilities will NOT remain active when changing shape, ie are not "polymorph-proof":

Hobbit:
+DEX bonus from not wearing shoes.
Dwarf:
Climbing.
Yeek:
Pass trees.
Ent:
Speed malus (will be reduced), swimming, pass trees.
Draconian:
Feather falling, levitation.
Intrinsic breath weapon - you can only use it if you're actually in dragon form (including dragonriders) or in any reptilian form (including Hydras).

Abilities acquired from traits (such as 'enlightened' or 'corrupted' trait for Maiar) are also considered intrinsic abilities and therefore polymorph-proof if they aren't on the list above.

(6.7a) Polymorph rings ('Ring of Polymorphing of <form>'):

There are two types of polymorph rings, those which already provide a monster form and those which can still be forged by a mimic. Latter ones are named 'Rings of Polymorphing of Player', while the first ones are named after the monster form.

A player can use a ring that carries a monster form, by wearing it and activating it. The user needs a mimicry skill of at least 1/2 the level of the monster in order to activate the ring and must be eligible to use that form in general (shamans cannot use certain forms). The ring will disintegrate and the player will polymorph into the according form for the number of turns the ring specified. The turns are depending on floor speed, which means they will run out faster on shallow levels and slower on deeper levels relative to real time, but in fact always at same speed in character time! (See (4.14) for more information about the in-game time system.)
As a rule of thumb, a dungeon turn lasts about 1 second on average (noticeably less in town or very shallow levels).
However, the remaining polymorph duration will stop decreasing while you are in a town and surrounding area, so you don't have to hurry while shopping.
If a character activates a poly ring and then manually polymorphs into another form, the remaining form duration is saved so he can turn back into the ring's form later. Only one ring form can be saved at a time. Note that there is an activation tax of 10 turns everytime the player polymorphs into the stored form (except for the initial polymorphing from activating the ring).

NOTE: UN_POWER attacks can drain the remaining time a temporary form lasts!

At around 100 turns (or less if there isn't more time left) before a form runs out the player will receive a warning message about this, and his appearance will start to flicker between the temporary form and his normal form, to indicate visually that it won't last very much longer.

Players can also create monster rings out of 'polymorph player' rings, by mimicking the according form, then wearing the ring and activating it. The ring will turn into a ring of polymorphing of the current monster form. However, to create such a ring it is required that the player has already learnt that form. All of his knowledge will be absorbed into the ring, so the player will completely forget the form and have to re-learn it if he wants to use it again!

The level of the ring will change depending on the form. Here are some levels:

form level	ring level
------------	------------

0 (townspeople)	5
1	5
15	14
30	22
60	36
80	43
100 (theoretical)	50

Polymorph rings contain a certain amount of energy that cannot be changed, which determined for how long the player will keep the form until he polymorphs back to normal.

If a player forges a ring, his 'Magic Device' skill helps to obtain a high amount of energy in the ring.

(6.7b) Druid form details

The according polymorph code is given in parentheses below the creature name. Note: Some druid forms can open doors, others may try to bash doors.

Also, all animal forms are able to travel through woods.

You can use the /ex command in game to see which forms you can use, and what polymorph code they have.

Note: If a monster can fly that means it will grant the player the 'levitation' ability.

Level 5:

Cave bear tough; can pass mountain terrain
(Code 160)

Panther speedy
(Code 198)

Level 10:

Grizzly bear same as Cave Bear, but tougher
(Code 191)

Yeti can pass mountain terrain;
(Code 154) is immune to cold but susceptible to fire

Level 15:

Griffon can fly; can pass mountain terrain
(Code 279)

Sasquatch speedy; similar to Yeti, but not susceptible to fire;
(Code 343) can pass woods too

Level 20:

Werebear same as Grizzly Bear, but tougher
(Code 414)

Great eagle speedy; can fly; passes most terrain types
(Code 335)

Great White shark (Code 898)	speedy and tough aquatic(*) form (aquatic means that it requires deep water to breathe and greatly resists water-based attacks)
Aranea (Code 963)	a speedy greater spider; all melee attacks are poisonous; resists fire, completely immune to poison; susceptible to light and to 'good' (creature is evil); has a small array of magic spells at its disposal
Level 25: -----	
Wyvern (Code 334)	speedy; can fly; passes most terrains; 25% poisonous melee attacks; immune to poison; susceptible to 'good'
Multi-hued Hound (Code 513)	resists fire/cold/lightning/acid/poison and is immune to one of those five elements; can't be confused or paralyzed; can breathe the five elements mentioned above
Level 30: -----	
5-headed hydra (Code 440)	tough and speedy; can swim; all melee attacks are poisonous; immune to poison; can cast fear and poison ball
Minotaur (Code 641)	tough and very speedy; susceptible to 'good'
Giant squid (Code 482)	tough and speedy aquatic(*) creature; resists cold/acid/lightning/poison; can breathe lightning, acid and poison
Level 35: -----	
7-headed hydra (Code 614)	tough and speedy; can swim; poisonous (75%) and blinding (25%) melee attacks; immune to poison; can cast fear, poison ball, and breathe poison
Elder aranea (Code 964)	speedy and smart (INT bonus) greater spider; 50% of melee attacks are poisonous; resists darkness, fire, poison; immune to either fire or poison; susceptible to 'good' and to light; can't be confused or paralyzed; regenerates HP quickly (same as item flag); has a medium array of spells at its disposal
Plasma hound (Code 726)	speedy; immune to fire, resistant to lightning and sound; susceptible to cold; can't be stunned (by magic), cut, confused or paralyzed; can breathe plasma
Level 40: -----	
11-headed hydra (Code 688)	speedy and toughest hydra; can swim; fiery attacks; immune to fire; has a small array of fire/fear spells
Giant Roc (Code 640)	speedy giant bird; deals high damage; can fly; passes most terrains; immune to electricity; resists sound; can't be paralyzed or confused;
Lesser kraken (Code 740)	speedy, smart and very tough aquatic(*) creature; resists lightning, cold, darkness, poison; completely immune to either water attacks or poison; can't be paralyzed or confused;

has a medium size array of spells;

Level 45:

Maulotaur
(Code 723)

like Minotaur, but tougher; stupid (INT malus);
immune to fire; resists teleportation attacks;
can cast plasma bolt and fire ball

Winged Horror
(Code 704)

speedy winged creature; can fly;
resists cold, poison, darkness, nether, life drain;
immune to either cold or poison;
susceptible to 'good';
can breathe nether, darkness and poison

Level 50:

Spectral Tyrannosaur
(Code 705)

speedy undead animal;
has 25% scaring attacks;
resists nexus, teleportation attacks, nether,
life drain, cold, acid and poison;
becomes immune to one of cold/acid/poison;
susceptible to 'good' and 'life';
can't be cut, scared, confused or paralyzed;
can breathe nexus, poison and nether

Greater kraken
(Code 775)

speedy, smart and extremely tough aquatic(*) creature;
resists cold, poison, lightning, acid, darkness;
completely immune to one of lightning/poison/water;
susceptible to 'good';
can cast from a large array of spells

Jabberwock
(Code 778)

fabulous very speedy and tough hybrid creature that
deals high damage;
can fly;
resists teleportation attacks and chaos;
can curse and breathe chaos

Level 55:

Horned Serpent
(Code 1131)

speedy and tough; can swim and pass mountain terrain;
33% poisonous attacks;
resists poison, acid, fire, water attacks,
becomes immune to either poison or acid;
can't be scared, confused or paralyzed;
can cast fear and breathe acid and poison

Level 60:

Firebird
(Code 1127)

speedy and tough; can fly and passes most terrains;
fiery attacks and fire aura;
immune to fire and susceptible to cold;
resists poison, sound and light;
regenerates HP quickly (same as item flag);
can breathe fire and light

(*) "Aquatic" means that this form requires deep water to breathe, you will get increasingly stunned and continuously take damage if you stay outside of deep water, beware.
Aquatic forms also resist all water-based attacks *greatly*.

(6.7c) Useful low-level humanoid forms for weapon-using mimics

Mimics who use weapons have less choices for forms than martial artists who do not need to rely on humanoid forms and can just utilize easy-to-get forms such as fruit bat, wild cat, spiders, birds or hounds right away to great effect.

To use weapons however, the form must be humanoid or very close to it, which rules out animal forms. To make form-hunting a bit easier in the beginning here is a list of useful low-level forms that are humanoid and allow the player to wear/wield full equipment:

-- Note: Forms usable by shamans are marked with an asterisk '*'. --

Forms you can already get in Bree town:

- Village idiot 1 Its pretty weak and has slightly erratic movement which can be a bit annoying but it gives a speed bonus which can be somewhat useful when fighting.
- Mean-looking mercenary
Battle-scarred veteran 1 They can improve your initial HP (hit points) and AC (armour class) fairly well.
They both have slightly erratic movement though.

Further forms:

Note: Nearly all of these actually occur in packs (although some of them might also sometimes appear on their own) making them even easier to attain.

- Small kobold 1 Actually very weak, but it has poison resistance. This way (or normal kobold) this form may help you to kill Rotting corpses (see below) which have poisonous melee attacks. ;)
Not really useful other than that.
- Novice mage 2 Sort of weak but has 'Blink' spell (aka Phase Door) and more.
It occurs solo at depth 2, but in packs at depth 6!
- Novice priest 2 Sort of weak but can cast fear/curse and self-heal spells.
It occurs solo at depth 2, but in packs at depth 6!
- *Poltergeist 3 Useful only for shamans because it has no limbs!
This form can pass solid walls and makes you invisible!
Also gives fear/confusion/cold/sound/insanity/time resistance, free action, poison immunity, and you won't bleed from cuts.
However, since Poltergeister are invisible, finding them might prove troublesome. An easier to spot ghost form is the 'Phantom warrior' (see further below).
- Novice ranger 4 Can pass trees easily. Gives an extra shot with slings or bows. This can be pretty powerful early on if the character has a decent 'bows/throws' ability or has a bow that is well enchanted to-hit.
It occurs solo at depth 4, but in packs at depth 8!
- N. mindcrafter 4 Free action, resists confusion and slightly insanity too.
Can cast blind/slow/confuse/fear spells.
It occurs solo at depth 4, but in packs at depth 8!
- Large kobold 5 As all kobolds it has poison resistance. It also has a lot of hit points and very good AC for its level.
- Rotting corpse 8 Free action, resists confusion/fear/cold, poison immunity, brands melee attacks with poison, decent AC.
- *Phantom warrior 8 Useful only for shamans because it has no limbs!
This form can pass solid walls!
Also gives fear/sound/insanity resistance, free action, poison immunity, and you won't bleed from cuts.
- Tengu 10 High HP, good AC, can blink/teleport and more, resists fear and fire, can levitate. A secret tip for form hunters!
(Does not occur in packs.)
- *Master yeek 12 Although everyone knows that Yeek = weak, this particular kind of Yeek can cast some interesting magic spells.
And as a plus it's actually immune to acid.
- *Air spirit 12 Useful only for shamans because it has no limbs!
Since this is an 'E' form, shamans learn it very quickly.
An insanely powerful early shaman form, since it gives a big speed bonus, levitation and invisibility!
It also gives free action and resists fear, confusion, light, dark, bleeding (cannot be cut), insanity, electricity and poison and immunity to either electricity or poison.
- Illusionist and Druid 13 These two have an array of spells at their disposal, one of them being 'Haste' which speeds themselves up temporarily, which can be a very powerful asset.
These two monsters appear somewhat rarely though.
(Later on, 'Mage' is a mid-level form that also provides haste spell and is actually more common to find.)
(These two do not occur in packs.)
- *Ogre 13 This form can cross thick woods and mountain terrain.
Note that Ogres also count as giants which means that shamans can use this form too.

		(This monster occurs somewhat more rarely than the others.)
Black orc	13	Good HP, good melee damage, +1 extra shot w/ slings/bows.
Lizard man	16	High HP, can swim easily, resists water, immune to acid.
		(This monster occurs somewhat more rarely than the others.)
*Ogrillon	16	Very high HP for its level, good melee damage. Note that Ogrillons also count as giants which means that shamans can use this form too.
		(This monster occurs somewhat more rarely than the others.)
Uruk	16	Good HP, good melee damage, good AC, +1 extra shot w/ slings or bows, poison immunity.
*Umber hulk	16	Shamans can use full equipment in this form, others cannot. Since this is an 'X' form, shamans learn it very quickly. It's not really strong but it destroys walls just by moving into them, allowing you to tunnel easily without any digging tool. Also it is immune to poison, paralysis and confusion, you won't bleed if you get cut, and its melee attacks may have a confusion effect (which makes fighting it in close combat a bit dangerous). (Does not occur in packs.)
*Forest troll	17	High HP, good AC, can pass trees, gives 'HP regeneration' (same as item flag).
*Earth spirit	17	Useful only for shamans because it has no limbs! Since this is an 'E' form, shamans learn it very quickly. Similar to Air spirit (see further above) this form comes with very useful abilities (and more hit points), even though it is less speedy than Air spirits. Earth spirits can pass solid walls and also fly, giving them ultimate mobility. It gives free action and resists fear, confusion, light, dark, bleeding (cannot be cut), shards, fire, cold, electricity and poison, and gives immunity to one of fire, cold, electricity and poison.
Elite uruk	20	Good HP, very high melee damage, good AC, +1 extra shot w/ slings or bows, poison immunity.
Dark-elven Lord	20	Good HP, resists darkness but is susceptible to light-based attacks. Moves fast and even has a 'Haste' spell in his array of spells that boosts his speed further. This monster occurs somewhat rarely. (Does not occur in packs.)

(The number is the monster level and therefore the amount of monsters you need to kill to learn the form.)

Of course some of these forms might also be useful for martial arts users. (Note that martial artists cannot make use of ranged weapons or weapons in general though, without losing their excellent bare-handed melee skills.)

Commonly seen advanced forms: Bloodletter of Khorne, Storm Giant, Dragonriders.

(6.8) Magic spells and prayers

Istari (mages), rangers, rogues, priests, paladins, druids, shamans, mindcrafters and even adventurers can cast magic spells, use telepathic powers (which are the same as spells, technically) or speak prayers. To do so, they need the according spell scrolls (which contain exactly one specific spell) or books (such as Codices, Spell Books, Grimoires, Handbooks or Tomes, that contain several different spells) in their inventory.

The failure rate when attempting to successfully cast a spell is usually shown when browsing the according spell scroll/crystal, and is determined by your intelligence or wisdom, and the spell's level. For details see (6.8d).

Some spells have an instant effect, other spells have a lasting effect over a certain duration, most commonly storm-type or cloud-type spells which deal damage over time. Such spells that have lasting effects on the map grids do not stack! For example, casting Noxious Cloud and immediately afterwards Vapor will cause the Noxious Cloud getting replaced by Vapor on all map grids where they would overlap.

Spell scrolls and some books can be purchased in store '9' (the 'book store', usually also sells 'Beginner Cantrips' and sometimes also Codices) or in '7' (the 'black market' - very expensive but you often find tomes here!).

Book stores in higher-level towns on average also tend to sell higher-level spells. You can also use the 'o' key in the book store to order specific spells! Note that in the book store it is sufficient to just enter the spell name when ordering, you don't need to type out the full item name of the spell scroll/crystal.

Note that you must spend enough points into a particular magic school (or into sorcery) for the spell turning from grey into green in your spell book, in order to use that spell. A spell will turn green when its current level has become at least 1.

A level 'x' spell will requires at least 'x' points in its school before you can cast it and it turns green. You'll cast it at spell level 1 then. If you spend more points into that school the spell will become more powerful as its spell level increases.

Example:

Noxious Cloud is a level 3 spell of the Air school. That means if you spend at least 3 points into Air school, the spell will become usable and be displayed as "level 1" in your 'Spell Scroll of Noxious Cloud' you just bought from the Book Store in Bree (symbol '9').

If you raise your Air school to 6 by spending 3 more points into it, the level of your Noxious Cloud spell will increase by 3 and now be displayed as "level 4" in your spell scroll. The spell now deals more damage and lasts longer than it did on power level 1 when you just barely learned it.

Casting spells on other players:

Some spells have effect on fellow players too, this works regardless of whether they are in the same party or not. In most cases the player needs to stand next to the caster for it to work.

This area effect around the caster, in which a spell affects other players standing next to him, is called spell "projection". The spells which project onto other players are marked by an '(auto-project)' tag.

Some Mindcrafter spells require the target player to open his mind ('p' key) to receive the spell effect.

Just for completeness: Rune magic that can affect other players does so automatically too, same as school magic.

Shared school spells:

Some spells are shared between different schools, occurring possibly but not necessarily in both of the schools. When a spell is shared between two schools it means that training in one of those schools will increase the spell level by only half that amount. So if you want to increase a shared spell by say 5 points, you either have to increase both of its schools by 5, or one of them by 10.

However, you don't need to train all involved schools necessarily. As long as you manage to increase the spell level to at least 1, you become able to use it even if you only trained one of all involved schools.

Spell tiers:

Some spells have multiple tiers, usually two or three, denoted by roman numbers after the spell name.

Higher tiers usually have greater effect but also cost more mana than lower tiers. Sometimes a higher tier will have not just added effects but actually different effects, in most cases a different type of damage dealt to enemies. Especially non-elemental attack spells will often have a different area of effect in higher tiers, such as bolt -> ball -> line of sight.

Magic, holy and occult schools give certain permanent boni and abilities to the player, when trained to a certain extent. The boni are listed below each school.

- Wizardry -

- Mana

Manathrust

Casts a powerful mana bolt.
Required skill level for first spell level: 1.

Tier II: Level 20.

Tier III: Level 40.

Recharge Recharges a magic staff or wand.
 Required skill level for first spell level: 5.
 Level 21: Also recharges rods.

 Tier II: Level 25.
 Can also recharge rods. At the skill level you learn this tier, the 1st tier spell can actually recharge rods too.

 Tier II: Level 40.

Disperse Magic Removes magical influences.
 Required skill level for first spell level: 15.
 Lvl1: Blindness/Confusion.
 Lvl10: Confusion/Hallucination.
 Lvl15: Speed/Slowness/Stun.
 This spell can be used even while confused or blind.

Remove Curses Removes non-heavy curses from carried/worn objects.
 Required skill level for first spell level: 20.

 Tier II: Level 40.
 Removes all normal and heavy curses. Also see (5.14).

Disruption Shield
 Conjures a shield that protects you from taking damage.
 Instead, the shield will consume your mana to absorb it.
 Only Istari are able to really get the most out of it -
 they get 1 mana point deducted for each absorbed point of
 damage. Other classes will instead get 2 mana points
 deducted for each damage point.
 Required skill level for first spell level: 35.

BONI: Mana resistance at 40.

- Fire

Globe of Light Creates a globe of magical light.
 Required skill level for first spell level: 2.
 Lvl10: Hurts monsters that are susceptible to light.
 Radius and damage will further increase.

 Tier II: Level 22.
 Calls a more powerful kind of light. This light hurts all
 types of monsters.

Fire Bolt Fires a fire bolt at a target.
 Required skill level for first spell level: 10.

 Tier II: Level 25.

 Tier III: Level 40.

Elemental Shield
 Temporary resistance to heat and cold. (auto-project)
 Required skill level for first spell level: 15.
 Shared spell (see above): Fire, Water.

 Tier II: Level 20. (auto-project)
 Temporary resistance to heat, cold, lightning and acid.
 Shared spell (see above): Fire, Water, Earth, Air.

Fiery Shield Creates a shield of flames around you.
 Required skill level for first spell level: 16.

 Tier II: Level 36.

Firewall Creates a fire wall to incinerate monsters that cross it.
 Required skill level for first spell level: 20.

 Tier II: Level 40.

Fire Ball Conjures a fire ball.
 Required skill level for first spell level: 23.

Tier II: Level 40.

Fireflash Conjures a ball of holy fire.
Required skill level for first spell level: 30.

Tier II: Level 42.

BONI: Fire resistance at 30,
Fire immunity at 50.

- Water

Vapor Fills the air around you with toxic moisture
(which does pure water damage, not poison).
Required skill level for first spell level: 2.

Tier II: Level 20.

Tier III: Level 40.

Ent's Potion Fills your stomach.
Lv5: Removes fear.
Lv12: Makes you heroic.
Required skill level for first spell level: 6.

Frost Bolt Fires a frost bolt at a target.
Required skill level for first spell level: 8.

Tier II: Level 22.

Tier II: Level 40.

Water Bolt Fires a water bolt at a target.
Required skill level for first spell level: 14.

Tier II: Level 24.

Tier II: Level 40.

Elemental Shield Temporary resistance to heat and cold. (auto-project)
Required skill level for first spell level: 15.
Shared spell (see above): Fire, Water.

Tier II: Level 20. (auto-project)
Temporary resistance to heat, cold, lightning and acid.
Shared spell (see above): Fire, Water, Earth, Air.

Tidal Wave Summons a monstrous tidal wave.
Required skill level for first spell level: 16.

Tier II: Level 36.

Frost Barrier Engulfs you in a storm of roaring cold.
Lv16: Turns into a storm of shards of ice.
Required skill level for first spell level: 22.

Tier II: Level 37.

Frost Ball Conjures a frost ball.
Required skill level for first spell level: 22.

Tier II: Level 40.

BONI: Passing water at 30,
water resistance at 40,
water immunity at 50.

- Air

Noxious Cloud Fires a poison cloud at a designated target.

Required skill level for first spell level: 3.

Tier II: Level 18.

Tier III: Level 33.

Unbreath cloud instead of normal poison, harder to resist since it prevents living creatures from actually breathing.

Lightning Bolt Fires a lightning bolt at a target.

Required skill level for first spell level: 6.

Tier II: Level 21.

Tier III: Level 40.

Elemental Shield

Temporary resistance to heat and cold. (auto-project)

Required skill level for first spell level: 15.

Shared spell (see above): Fire, Water.

Tier II: Level 20.

(auto-project)

Temporary resistance to heat, cold, lightning and acid.

Shared spell (see above): Fire, Water, Earth, Air.

Thunderstorm Throws thunder bolts at random monsters nearby.
(33% lightning, 33% sound, 33% light)

Required skill level for first spell level: 15.

Shared spell (see above): Air, Nature.

Wings of Wind Grants feather falling.

Lvl6: Lets you levitate.

Required skill level for first spell level: 16.

Shared spell (see above): Air, Conveyance.

Invisibility Turns you invisible. (See (5.16) for details.)

Required skill level for first spell level: 30.

BONI: Feather falling at 30,
poison resistance at 40,
levitation at 50.

- Earth

Dig Turns walls into mud.

Required skill level for first spell level: 12.

Acid Bolt Fires an acid bolt at a target.

Required skill level for first spell level: 12.

Tier II: Level 24.

Tier III: Level 40.

Elemental Shield

Temporary resistance to heat and cold. (auto-project)

Required skill level for first spell level: 15.

Shared spell (see above): Fire, Water.

Tier II: Level 20.

(auto-project)

Temporary resistance to heat, cold, lightning and acid.

Shared spell (see above): Fire, Water, Earth, Air.

Stone Prison Creates a prison of granite walls around you.

Required skill level for first spell level: 25.

Strike Creates a force bolt that may stun enemies.

Required skill level for first spell level: 25.

Tier III: Level 37.

It's a small ball instead of a bolt.

Shake Creates a local earthquake.

Required skill level for first spell level: 35.

BONI: Shard resistance at 40,
Great damage reduction against earthquakes at 50.

- Nature

Healing Heals a percentage of your hit points. (auto-project)
Required skill level for first spell level: 1.

Tier II: Level 20.

Tier III: Level 40.

Vermin Control Prevents vermin from breeding any further on
your current level.
Required skill level for first spell level: 10.

Recovery Neutralizes poison, heals cuts, cures confusion,
stun and blindness. (auto-project)
Required skill level for first spell level: 15.

Tier II: Level 35.

Also restores drained stats and lost experience.

Thunderstorm Throws thunder bolts at random monsters nearby.
(33% lightning, 33% sound, 33% light)
Required skill level for first spell level: 15.
Shared spell (see above): Air, Nature.

Regeneration Increases your hit point regeneration rate.
(Stacks with other regeneration effects and item flag.)
Required skill level for first spell level: 20.

Grow Trees Grows trees quickly around you.
Required skill level for first spell level: 30.

Poison Blood Gives temporary poison resistance
and brands melee weapons with venom.
Required skill level for first spell level: 30.

BONI: Regeneration (faster hit point regeneration, same as from
items that provide regeneration, so doesn't stack with
item flag regeneration) at 30,
pass trees and water easily at 30,
poison resistance at 40.

- Conveyance

Phase Door Teleports you on a small scale range.
Required skill level for first spell level: 2.

Disarm Destroys traps and reveals and unlocks doors around you.
Required skill level for first spell level: 5.

Teleport Teleports you within the level.
Required skill level for first spell level: 10.

Wings of Wind Grants feather falling.
Lv16: Lets you levitate.
Required skill level for first spell level: 16.
Shared spell (see above): Air, Conveyance.

Teleport Away Teleports a line of monsters away.
Required skill level for first spell level: 23.

Tier II: Level 43.

Teleports away all monsters in sight.

Recall Works like Word of Recall.
Inscribe your spell scroll or book like you would inscribe
a scroll, in order to specify a destination.
Required skill level for first spell level: 30.

See "(0.3) Important inscriptions, Word of Recall" for more info about Word of Recall!

Telekinesis I Inscribe your book @P<Playername>, cast it, select an item that you wish to teleport to the player's inventory. The target player needs to concentrate by opening her/his mind, see (0.2). It's dangerous to have the mind opened, since everyone can send you any items, so better close it again as soon as the desired telekinesis transaction is done. Example inscription: @PGandalf
Required skill level for first spell level: 35.
Shared spell (see above): Mind, Conveyance.

Probability Travel

Renders you instable, allowing to pass walls and to float upwards/downwards. Floating up/down will skip floors that have other players on them, except if at least one of them is in your party (or if it's the world surface level). If all floors in the (up or down) direction of your attempt to probtravel are occupied by players you get this message:
"There is a magical discharge in the air as probability travel fails!"
Required skill level for first spell level: 35.

Mass Warp Locks monsters in stasis for a while.
Required skill level for first spell level: 45.
Shared spell (see above): Temporal, Conveyance.

BONI: Resistance to teleportation attacks at 40.

- Divination

Detect Monsters Detects all non-invisible monsters nearby. (auto-project)
Required skill level for first spell level: 3.

Sense Hidden Detects traps. (auto-project)
Required skill level for first spell level: 5.

Tier II: Level 20.
Lets you see invisible for a while. (auto-project)

Identify Identifies an item that you carry or have equipped.
Required skill level for first spell level: 8.

Tier II: Level 25.
Identifies all items that you carry or have equipped.

Tier II: Level 35.
Identifies all items that you carry or have equipped and identifies all items on the floor around you.

Reveal Ways Detects doors/stairs/ways within a radius. (auto-project)
Required skill level for first spell level: 9.

Vision Detects the dungeon layout around you.
Required skill level for first spell level: 18.

Tier II: Level 40. (Also dubbed "Clairvoyance".)
Maps and lights the whole level.

Greater Identify *Identifies* an item.
Required skill level for first spell level: 35.

BONI: Automatic identification at 50.

- Temporal

Magelock Magically locks a door.
Required skill level for first spell level: 1.

Tier II: Level 40.
Creates a Glyph of Warding on the ground that stops

monsters from crossing the field or summoning on it.
Powerful monsters may be able to break glyphs.

Slow Monster Slows down a monster.
Required skill level for first spell level: 10.

Tier II: Level 30.
Affects a zone.

Essence of Speed Hastes you for a while. (auto-project)
While istari can gain up to +19 speed from it and even up to +24 if they have maxed 'Spell-power', for all other classes the effect will cap at +10.
Required skill level for first spell level: 15.

Mass Warp Locks monsters in stasis for a while.
Required skill level for first spell level: 45.
Shared spell (see above): Temporal, Conveyance.

BONI: Time resistance at 50.

- Udun

Hellfire Conjures a ball of hellfire which is especially deadly to GOOD opponents.
Required skill level for first spell level: 20.

Tier II: Level 40.

Genocide Genocides all monsters of a race on the level.
For details on the effect "genocide" of this spell, please see (5.9) scroll of geno/oblit.
(This spell uses WISDOM to determine fail-rates!
Genocide-type spells do not yield experience or loot.)
Required skill level for first spell level: 25.

Wraithform Temporarily turns your form immaterial.
Required skill level for first spell level: 35.
Stop Wraithform Turns you back to material form immediately.

Disenchantment Beam Conjures a powerful and nearly irresistible beam.
Required skill level for first spell level: 40.

Obliteration Obliterates all monsters nearby.
For details on the effect "obliteration" of this spell, please see (5.9) scroll of geno/oblit.
(This spell uses WISDOM to determine fail-rates!
Genocide-type spells do not yield experience or loot.)
Required skill level for first spell level: 40.

BONI: Hold life at 40.

- Mind

Confuse Confuses a monsters.
Required skill level for first spell level: 5.

Tier II: Level 20.
Turns into a ball.

Stun Stuns a monster.
Required skill level for first spell level: 15.

Tier II: Level 40.
Turns into a ball.

Sense Minds Gives you temporary ESP.
Required skill level for first spell level: 30.

Telekinesis I Inscribe your book @P<Playername>, cast it, select an

item that you wish to teleport to the player's inventory. The target player needs to concentrate by opening her/his mind, see (0.2). It's dangerous to have the mind opened, since everyone can send you any items, so better close it again as soon as the desired telekinesis transaction is done. Example inscription: @PGandalf
Required skill level for first spell level: 35.
Shared spell (see above): Mind, Conveyance.

BONI: Reduces confusion and hallucination at 30,
Reduce insanity influence at 40 and especially at 50.

- Prayers -

(In general, holy schools are somewhat less affected by anti-magic fields.)

- Holy Offense

Curse Randomly causes confusion damage or slowness or blindness.
Required skill level for first spell level: 1.

Tier II: Level 16.
Turns from bolt into beam, passing through the target and also hitting those behind.

Tier III: Level 26.
Affects all monsters in line of sight.

Holy Light Creates a globe of pure light.
Required skill level for first spell level: 2.
Lv3: Hurts monsters that are susceptible to light.
Shared spell (see above): H.Offense, H.Support.

Tier II: Level 20.
Calls a more powerful kind of light. This light hurts all types of monsters.
Radius and damage will further increase.
Shared spell (see above): H.Offense, H.Support.

Redemption *Dispels undead* in your field of view.
Required skill level for first spell level: 10.

Tier II: Level 25.

Tier III: Level 40.

Exorcism *Dispels demons* in your field of view.
Required skill level for first spell level: 20.

Tier II: Level 40.

Orb of Draining Summons a holy orb, devouring monsters.
This spell deals double damage against evil monsters.
Required skill level for first spell level: 20.

Tier II: Level 40.

Chaos Bolt Channels the powers of chaos into a bolt attack.
Required skill level for first spell level: 30.
Shared spell (see above): O.Shadow, H.Offense.
This spell cannot be found in the Holy Offense tome.

Doomed Grounds Has an annihilation effect, much weaker, but affecting a whole area. Unique monsters may resist.
Required skill level for first spell level: 40.
Shared spell (see above): H.Offense, O.Shadow.
This spell cannot be found in the Shadow tome.

Earthquake Creates a local earthquake.
Required skill level for first spell level: 42.

BONI: Adds slay undead at 30, slay demon at 40, slay evil at 50 to all (physical) melee and ranged attacks.

- Holy Defense

Blessing	Same effect as scroll of Blessing. (auto-project) Required skill level for first spell level: 1. Tier II: Level 15. Same effect as scroll of Holy Chant. (auto-project) Tier II: Level 30. Same effect as scroll of Holy Prayer. (auto-project)
Protection from evil	Evil creatures that try to attack you in melee might get repelled, thereby preventing them from actually hitting you. Works very well, as long as the creature isn't of a higher level than you. Required skill level for first spell level: 12.
Dispel Magic	Removes magical influences. Lv1: Blindness/Confusion. Lv8: Confusion/Hallucination. Lv13: Speed/Slowness/Stun. Required skill level for first spell level: 18. This spell can be used even while confused or blind.
Holy Resistance	Lets you resist heat and cold. (auto-project) Required skill level for first spell level: 20. Tier II: Level 30. Also resist lightning and acid. (auto-project) Tier II: Level 40. Also resist poison. (auto-project)
Glyph of Warding	Creates a rune on the ground that monsters cannot cross nor summon on. Powerful monsters may break it. Required skill level for first spell level: 35.
Martyrdom	You burn in holy fire making you invincible for 15 seconds if used by a priest, for 8 seconds if used by any other class. When your martyrdom ends, you will be left close to death with a fraction of your hit points, at least 30 HP though (this amount should be sufficient to survive a hit from terrain damage, such as lava or nether). Note that you cannot be healed in any way during martyr. Invincible here in detail means that you won't take.. -any hit point decreasing damage (except genocide strain), -any sanity decreasing damage, -any malicious effects such as poisoning, fear, blindness, confusion, paralyzation, slowness, stun or cuts, -nexus, polymorph and teleportation effects. Martyrdom doesn't protect your inventory from harm though. The heavens won't accept another martyrdom until 1000 seconds have passed. Note: To check whether you can use the spell again, use the /martyr (or /mar) command. During martyrdom any kind of line-of-sight (ie affecting all monsters at once that are in your character's field of view) spell damage you inflict will only deal half damage. Required skill level for first spell level: 47.
BONI:	Protects the player from undead at 30, from demons at 40 and from evil in general at 50. Works similar to the 'protection from evil' spell, but has better effect on monsters of higher level. (This effect does not stack with the spell/scroll, but overrides them.)

- Holy Curing

Curing	Slows down the effect of poison (auto-project) and cures being gorged. Required skill level for first spell level: 1. Tier II: Level 11. (auto-project) Also neutralizes poison, cures blindness, cuts, confusion. Tier III: Level 21. (auto-project) Also cures stun and hallucinations.
Cure Wounds	Heals a fixed amount of hit points of a friendly target, which is capped at 14d8, the same amount a potion of cure critical wounds actually heals. Required skill level for first spell level: 3. (Since this is a bolt spell, use the 'target friendly' key, which is '(' . See command reference section (0.2) for details about this key. To target yourself, use a macro that clears your current target via '*q' and picks direction '5' which will then be your current grid.) Tier II: Level 23.
Heal	Heals a percentage of hit points. (auto-project) Required skill level for first spell level: 3. Tier II: Level 23. Tier III: Level 40.
Break Curses	Removes non-heavy curses from carried/worn objects. Required skill level for first spell level: 10. Tier II: Level 35. Removes all normal and heavy curses. Also see (5.14).
Cleansing Light	Continuously heals every player who steps inside. It also damages undead creatures. Required skill level for first spell level: 18. Tier II: Level 29. Tier III: Level 40.
Faithful Focus	Cure hallucinations and insanity. (auto-project) Required skill level for first spell level: 21.
Soul Curing	Cures Black Breath (See (1.3a) for more information about Black Breath). (auto-project) Required skill level for first spell level: 25.
Resurrection	Resurrect another player's ghost. The resurrected player will lose less experience the higher the spell level is. Exp loss is usually 35% if revived in the temple or via life scroll. Resurrection prayer exp loss goes down from 35% and caps at 30%. Required skill level for first spell level: 30.
Restoration	Restores drained stats and experience. (auto-project) Required skill level for first spell level: 31.
BONI:	Improves HP regeneration rate extraordinarily the further it is trained above 30. (Stacks with other regeneration effects and item flag.) Reduces duration of various bad effects on the body at 30 (blindness, poison) / 40 (stun, cuts) / 50 (hallucination). Less frequent suffering from black breath, adds slay undead to all (physical) melee attacks and -5% experience loss on getting revived (by whatever means, but never goes below 30% total exp loss) at 50.

- Holy Support

Remove Fear	Keeps your heart boldened for a while. (auto-project) Required skill level for first spell level: 1.
Holy Light	Creates a globe of pure light. Lv3: Hurts monsters that are susceptible to light. Lv19: Calls a more powerful kind of light. This light hurts all types of monsters. Radius and damage will further increase. Required skill level for first spell level: 2. Shared spell (see above): H.Offense, H.Support.
Detect Evil	Detects evil monsters. Required skill level for first spell level: 3.
Sanctuary	Puts nearby monsters asleep. Required skill level for first spell level: 3. Tier II: Level 23. Lets all monsters in line of sight fall asleep.
Satisfy Hunger	Satisfies your hunger. (auto-project) Required skill level for first spell level: 10.
Sense Surroundings	Maps the dungeon around you. Required skill level for first spell level: 20. Tier II: Level 40. Gives clairvoyance (full, enlightened map).
Zeal	Gives +1 extra attack per round for a while. Friendly players around the caster that are affected by the spell may receive up to +2 EA depending on spell tier. Note: The EA effect won't be applied to barehanded players if they don't have Martial Arts skill of at least 01.000. Required skill level for first spell level: 27. Tier II: Level 37. (auto-project) Gives +2 EA to the caster. Tier III: Level 47. (auto-project) Gives +3 EA to the caster.
Sense Monsters	Gives full temporary ESP. Required skill level for first spell level: 33.
BONI:	Completely Suppresses DG_CURSE and TY_CURSE at 40. Keeps the hunger satisfied all the time at 50 (you also cannot become gorged anymore).

- Occultism -

- Shadow

Cause Fear	Scares your target. (This spell uses WISDOM to determine fail-rates!) Required skill level for first spell level: 1. Tier II: Level 18. Scares all nearby creatures.
Blindness	Blinds your target. Required skill level for first spell level: 3.
Detect Invisible	Detects all invisible creatures nearby. Required skill level for first spell level: 3.

Veil of Night Causes your target to fall asleep instantly.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 5.

Tier II: Level 20.
It expands around you.

Shadow Bolt Channels shadow into a bolt attack.
Required skill level for first spell level: 10.

Tier II: Level 25.

Tier III: Level 40.

Aspect of Peril Temporarily brands your melee weapons with poison.
Lv10: Grants temporary poison resistance.
Required skill level for first spell level: 14.

Darkness Causes a burst of darkness around you, possibly blinding nearby creatures.
Required skill level for first spell level: 20.

Shadow Gate Teleports you to the nearest opponent in line of sight.
Required skill level for first spell level: 26.
Shared spell (see above): O.Shadow, Conveyance.
This spell cannot be found in the Conveyance tome.

Shadow Shroud Grants temporary invisibility. (See (5.16) for details.)
Required skill level for first spell level: 30.

Chaos Bolt Channels the powers of chaos into a bolt attack.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 30.

Shared spell (see above): O.Shadow, H.Offense.
This spell cannot be found in the Holy Offense tome.

Nether Bolt Channels lingering nether into a bolt attack.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 30.

Shared spell (see above): O.Shadow, Necromancy.
(Necromancy isn't actually a school, but a normal skill.)

Drain Life Drains life from a non-undead and non-nonliving creature and returns a part of it to your hit points.
Unique monsters may resist, undead and nonliving monsters are unaffected. Damage caps at 900.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 37.

Shared spell (see above): O.Shadow, Necromancy.
(Necromancy isn't actually a school, but a normal skill.)

Doomed Grounds Temporarily applies a weak annihilation effect to an area.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 40.

Shared spell (see above): H.Offense, O.Shadow.
This spell cannot be found in the Shadow tome.

Darkness Storm Conjures up a storm of darkness.
Required skill level for first spell level: 42.

BONI: At 30 grants darkness resistance.
At 35 and higher it will also grant a stealth bonus that increases by +1 every five skill points, up to +4 at 50.

- Spirit

Cause Wounds Causes wounds to open on your target, dealing instant damage.
Required skill level for first spell level: 1.

Tier II: Level 20.

	Tier III: Level 40.
Tame Fear	Keeps your heart boldened for a while. (auto-project) Required skill level for first spell level: 1.
Starlight	Creates a globe of starlight around you. Lv10: Damages monsters that are susceptible to light. (This spell uses INTELLIGENCE to determine fail-rates!) Required skill level for first spell level: 2.
	Tier II: Level 22. Calls a more powerful kind of light. This light damages all types of monsters. Radius and damage will further increase.
Meditation	Cures confusion and blindness. Level 18: Also restores drained stats. Level 28: Also restores lost experience. Required skill level for first spell level: 4.
Trance	Causes all ghosts, spirits and elementals that see you to fall into a deep, spiritual sleep instantly. Required skill level for first spell level: 5.
Lightning	Conjures up spiritual power into a great lightning bolt. (This spell uses INTELLIGENCE to determine fail-rates!) Required skill level for first spell level: 10.
	Tier II: Level 25.
	Tier III: Level 40.
Spear of Light	Conjures up spiritual light into a powerful beam. Required skill level for first spell level: 10.
	Tier II: Level 25.
	Tier III: Level 40.
Lift Curses	Removes curses from carried/worn objects. Required skill level for first spell level: 15.
	Tier II: Level 35. Removes all normal and heavy curses. Also see (5.14).
Possess	Tries to manipulate the mind of a monster to make it ignore you. Lv9: Turns into a ball. Lv17: Affects all monsters in sight. Required skill level for first spell level: 23.
Stop Possess	Stops active possession of monster minds.
Ethereal Eye	Detects all nearby creatures. Required skill level for first spell level: 28.
Guardian Spirit	Invokes your guardian spirit, guiding and protecting you. Your saving throw is maximised and you are protected from evil. Required skill level for first spell level: 25.
	Tier II: Level 45. All physical attacks have a chance to miss you, at the cost of your mana.
Rites of Purification	*Dispels undead* in your field of view. Required skill level for first spell level: 30.
	Tier II: Level 45.
BONI:	At 30 grants a firm hold on your life force. Adds slay undead to all your physical attacks at 40.

-5% experience loss on getting revived (by whatever means, but never goes below 30% total exp loss) at 50.

- Hereticism

Terror

Casts fear and confusion into the hearts of others.
Required skill level for first spell level: 3.

Tier II: Level 18.
Affects all opponents surrounding you.

Ignore Fear

Temporarily removes the ignorant weakness known as fear.
Required skill level for first spell level: 7.

Fire Bolt

Conjures up fire into a powerful bolt.
(This spell uses INTELLIGENCE to determine fail-rates!)
Required skill level for first spell level: 10.

Tier II: Level 25.

Tier III: Level 40.

Wrathflame

It temporarily brands your melee weapons with fire.
Lv7: Grants temporary fire resistance.
Lv17: The brand is now hellfire instead of normal fire.
Required skill level for first spell level: 12.

Flame Wave

Eradicates critters beneath your notice that dare trifle with you, by emitting a flamewave that expands into all directions.
(This spell uses INTELLIGENCE to determine fail-rates!)
Required skill level for first spell level: 20.

Tier II: Level 35.

Demonic Strength

Temporarily increases and sustains strength and constitution.
Required skill level for first spell level: 23.

Boundless Rage

Your melee strikes are furious, granting you one extra attack per round.
This spell has a special synergy with 'Traumaturgy' skill: If you keep hitting opponents in melee that are affected by Traumaturgy while under the effect of Boundless Rage, their pain will continue to fuel your rage and keep extending the spell's duration.
Required skill level for first spell level: 29.

Tier II: Level 41.
Gives +2 EA to the caster.

Chaos Bolt

Channels the powers of chaos into a bolt.
Required skill level for first spell level: 32.

Wicked Oath

Restores drained stats and lost experience.
Required skill level for first spell level: 35.

Levitation

Grants the power of levitation.
(This spell uses INTELLIGENCE to determine fail-rates!)
Required skill level for first spell level: 39.

Robes of Havoc

Envelops you in hellfire, burning your opponents to ashes.
(This spell uses INTELLIGENCE to determine fail-rates!)
Required skill level for first spell level: 44.

Blood Sacrifice

Inflict a mortal wound on yourself, causing the warped powers of chaos to temporarily change your form into a terrifying Bloodthirster.
It includes the effects of the 'Demonic Strength' spell.
The hells won't accept another blood sacrifice until 1000 seconds have passed.
The Bloodthirster's power is enough to tear even heavily

cursed items from its body or toss them away.
Note: To check whether you can use the spell again,
use the /sacrifice (or /sac) command.
--- This spell is only usable by Corrupted
Maia Priests and Hell Knights! ---
Required skill level for first spell level: 47.

(Its powers according to (6.7), with the exceptions that
this greater demon form will actually grant TWO immunities
at the same time and it never has less armour class than
in player form:
Speedy and tough; levitates; has intrinsic hit point
regeneration; immune to fire and poison; resists fear,
paralysis, confusion, cold, acid, nexus, nether and
teleportation effects.)

BONI:
At 30 grants resistance to fire.
At 45 grants resistance to chaos.
If both Hereticism and Traumaturgy are at least 15.000,
insanity-inducing effects become slightly less effective.
If both Hereticism and Traumaturgy are at least 30.000,
insanity-inducing effects become somewhat less effective.
If both Hereticism and Traumaturgy are at least 45.000,
insanity-inducing effects become less effective.

- Druidism - -----

- Arcane Lore

Toxic Moisture Creates a cloud of toxic moisture at a designated target,
consisting of poisonous gas.
Required skill level for first spell level: 3.

Tier II: Level 20.
It combines the surrounding air into the attack, turning it
into a water/poison mixture.

Tier III: Level 33.
It condenses the water and turns into poisonous ice shards.

Nature's Call Quickly grows trees around you.
Required skill level for first spell level: 10.

Ancient Lore Identifies all items in your inventory.
Required skill level for first spell level: 20.

Garden of the Gods
Transforms solid walls into green trees!
Required skill level for first spell level: 35.

Call of the Forest
Dispels all animals from your line of sight.
Animals have a chance to resist, depending on their level.
(You do not get experience as they do not count as kills,
because this spell internally works like genocide and not
like actual dispel-class spells - which deal damage.)
Required skill level for first spell level: 40.

- Physical Lore

Focus Increases your accuracy, adding a bonus to your
melee-to-hit and ranged-to-hit.
Required skill level for first spell level: 1.

Herbal Tea Satisfies your hunger. (auto-project)
Lv20: Restores your experience. (auto-project)
Lv25: Restores your attributes. (auto-project)
Lv35: Cures black breath! (auto-project)
Required skill level for first spell level: 3.

Quickfeet Temporarily boosts your speed. (auto-project)

Required skill level for first spell level: 13.

Forest's Embrace

Creates a cloud around you which heals everyone including yourself over time. (auto-project)
Required skill level for first spell level: 18.

Tier II: Level 29.

Tier III: Level 40.

Extra Growth

Increases your attributes temporarily.
Lv1: Increases strength.
Lv5: Also increases dexterity.
Required skill level for first spell level: 15.

Tier II: Level 25.
Also increases constitution.
Lv11: Also increases intelligence.

- Mindcraft -

(In general, mindcraft schools are less affected by anti-magic fields.)

- Psycho-power

Psychic Hammer Telekinetic power focussed to bash an enemy, damaging and stunning him.
Required skill level for first spell level: 1.

Psychokinesis Destroys traps and locks by psychokinetic manipulation, also revealing secret doors in the process.
Required skill level for first spell level: 3.

Autokinesis I Teleports you within a small range.
Required skill level for first spell level: 5.

Autokinesis II Teleports you over a long range.
Required skill level for first spell level: 16.

Autokinesis III Teleports you towards a party member with opened mind.
Required skill level for first spell level: 24.

Feedback Uses telekinetic effects to slow your fall, granting feather falling.
Lv15: It becomes sufficient for levitation.
Required skill level for first spell level: 18.

Pyrokinesis Causes a severe inflammation to burn your opponent.
Required skill level for first spell level: 20.

Tier II: Level 37.

Cryokinesis Causes a dramatic temperature drop on your opponent.
Required skill level for first spell level: 24.

Tier II: Level 39.

Psychic Warp Attempts to teleport away your opponent.
Required skill level for first spell level: 30.

Telekinesis II Inscribe your book @P<Playername>, cast it, select an item that you wish to teleport to the player's inventory. The target player needs to concentrate by opening her/his mind, see (0.2). It's dangerous to have the mind opened, since everyone can send you any items, so better close it again as soon as the desired telekinesis transaction is done. Example inscription: @PGandalf
Required skill level for first spell level: 35.
Shared spell (see above): Psycho-power / Attunement.

Kinetic Shield Uses telekinetic force to set up a shield around you that has a good chance to repel physical attacks or projectiles,

draining your mana each time.

For repelling physical attacks the mana cost depends on the attacker's level and the damage the attack would inflict.

Required skill level for first spell level: 40.

- Attunement

Clear Mind Removes fear, confusion and hallucination. (auto-project)
Required skill level for first spell level: 3.
This spell can be used even while confused or blind.

Willpower Boosts your willpower to unleash hidden potential, improving both your performance and resilience.
Gives fear resistance, increases your saving throw and gives especially increased chance to resist paralyzation, confusion and slowness. Also gives heroism-like +hit bonus. (See (6.3) for details on Saving Throw.)
At level 25 gives +1 extra attack. (auto-project)
Required skill level for first spell level: 3.
This spell can be used even while confused or blind.

Self-Reflection Find out more about yourself.
Required skill level for first spell level: 15.
This spell can be used even while blind.

Accelerate Nerves
Speeds you up.
Required skill level for first spell level: 20.
This spell can be used even while blind.

Telepathy Senses the minds of creatures.
Required skill level for first spell level: 20.
This spell can be used even while blind.

Recognition Identifies an item.
Required skill level for first spell level: 20.
Shared spell (see above): Attunement / Mental Intrusion.

Stabilize Thoughts
Cures some insanity and removes effects: (auto-project)
-Fear and confusion at level 5,
-Hallucinations at level 10.
Required skill level for first spell level: 25.
This spell can be used even while confused or blind.

Telekinesis II Inscribe your book @P<Playername>, cast it, select an item that you wish to teleport to the player's inventory. The target player needs to concentrate by opening her/his mind, see (0.2). It's dangerous to have the mind opened, since everyone can send you any items, so better close it again as soon as the desired telekinesis transaction is done. Example inscription: @PGandalf
Required skill level for first spell level: 35.
Shared spell (see above): Psycho-power / Attunement.

- Mental Intrusion

(Note that psi attacks don't have any effect on angels, nonliving creatures, or empty-minded creatures, and that undead, stupid creatures and common animals as well as weird-minded creatures may resist it. At the same time, smart creatures might be hit especially hard.

Targets that might resist psi attacks, but which are already confused when they get hit, get their chance to resist nullified by the confusion.

As a side effect, psi attacks themselves have a chance to cause confusion to the target, thereby increasing their effect when the target is hit by another psi attack afterwards.

if a monster does not resist a psi attack, it may suffer from additional effects besides confusion, such as fear, stun or sleep.)

Psionic Blast Blasts the target's mind with psionic energy.
Possibly causing various additional effects.
Required skill level for first spell level: 1.

	Tier II: Level 20.
	Tier III: Level 40.
Scare	<p>Infuses your target's mind with fear. Required skill level for first spell level: 1.</p> <p>Tier II: Level 15. Affects all monsters in LoS (line of sight).</p>
Confuse	<p>Infuses your target's mind with confusion. Required skill level for first spell level: 3.</p> <p>Tier II: Level 18. Affects all monsters in LoS.</p>
Hypnosis	<p>Puts your target's mind to sleep. Required skill level for first spell level: 5.</p> <p>Tier II: Level 20. Affects all monsters in LoS.</p>
Drain Strength	<p>Slows your target down, draining power from its muscles. Required skill level for first spell level: 7.</p> <p>Tier II: Level 22. Affects all monsters in LoS.</p>
Psychic Suppression	<p>Drains the target's psychic energy, impacting its ability to cast spells temporarily, effectively silencing it for a short period of time. Chance to be successful depends on school skill vs monster level. Also, monsters that can't cast any spells as well as unique monsters of level 98 or above are unaffected. Monsters that are unique or powerful have an increased chance to resist. The target cannot be silenced again for a short while, until the effect runs out. Note that the target also becomes immune to the effect for the same short amount of time if the attempt was actually unsuccessful. Required skill level for first spell level: 10.</p>
Psi Storm	<p>Psionic storm that damages and disturbs all minds within an area for a while, causing the usual random Psi side effects on all targets similar to Psionic Blast. Required skill level for first spell level: 18.</p> <p>Tier II: Level 38.</p>
Remote Vision	<p>Tries to forcibly enter all sentient creatures' minds (including invisible monsters, but never empty-minded ones) on the level, in order to use their vision to make the dungeon structure known to yourself. Required skill level for first spell level: 20. If your proficiency in 'Attunement' school is at least 20, you will automatically infuse the knowledge gained from the vision to all open-minded (see (0.2)) allied players who happen to be the same floor.</p>
Recognition	<p>Identifies an item. Required skill level for first spell level: 20. Shared spell (see above): Attunement / Mental Intrusion.</p>
Charm	<p>Makes monsters in sight believe that you aren't an enemy, preventing them most of the time from attacking you. Monsters may resist or be immune to the initial cast. While active, the spell drains your mana. The more monsters you try to keep under control, the faster your mana is depleted. If your distance to the monsters becomes too big or your mana is depleted then the spell will break. Sleeping monsters won't be affected or woken up by charm. Monsters which have already been hurt cannot be charmed. Psi-immune, unique, undead, empty-minded or non-living</p>

monsters cannot be charmed either.
Monsters may have a chance to resist the attack, the higher the more of the following abilities they possess:
Being smart, resisting confusion, being powerful.
(This spell uses CHARISMA to determine fail-rates!)

Required skill level for first spell level: 33.

Cease currently active charming effects.

Stop Charm

- Astral Knowledge -

The exclusive astral school for Maiar.
Instead of normal spell level, the spells of this school use an 'astral level' to determine damage or effect. This astral level consists to equal parts of your character level and your Astral Knowledge school level. This means that a level 49 character with 1.000 in Astral Knowledge will still cast spells that deal damage and have effects as if the spell was actually at level 25 (the average value of 1 and 49). (Spell success chance uses the normal spell level though, as all other magic schools do, not the astral level.)

Power Bolt Casts a bolt of electricity/mana/dispelling depending on your alignment:
Still neutral -> electricity,
enlightened -> mana,
corrupted -> dispel.
Required skill level for first spell level: 1.

Tier II: Level 20.

Tier III: Level 40.

Power Ray Casts a beam of electricity/light/darkness depending on your alignment (see Power Bolt spell above).
Required skill level for first spell level: 5.

Tier II: Level 20.

Tier III: Level 40.

Power Blast Casts a ball of electricity/mana/dispelling depending on your alignment (see Power Bolt spell above).
Required skill level for first spell level: 10.

Tier II: Level 25.

Tier III: Level 45.

Relocation Same as Word of Recall.
You may inscribe book '@R' etc. for the usual results.
Required skill level for first spell level: 22.

Vengeance Enlightened: Summons all party members on the same floor to you (as well as all monsters in line of sight) who have their mind opened.
Might summon additional monsters for each player who got teleported.
Corrupted: Damages all monsters in line of sight.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 30.

Empowerment Enlightened: Incite self-fury.
Corrupted: Increases own hit points temporarily.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 40.
This spell can be used even while blind.

The Silent Force Enlightened: Slows down monsters within sight and grants temporary mana resistance.
Note: This resistance does not stack with permanent resistance.
Corrupted: Increases your chance to strike critically.
(This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 45.

Sphere of Destruction

Enlightened: Conjures up a mana storm.

Corrupted: Conjures up raging inferno, which deals similar damage as rockets do.

Required skill level for first spell level: 50.

Gateway

Enlightened: Nigh-instantaneous Word of Recall for all party members on your dungeon level.

Corrupted: Creates a pair of connected void jump gates. (This spell uses WISDOM to determine fail-rates!)

Required skill level for first spell level: 50.

This spell requires a character level of at least 62.

(6.8a) Mimic powers

The monster spells ('S:' line in r_info.txt) are mostly also usable by a player transforming into the monster via Mimicry skill, these spells are also called 'mimic powers', since they're not always spells in a strict sense of the word. (In general, monsters' summoning spells are never available as mimic powers.)

All mimic powers use intelligence stat to determine their failure rate.

Their power usually depends on the level of the monster whose form the character is using and on the character's own level.

As with magic spells, some mimic powers require a target, some don't.

Here is a list of all available mimic powers:

Shriek	Aggravates nearby creatures and annoys nearby players.
Fire Rocket	..
Arrow	Fires an arrow, does not require bow or ammunition.
Shot	Fires a shot, does not require bow or ammunition.
Bolt	Fires a bolt, does not require bow or ammunition.
Missile	Fires a (physical) missile.
Breathe Acid	..
Breathe Lightning	..
Breathe Fire	..
Breathe Cold	..
Breathe Poison	..
Breathe Nether	..
Breathe Lite	..
Breathe Darkness	..
Breathe Confusion	..
Breathe Sound	..
Breathe Chaos	..
Breathe Disenchantment	..
Breathe Nexus	..
Breathe Time	..
Breathe Inertia	..
Breathe Gravity	..
Breathe Shards	..
Breathe Plasma	..
Breathe Force	..
Breathe Mana	..
Breathe Disintegration	..
Breathe Toxic Waste	..
Throw Boulder	Hurls a boulder at a target (giants do this usually).
Acid Ball	..
Lightning Ball	..
Fire Ball	..
Cold Ball	..
Poison Ball	..
Nether Ball	..
Water Ball	..
Mana Storm	.. (casts a mana ball)
Darkness Storm	.. (casts a darkness ball)
Mind Blast	Psi attack, similar to Psionic Blast mindcrafter spell.
Brain Smash	Powerful psi attack, similar to Psionic Blast.
Cause Wounds	The curse spell, eg used by priests and archpriests.
Ball Toxic Waste	..
Raw Chaos	.. (casts a chaos ball)
Acid Bolt	..
Lightning Bolt	..

Fire Bolt	..
Cold Bolt	..
Poison Bolt	..
Nether Bolt	..
Water Bolt	..
Mana Bolt	..
Plasma Bolt	..
Ice Bolt	..
Magic Missile	..
Scare	..
Blind	..
Confusion	..
Slow	..
Paralyze	Tries to put a monster into stasis (similar to sleep).
Haste Self	Temporarily increases your speed by 10.
Heal	Heals yourself, amount depends on spell level.
Blink	Short range teleport, like Phase Door.
Teleport	..
Teleport To	Tries to teleport a monster towards you.
Teleport Away	Tries to teleport monsters away (it's a beam!).
Darkness	Unlights the area around you.
Cause Amnesia	Confuses a target.

(6.8b) Runes & Runemastery

Runes are magical symbols used to summon and manipulate the raw elemental forces which sustain the world of life. They are the motivating force behind the traditional systems of magic in TomeNET. The istari spell scrolls, for example, are composed of a series of complicated runes which both protect the mage from immediate harm, and create the desired effect: from fireballs to magical satiation.

Runemasters are less methodical in their approach to magic. Having learned to summon elemental forces without the aid of the traditional precautions, limitations and potential inefficiencies of the complex istari spell system, runemasters deal directly with the 'pure' substance of magic, and are limited only by their wits, their strength and their skill. Runemasters only require a physical rune to cast the Sign, Sigil, and Enhanced spell types.

This approach is not necessarily a safe one. Whereas traditional spells from other schools of magic fail outright when something goes awry, the primordial energy incumbent to a runespell instead erupts forth, damaging the caster in the form of an elemental backlash.

As runemastery does not rely on books or spell scrolls to guide its magic, runespells may be cast while blinded, although at increased rate of failure. Spell failure likewise increases while stunned, or simply when attempting a powerful spell. While an istar is always prevented from casting outside of his or her ability, a runemaster may continue making spell attempts until the backlash proves fatal. Runemasters are able to cast many kinds of spells, but it's important to note that some are much more difficult to manage than others. All runespells can either be projected at the world or a monster, or directed at the caster for a different result. Runespells that are cast onto the floor are 'glyphs' aka rune-traps, and prevent summoning as usual. Those remain on the floor and explode if a monster triggers them. The runemaster can retrieve the rune used to place the glyph with another cast (refunds the rune).

In addition, runespells fueled by physical runes may be used to emblazon non-artifact equipment that is wielded by the runemaster. The strength and success rates of these 'sigils' depend both on the skill of the runemaster and the power of the item that would result. At most a runemaster may have one armor sigil and one weapon sigil. Sigils vanish from the equipment when dropped, sold, taken off, disarmed, etc. being linked directly to the runemaster and the consumed physical rune for their power. Physical runes may be activated to combine or decombine in stacks with other runes, sharing level requirement, inscription and discount (use 'A').

Runemastery requires dexterous physical and intellectual manipulation of the rune forms, requiring high INT and DEX character stats. For this reason, runemasters also make decent thieves and fighters. To some extent, runemasters will need to experiment to find out their own capabilities.

Runespells:

To cast a runespell, enter the m-key menu and select 'Draw a rune'.
(Note: The ability code for drawing a rune is 12.)

Runespells are made up of three components:

1. A single rune or combination of two runes
2. A spell modifier (minimized, brief, etc.)
3. A spell type (glyph, bolt, ball, etc.)

Each component has different associated parameters, summarized in the menu. When selecting runes, press return once you are finished, or enter the maximum of two runes and continue to the modifier selection. The menu will prompt for a direction if it is required after you're done. If the spell targets an item, you must supply the letter corresponding to your choice of equipment.

Runespell Failure & Backlash:

Runemasters can only truly fail Sigil type (item-enhancing) spells. Spell failure instead causes elemental backlash against the caster, while the effects of the spell, if it is not a sigil type spell, resolve normally. Resisting one's own spells can be an important factor for survival in critical situations. For this reason, beginner runemasters are advised to use basic elemental spells that they can easily acquire the according resistance for or stick to the Mana element, which has few adverse effects.

Intelligence, dexterity, and skill level affect spell failure rates for runespells. Runespell type generally governs the level of a spell, and is further modified by the runespell modifier. Highly experienced and talented runemasters may achieve 0% spell failure rates, but should be cautioned against stunned and blinded statuses, which will each increase runespell failure, and thus the chance of backlash directly.

Other Uses for Runes:

Runes are required to cast Sign, Sigil and Enhanced spells. The Glyph type spell may be cast again to disarm a glyph and recover the original physical rune at no additional rune cost. Sigil spells on the other hand consume a rune forever, remaining in effect only so long as the runemaster continues to wear/wield the enhanced equipment. An additional sigil spell on the same equipment overrides the previous one, consuming a new rune as before.

Macros & Spell Construction:

Runemastery macros look like this (key translation in parenthesis):
(Note: m@12\r invokes the m-key menu command for 'Draw a rune'.)

Targetted runespells use the following format:

```
\e)*tm@12\r[a-f]\r[a-g][a-g]- (rune, return, modifier, type, target)
\e)*tm@12\r[a-f][a-f][a-g][a-g]- (rune, rune, modifier, type, target)
```

Non-targetted runespells use the format:

```
\e)m@18\r[a-f]\r[a-g][a-g] (rune, return, modifier, type)
\e)m@18\r[a-f][a-f][a-g][a-g] (rune, rune, modifier, type)
```

Note that you must choose at least one and up to two runes, one modifier, and one type. If you choose two runes for a spell, the \r is not required. [a-f] and [a-g] denote the choices of a letter from a to f or h, inclusive, which represents a rune or a modifier or type, respectively. ie. There are six base runes, so [a-f] represents a choice from rune 1-6.

Examples:

Here is a single rune example, invoking the element 'light' (rune 'a'):
\e)*tm@12\ra\raa- (light--return--minimized--bolt)

This spell launches a minimized bolt of light, a targetted projection affecting up to a single opponent, dealing light damage if it successfully connects.

A fire ball spell might look like this (runes 'a' and 'e' for 'fire'):
 \e)*tm@12\raedd- (light--chaos--moderate--ball)

Note the following macro produces an identical effect (runes 'e' and 'a'):
 \e)*tm@12\raeed- (chaos--light--moderate--ball)

To increase the radius of the ball, adjust the modifier to something that sounds bigger, ie. choose a spell modifier that increases radius.

A maximized ball of fire:
 \e)*tm@12\raegd- (light--chaos--maximized--ball)

Or an expanded ball of fire, to produce something much larger:
 \e)*tm@12\raeed- (light--chaos--expanded--ball)

Note that failure rate may become an obstacle to advanced spells at low level. Low failure types, modifiers, and elements are recommended.

Advanced runemasters may wish to create macro sets which construct spells on the fly, swap macro sets containing preset runespells, or set up combinations of macros to chain together spells quickly and efficiently. Spells with a lowered casting time might even be combined in one macro, creating a 'dual-cast' effect (especially true with the 'brief' modifier).

Note that every modifier has drawbacks associated with the benefits of using it: higher cost, level, reduced damage, increased failure rates- check the specifics in the m-key menu before you create a new macro. It is recommended to experiment with new spells in Bree or even the Training Tower for safety.

Auto-retaliation:

If you inscribe @O[a-g][a-g] on a rune in your inventory, you will retaliate with a spell of the selected modifier and type. For example, if you set the inscription to @Oad on a rune of light, the 'ballâM-^@M-^Y spell type will be selected, with a 'minimized' spell modifier.

Although you can set most spells for retaliation, some spells may make poor choices for auto-retaliation. Retaliation is disabled completely if you select a non-damaging runespell (most Sign spells, and all Sigil spells).

Hints:

The casting adjective will further elaborate on the difficulty of a spell compared to your skill. Ideally, choose spells where the average outcome is 'efficiently', or better, or cast while at near full HP and with the according resistance. You can use the mkey * display to see a list of spell failure rates, or go through the macro wizard to display the specific attributes of spells.

Beginners may wish to play a race with intrinsic resistance to their element or elements of choice, or choose combinations of skills to produce a 'base' element, and purchase rings/amulets from the magic shop to resist these. For example, light is resisted by elves, so an elf runemaster who trains in light runemastery may evoke runes of light relatively safely. Training chaos runemastery as well would unlock the combination element fire, a 'base' element, and Rings of Fire Resistance are readily available in magic shops.

Note that different elemental damage types are reduced more or less when resisted, see (5.6) Resistances & caps, Immunities, Susceptibilities for info.

(6.8c) Runespell Tables

Runemastery covers a breadth of effects, catalogued in the tables below.

Elements

A table of every projectable element accessed through one or two rune skills. Weight is the relative base damage for an element, which is similar to the maximum damage caps per element listed in section (5.6). This value is averaged towards half the magic damage cap of 1600 (so 800, by level 50) to produce the

approximate damage cap for any given runespell. ie. Fire damage >> Mana damage! Artifacts and certain items may be unaffected by the various elemental effects. See section (5.6) for more information about elemental attacks.

Rune	Rune	Element	Weight	Status Effects	Affected Items
Light	Light	Light	400	Blindness	
Darkness	Darkness	Darkness	550	Blindness	
Nexus	Nexus	Nexus	250	Tele/Stat Swap	Most Items
Nether	Nether	Nether	550	Level Drain	
Chaos	Chaos	Chaos	600	Confusion/Poly	
Mana	Mana	Mana	600		Most Items
Light	Darkness	Confusion	400	Confusion	
Light	Nexus	Inertia	200	Slow	
Light	Nether	Lightning	1200	DEX Drain	Jewelry/Device
Light	Chaos	Fire	1200	STR Drain	Flammables
Light	Mana	Water	300	Confusion/Stun	Scrolls
Darkness	Nexus	Gravity	150	Tele/Slow/Stun	Most Items
Darkness	Nether	Frost	1200	STR Drain	Potions
Darkness	Chaos	Acid	1200	CHR Drain	Many Items
Darkness	Mana	Poison	800	Poison	
Nexus	Nether	Shards	400	Cuts	Potion/Scrolls
Nexus	Chaos	Sound	400	Stun	Potions
Nexus	Mana	Time	150	Stat/Lvl Drain	
Nether	Chaos	Disenchantment	500		Magical Items
Nether	Mana	Ice	933	Cuts	Potion/Scrolls
Chaos	Mana	Plasma	933	Stun	Many Items

Spell Modifiers

A table of every runespell modifier. Modifiers alter the nature of a runespell, influencing level, cost, fail rate, damage, casting time, radius, and duration. The Enhanced modifier (noted with a (&) in the Name column) requires at least one appropriate rune to be present in your inventory for the spell to be cast. Enhanced Signs are an exception to this rule, but only when retrieving a glyph.

Name	Lvl	Description
Minimized	+ 0	Best efficiency, worst damage, poor radius and duration.
Extended	+ 2	Good efficiency, poor damage, best duration.
Compressed	+ 3	Good efficiency and duration, worst radius.
Moderate	+ 5	Balanced spell parameters.
Expanded	+ 7	Poor efficiency and duration, best radius. Projects Signs.
Brief	+ 8	Poor efficiency, good damage, worst duration. Half energy!
Maximized	+10	Worst efficiency, best damage, good radius and duration.
Enhanced (&)	+10	Unique spell parameters, see Enhanced Spell Types.

Spell Types

A table of basic runespell types. Type controls the form of the runespell, also influencing level, cost, fail rate, damage, casting time, radius, and duration. Spell types followed by a (&) consume a rune (cost 1 rune) to cast. Sign (*) is an exception to this rule, only requiring that the physical rune be carried.

Name	Lvl	Description	Enhanced
Bolt	5	Fires a single target bolt, may be reflected.	Beam
Cloud	10	Damages an area about your target over time.	Storm
Sign (*)	15	Specific buff or effect, see Sign Effects.	Glyph
Ball	20	Targeted area damage that diminishes with radius.	Swarm
Wave	25	High damage in an expanding area about yourself.	Surge
Sigil (&)	30	Grants worn equipment the according resistance*.	Boon
Burst	35	Focussed area damage, full damage across radius.	Flare

* Elements that don't have a resistance grant these associated boni, instead:

Inertia	free action
Gravity	feather falling
Ice	cold and shards resistance
Plasma	fire, electricity and sound resistance

Enhanced Spell Types

A table of runespell types enabled by choosing the "Enhanced" spell modifier. These runespells use fixed attributes, since they are exclusively accessed. Spell types followed by a (&) consume a rune (cost 1 rune) to cast. Glyph (*) is an exception to this rule, but only when retrieving the set rune (a refund).

Name	Lvl	Description	Basic
Beam	15	Fires a beam, damaging all grids in a line.	Bolt
Storm	20	A high damage, radius 1 cloud that follows you.	Cloud
Glyph (*)	25	Set or retrieve a damaging glyph of warding.	Sign
Swarm	30	Fires a spread of level/10, radius 1 mini balls.	Ball
Surge	35	Instantly damages all monsters in line of sight.	Wave
Boon (&)	40	Enhances worn equipment, see Enhanced Sigil Boni.	Sigil
Flare	45	High damage non-reflectable bolt, 33% backlash.	Burst

Sign Effects

Effects followed by a (P) are projectable when cast with the Expanded modifier.

Rune	Rune	Element	Sign Effect	Description
Light	Light	Light	Illumination	Illuminates rooms.
Darkness	Darkness	Darkness	Invisibility	Grants concealment.
Nexus	Nexus	Nexus	Teleportation	Teleports yourself.
Nether	Nether	Nether	Annihilation	Percent life drain.
Chaos	Chaos	Chaos	Polymorph Self	As Chauve-Souris.
Mana	Mana	Mana	Recharging	Replenishes charge.
Light	Darkness	Confusion	Reflection	Redirects bolts.
Light	Nexus	Inertia	Mass Stasis	Halts monsters.
Light	Nether	Lightning	Infusion (P)	Brand, resist elec.
Light	Chaos	Fire	Infusion (P)	Brand, resist fire.
Light	Mana	Water	Quench Thirst	As potion of water.
Darkness	Nexus	Gravity	Mass Teleport-To	Pulls monsters.
Darkness	Nether	Frost	Infusion (P)	Brand, resist cold.
Darkness	Chaos	Acid	Infusion (P)	Brand, resist acid.
Darkness	Mana	Poison	Infusion (P)	Brand, resist pois.
Nexus	Nether	Shards	Dig	Breaks walls/doors.
Nexus	Chaos	Sound	Disarm	Breaks traps/doors.
Nexus	Mana	Time	Haste (P)	Temporary speed.
Nether	Chaos	Disenchantment	Resistance (P)	Base (four) resists.
Nether	Mana	Ice	Ice Shield	+AC, ice damage.
Chaos	Mana	Plasma	Plasma Shield	+AC, plasma damage.

Enhanced Sigil Boni

A table cross referencing boni to element and item TVAL (type value). Boni are restricted as with artifact creation regarding PVAL modifiers. Stat boni have a chance to include a sustain, and boni occurring both generally and on the item type are more likely to occur. Some weapon/helm boni are specific to mage staves, boomerangs, and crowns (see (8.4) Artifact Creation).

Note: Non-enhanced sigils will always produce the element's according resist.

Abbreviations (in alphabetical order):

AM - Anti-magic shell (see (5.8) under NO_MAGIC)
 Au - Aura
 Ba - Base resist (acid/elec/fire/cold)
 Bl - Blind resist
 Br - Brand
 c+ - Charisma bonus (PVAL Required)
 C+ - Constitution bonus (PVAL Required)
 Ch - Chaotic (see (5.8) for details)
 Cr - Critical bonus (PVAL Required)
 D+ - Dexterity bonus (PVAL Required)
 EA - Extra attacks (PVAL Required)
 FA - Free action
 Fe - Fear resist
 Lv - Levitation
 Pl - Permanent Light (+1 light radius)
 HL - Hold life
 I+ - Intelligence bonus (PVAL Required) [Helm -- Crowns ONLY]
 If - Infra-vision (PVAL Required)
 Im - Immunity (One element only!)

In - Invisibility (see (5.16) for details)
 MP - Max mana increase (PVAL Required) [Helm -- Crowns ONLY]
 NT - Anti-Teleportation
 Re - Reflection
 Rh - Regen health
 Rm - Regen mana
 RR - Random res (acid/elec/fire/cold/pois/conf/blin/shar/soun/neth/nexu/disi)
 S+ - Strength bonus (PVAL Required)
 SD - Slow digestion
 SI - See invisible
 SK - Random slay/kill flag
 Sl - Stealth (PVAL required)
 Sp - Speed (PVAL Required)
 Su - Random sustain
 Va - Vampirism (see (5.15) for details)
 Vo - Vorpals (Quaking if blunt) (see (5.8) for details on 'IMPACT' and 'VORPAL')
 W+ - Wisdom bonus (PVAL Required) [Helm -- Crowns ONLY]

Element	Any	Weap	Shield	Armor	Cloak	Crown	Glove	Boot
Light	PlBlSI	SI				BlIf		
Darkness	BlSI	SI			In	BlIf		
Nexus	Su	SK					SK	
Nether	HL	Va		HL	HL		Va	
Chaos	RR	Ch						
Mana	Rm					MPRm	MP	
Confusion	FA		Re	Re		W+I+	FA	
Inertia	NT							
Lightning	Im	Br			Au		BrD+	
Fire	Im	Br			Au		BrS+	
Water	Im							
Gravity	NT				Lv			Lv
Frost	Im	Br			Au		BrS+	
Acid	Im	Br					BrC+	
Poison	Im	Br		C+			BrC+	
Shards	Rh	CrVo					Cr	
Sound	Sl			Sl	Sl	Fe		Sl
Time	Sp	EA					EA	Sp
Disenchantment	AM		Ba	Ba	Ba			
Ice	SD	BrVo					Br	
Plasma	Pl	Br				Fe	Br	

(6.8d) Spell failure rate

The chance to not successfully cast a spell, aka the spell fail rate is shown in percent when browsing a spell scroll/crystal.
 For mimic spells, the failure rate is shown next to their spell name in the mimic power menu (accessible with 'm').

The fail rate of a spell depends on..

Magic schools:

Nearly all magic spells depend on the spell level and your intelligence, some spells however use wisdom instead of intelligence, those spells are designated in (6.8) in their spell description.
 Currently, the only magic spell using wisdom is 'Genocide'.

Prayer schools:

All holy spells depend on the spell level and your wisdom.

Occult schools:

Some shadow and most spirit and hereticism spells use wisdom, the others intelligence.

Mindcraft schools:

All mind spells depend on the spell level and your intelligence, except for 'Charm' which uses charisma.

Druidic schools:

All druidic spells depend on the spell level and your wisdom.

Astral school:

Some astral spells depend on the spell level and wisdom, some on the spell level and intelligence, as designated in (6.8) in the spell descriptions.

Runecraft:

Runespells use dexterity, intelligence and spell level to determine failure rate.

Mimic powers:

All mimic powers use intelligence to determine fail rate.

In general, when you learn a new spell that starts at a high fail rate, you will observe a great improvement just by further training the spell's school to increase the spell's level. Increasing your attributes (depending on what this particular spell uses, see list above) will also help.

At a certain point however, usually when the spell's fail chance is already rather low, the spell fail rate might not go down further from increasing its level. At that point the only thing you can do to further reduce the spell fail rate is to increase the stat that the spell uses.

A spell failure rate of 0% means that you will always successfully cast the spell. However, certain status effects can increase your failure rate temporarily or even completely prevent spell-casting, even if your fail rate used to be 0%:

-Blindness

Some spells can be cast while blind (will say so in the spell description)

-Confusion

Some spells can be cast while confused (will say so in the spell description)

-Stun

Stun will increase your fail chance by 15%, heavy stun even by 25%.

When you're knocked out you can of course not cast any spells (or do anything at all).

(6.9) Parties, Iron Teams, Guilds

Press 'P' to display the party menu.

Here you can..

Parties:

-Create or rename a party

Allows you to create a party if you aren't in one yet, or rename your current party, provided you are the party owner.

In a party you will share experience points if you are within 7 character levels to each other and on the same dungeon/tower level respectively the same worldmap/wilderness sector. A slight experience bonus is applied for killing monsters in a party!

The range is 11 levels instead of 7 for "winners" (queens/kings/empresses/emperors).

Winners don't share experience with non-winner characters. They do share experience with fallen winners though, within 7 levels.

Monsters will usually remember the highest player they have met and not give experience nor kill credit to players who are more than the 8 (exp-sharing level limit plus 1) levels away from it, 12 for winners. So, avoid being on the same dungeon floor as teammates whose character level differs by more than 8 levels (12 for winners) from yours.

Similarly, a player who received a power-up spell from another player who is higher in levels than the allowed difference of 8 (12 for winners), may cause that player to not gain any experience or kill credit until a number of turns (usually 200) has passed and the buff spell has worn off. Kings/queens/emperors/empresses are freed from this restriction.

Note that there are two exceptions to these rules:

-Morgoth, Lord of Darkness (Game boss)

-The Great Pumpkin (Halloween special event monster)

These two always give credit, no matter what level difference the players have.

Special case: A player who lost levels due to death plays together with another player who is now just within range of his lowered level. Example: Player A was level 45, but lost 5 levels due to dying twice and is now level 40. He teams up with player B whose level is a regular 33. What happens depends on the server settings, there are three rules:

- a) the difference of player A's real level and his current level counts in 50%. So he'd be treated like a $40 + (45-40)/2 = 42$ (rounded down) player and player B wouldn't get any exp since he's not level 35 or higher.
- b) if player B is way below player A's top level (default is more than 5 levels beyond the level limit for sharing experience) the exp he gets will be cut down depending on the difference between player B's current level and player A's top level, but he still receives exp.
- c) the server only looks at the highest reached level and compares the current level of all team members to it. So it would compare player B's 33 to player A's 45 when it wants to determine if player B receives a share of exp from player A, which is more than 7 levels apart, so player B gets nothing.

The rule effective on the official servers is b), so teaming up with everlasting characters that have lost a bunch of levels shouldn't be much of an issue.

A party owner may set access to one or more of his houses to 'party access' (use 'h' key next to the door) to allow all party members to access that house.

If the owner dies, the whole party is disbanded. (Exception: On a server running 'Ironman' rules the party ownership will be transferred to another player in the party automatically. See (8.6) for more information about Ironman settings. Within the 'Ironman Deep Dive Dungeon', party ownership is also transferred in the same manner. See (4.13) for more information about the persistent "Ironman Deep Dive Challenge" event.)

Be aware that his houses will be wiped too, so the party might lose quite an amount of items that way.

'Anti-magic fields' of fellow party members have greatly reduced effect on spell-users in the same party, to allow the party to still be a vital combination. Usage of magic devices by party members is not hindered.

If you choose 'Create or rename a party' while already being in a party, you will be prompted to rename the party. Only the party owner can do this.

Specialty: Everlasting and non-everlasting players can team up while inside the Nether Realm.

-Create or rename an 'Iron Team' party

Allows you to create an iron team if you aren't in one yet, or rename your current iron team, provided you are the party owner.

An iron team is like a party with the following differences:

An 'Iron Team' can only be formed with newly created characters. Its members will only get experience for killing monsters if ALL members are online and on the same dungeon level!

If you choose this while already being in an iron team, you will be prompted to rename it. Only the iron team owner can do this.

-Add a player to party / Add yourself to party

If you are in a party you will see the option "Add a player to party", allowing you to add more players to your party.

This can be done by all members of the party, not just by the owner!

If you aren't in a party, you will see "Add yourself to party" instead! This will allow you to add this character to a party, provided that at least one of your other characters is already a member of it.

This does not work for cross-adding to nether realm parties.

It only works for cross-adding to IDDC parties if your already partied character is currently in the IDDC.

-Delete a player from your party

This can only be done by the party owner.

Note that if you remove a player from an iron team and his character has already gained some experience he will be unable to join again.

If the owner removes himself from his own party, the whole party is disbanded.

-Leave your current party

Note that if you leave an iron team and your character has already gained experience you will be unable to join again.

If the owner leaves his own party, the whole party is disbanded.

Guilds:

-Create a new guild

You can create a guild with a character that is at least level 30. This costs 2,000,000 Au. A guild will stay, even if the owner dies. The guild creator will receive a 'Guild Key' which designates him as the guild master. The guild master doesn't need to carry the key around with him but can just safely deposit it in a house. In case the guild master dies, another guild member may fetch the key to become the new guild master. Only one character per account can be a guild master.

A guild offers a dedicated guild chat, so players in a guild can organize themselves in diving parties and still have a global chat if needed.

Guilds may have a guild hall, see (6.9a) below for more information.

The following slash commands are available to manage your guild, only the guild master may use them:

`/guild_adder <name of another player>`

Allows that player permanently to add other players to the guild too. Use the command a second time to revoke his rights again.

Note that this only works if you have enabled the guild flag 'adder', see the '`/guild_cfg`' command below.

`/guild_cfg [<flag> [<value>]]`

Shows you your current guild configuration if used without any parms and allows you to change it by specifying a flag.

The same functionality as provided by these commands can simply be accessed by pressing SHIFT+P and then choosing 'e'.

NOTE: If you want to rename your guild that can be done for a fee that is as high as actually creating a guild, in the mayor's office in Bree.

-Add player to guild / Add yourself to guild

Only the guild master or a designated 'adder' can do this.

If you are in a guild you will see the option "Add a player to guild", which allows you to add another player to this guild. You need to be either the guild master or one of the designated 'adders' to do this (and the 'adders' guild flag must be enabled).

If you aren't in a guild, you will see "Add yourself to guild" instead! This will allow you to add this character to a guild, provided that at least one of your other characters is either the guild master or one of the 'adders' designated by the guild master (and the 'adders' guild flag must be enabled).

-Remove player from guild

Only the guild master can do this. If all members are removed including the guild master, the guild ceases to exist.

If the guild master removes himself, it's like he leaves the guild (see below).

-Leave guild

If the last member leaves, the whole guild is disbanded.

If the guild master leaves the guild, the guild becomes leaderless.

The next player from that guild who grabs the guild key becomes the new guild master.

A player of a leaderless guild who grabs the guild key becomes the new guild master. Keys are indestructible, they can be lost though..

While a guild is leaderless, three restrictions apply:

- 1) No new members can be added to the guild.
- 2) Items and gold cannot be picked up from the guild hall anymore.
- 3) The guild will cease to exist if it is leaderless for more than a week!

PvP outside of the dedicated 'PvP' character mode:

-Specify player to attack

Now you are hostile to that player and you will hurt each other like when fighting a monster (this includes auto-retaliating and targetting). You can kill each other for real this way, so this is NOT recommended!

-Make peace

Make peace with a player you are hostile too. Better pay attention that your opponent makes peace too.

(6.9a) Guild halls

A guild may have a guild hall. That is a house owned by the guild, which will persist until the guild is disbanded or it is sold by the guild master.

To get a guild hall, the current guild master must buy a house and transfer ownership to the guild. He does this by standing next to the house door, pressing 'h' key for house operations, and then choose '(2) Change house owner' followed by '(2) Guild'.

Note that 'list' houses (store-like houses) are not allowed to become guild halls. You need to pick the other type of house (the one with open area inside).

After the ownership has been changed to the guild, the house no longer counts to houses owned by the guild master. So it does not affect his house limit nor will it be wiped if the guild master dies.

The guild master is the only person who can change back ownership of the guild hall or even sell it if the guild for example wants to migrate to a bigger guild hall.

The approximate guild hall location can be viewed by all guild members by pressing SHIFT+P and then choosing 'e'.

The door of a guild hall is displayed in violet colour to all eligible members. Note that a guild hall can, same as party-accessible houses, have restrictions put on it such as minimum level required to enter, et cetera. These can only be installed or changed by the current guild master.

(6.10) Magic devices, skill and ability

The player's "Magic Device" ability in the character overview screen is calculated from a base ability depending on race/class, your intelligence, and to the largest part from the 'Magic Device' skill in the skill screen ('G'). It determines how well a character can make use of magical devices such as wands, staves, rods and activatable items (see (5.9a)).

The Magic Device ability is not limited to a maximum value, although the player won't be able to increase it infinitely. While a low magic device ability might be sufficient to use supportive devices during breaks from combat, you will probably want superb, heroic or even legendary magic device ability if you intend to use magic devices as weapons in combat effectively. Otherwise your failure chance might be too high and therefore your damage output lacking.

In detail, the magic device ability does this...

-makes it easier to use wands, staves and rods and to activate items.

There's always a slim chance to succeed even if your magic device ability is really bad.

Items that have higher base item level (from k_info.txt) determines how difficult it is to activate a magic device. This level is not the (often higher) level displayed on the item that you see when looking at it in-game (ie the level shown in curly brackets).

Confusion reduces your chance, EASY_USE (rods of charging/of the istari) greatly increases it.

The 'Magic Device' skill does the following...

-increases the power of magic devices.

-makes rods take less time to recharge.

-helps to reduce effects of UN_POWER attacks (does not protect the remaining duration of a form gained from a ring of polymorphing).

-helps to increase the duration on polymorph-rings when they are forged.

-makes it easier to recharge items provided you don't use scrolls to do that, but a real magic device (some artifacts can be activated for recharging).

Magic Device skill and ability have no effect on the damage output of traps loaded with a magic device or on recharge time of rods that are loaded inside trap kits.

Rods have more high level item types and hence are harder to use on average, staves and wands have more lower level types available in comparison. Wands are always used directional (with a target), staves are always used without a target, rods and other activatable items have both types. Wands and rods that cast elemental bolt spells or magic missiles have a small chance of actually casting a beam instead, on each activation.

Equippable items and true artifacts may have higher levels in general, but are actually much easier to activate than normal magic devices. (For true artifacts their base level from a_info.txt counts, ie what is displayed at 'Found around depth:' in ~6.)

(6.11) Parrying and blocking

There are a couple of ways to reduce damage taken. One is simply to have high armour class (see (5.12) for details), another one is 'Dodging' skill (see (6.2) for details).

This paragraph is about parrying/blocking only. Note that the chance values given below do not always apply as is, but sometimes depend on the attack type and especially on a little bit of randomness when your character chooses which defense method it actually uses (block or parry) - for details about this and about all damage reduction mechanisms in general and the order/chance they are applied, make sure you also read (5.12).

For melee fighters that use weapons or shields, two more abilities can help: Parrying enemy attacks with a weapon, and blocking attacks with a shield. Press 'm' and choose 'Check block/parry chance' to see your actual ability to block or parry. In order to have this option appear in your 'm' menu, you need a combat skill greater than zero.

Depending on the server version you might see textual descriptions instead of raw numbers:

"You cannot parry at the moment."	You aren't wielding a weapon.
"You have almost no chance of parrying."	Below 5% chance.
"You have a slight chance of parrying."	Below 10% chance.
"You have a significant chance of parrying."	Below 20% chance.
"You have a good chance of parrying."	Below 30% chance.
"You have a very good chance of parrying."	Below 40% chance.
"You have an excellent chance of parrying."	Below 50% chance.
"You have a superb chance of parrying."	50% chance or better.
	(51% is highest reachable)

Note: Above 30% can only be reached in defensive combat stance without a shield equipped. (Because if no shield is equipped, defensive combat stance which normally bolsters block chance will transfer that defensive advantage to the weapon instead, increasing the parry chance.)

Also your class needs to be fairly skilled at parrying (see below.)

Depending on the server version you might see textual descriptions instead of raw numbers:

"You cannot block at the moment."	You aren't wielding a shield.
"You have almost no chance of blocking."	Below 5% chance.
"You have a slight chance of blocking."	Below 14% chance.
"You have a significant chance of blocking."	Below 23% chance.
"You have a good chance of blocking."	Below 33% chance.
"You have a very good chance of blocking."	Below 43% chance.
"You have an excellent chance of blocking."	Below 48% chance.
"You have a superb chance of blocking."	48-50% chance (the highest reachable).

Note: To achieve an extraordinarily high block chance above 30% you'll have to enter a defensive combat stance, and your class should be fairly skilled at blocking and/or your shield should have a high block chance. See the note below.

Additional information:

Classes do differently well at parrying and blocking. To find out more, see the class overview table at the end of section (6.5).

Parrying/blocking might get boosted/modified under certain circumstances, such as PvP or defending from a trap you accidentally set off.

More on Parrying

The larger a weapon, the more you can parry. Without a weapon, you cannot parry at all.

A 1-handed weapon will parry less often than a 1 1/2-hander (SHOULD2H), and that one less often than a 2-handed weapon (MUST2H).

If you wield a 1-hand weapon WITHOUT a shield which "feels especially easy to swing" (COULD2H), you'll also get an extra parry bonus.

Increasing weaponmastery improves your parry chance; dual-wielding improves it too, provided that you aren't 'flexibility-encumbered' (compare (5.5)).

More on Blocking

Some effects that normal armour usually doesn't protect from can actually be blocked, for example magical breath, ball or bolt attacks.

The bigger a shield, the more you can block. Depending on server settings, the actual block base chance will usually be displayed as a percentage in [] brackets behind the shield's name, where AC is located for other types of armour.

This base chance in many cases applies as is to standard melee combat IF your character tries to block instead of parrying (compare (5.12)), but is sometimes modified depending on the type of an incoming attack: When deflecting bolts from bolt traps or when in PvP combat blocking receives an additional bonus.

Parrying and blocking can both be affected by combat stances - see (6.2) for "Combat Stances" skill.

(6.12) Fighting/shooting techniques

Depending on your class, your character is able to gain access to certain fighting techniques that cost 'Stamina' to use. Warriors, rangers, paladins and mimics will learn all of them eventually, while rogues may learn sprint and taunt, and some rogue-specific techniques.

Similarly, by training archery your character will gain access to a couple of ranged techniques.

All techniques are accessible via 'm' key, also see (3.7a).

The time your character learns a certain technique varies, depending on your class, see the table at the bottom of this section. The order in which they are learnt is the same though.

The techniques are as follows:

Fighting techniques:

----- Sprint 7 stamina

Your character will be able to move faster, so you can catch up to runners and other monsters that avoid you. Note: This does not affect your SPEED stat, nor has anything to do with 'running' (shift+dir), but simply means that moving one step will only cost you half a turn of energy, allowing you to move two steps during each of your turns instead of one! So the ONLY thing 'Sprint' affects is normal walking. (Advanced note: Certain hit & run tactics aka kiting might also become more effective accordingly, since half of your turn could be utilized by the auto-retaliator if you keep time intervals between each step.) Running (shift + directional keys) is not affected. (Starting to sprint does not cost energy.)

Taunt 2 stamina

Attempts to draw attention of humanoid mobs, causing them to attack you. Might require more than one try sometimes until they fall for it, depending on the monster. Some won't be affected at all even. Most common targets are typically shaman and priest class monsters. Note that this can also be used to make scared monsters aggressive,

and -if you and an ally both stand next to the same monster- to draw its attention from your ally and make it attack you instead.

(Taunting costs a quarter of a turn of energy.)

Distract 1 stamina

Your character will attempt to appear wimpy and a non-worthy target to adjacent monsters, in hope of making them attack another player who must be standing next to you and also next to the monster, instead of you. Not all monsters can be fooled though. Some monsters might resist, but probably fall for it if you give it another try.
This skill is useless if there is no team mate next to you (and the monster).

(Distracting costs half a turn of energy.)

Track Animals 3 stamina (rangers only)

Read animal tracks, disclosing their whereabouts in your surroundings.

Spin 8 stamina

A sweep that hits all adjacent monsters and may stun them if they don't resist. You might even perform more than one complete sweep circle, hitting some or all monsters multiple times, based on your number of blows/round!

(Spinning around costs a turn of energy.)

Berserk 10 stamina (warriors only)

Similar to potions of berserk strength, also giving you +1 blow/round.
(Entering berserk rage does not cost energy.)

Rogue-specific fighting techniques:

Apply Poison -

Searches your inventory for a potion of poison or a mushroom of poison, or of unhealth, and spends it to apply poison to any melee weapon that you have equipped.

If you have two weapons equipped, it is applied to both. This technique does not work without a weapon. If you take off a weapon the poison branding will fade away.

The poison will only last for a short while, so it's best to apply it before engaging in a fight.

Perceive Noise 3 stamina

Listen carefully to every sound in your surroundings, thereby locating creatures. Some entities are so quiet that they cannot be detected this way though.

Flash Bomb 4 stamina

You throw down a flash bomb that causes a flash of light, blinding your opponents for a short time, giving you opportunity to escape or kill them off while they are running around in confused state.

See (4.12) for which monsters are (not) affected by blindness.

(Throwing a flash bomb costs a turn of energy.)

Shadow Run 10 stamina, kings/queens only!

You will move at blinding speed, your silhouette turning shadowy.

Ranged attacks will hardly be able to pin you down, you will act at increased speed and you cannot be intercepted.

You can even perform a backstab opening attack out of this state.

Performing actions that require calm movements or anything that distracts or disrupts your attention from focussing on keeping up your movement, or attacking someone/something will break shadow running - it will not wear off on its own but last indefinitely until broken.

Taking damage doesn't break it, but taking sanity damage can break it. Suffering from status effects such as confusion/blindness/stun breaks it too.

Note that stamina does not regenerate while shadow running.

Shadow running includes sprinting, ie moving at half energy cost.

(Starting to shadow-run does not cost energy.)

Shooting techniques:

Flare Missile 2 stamina (4.000 Archery)

Prepares an oil-drenched shot for the next time you shoot, which will burn brightly, lighting up the area where it lands or hits a wall.

If that spot is inside a room, the whole room will be lit up.

If it hits a monster, instead of lighting up an area the monster will absorb it and suffer extra fire damage.

This technique consumes 1 flask of oil and your shot/arrow/bolt.

Note that this destroys magic ammunition too.

(Preparing a flare missile costs a turn of energy.)

Precision Shot 7 stamina (8.000 Archery)

You aim your next shot carefully, costing you a turn. The next shot

you fire however will receive a great damage bonus, even more so against fleeing opponents. Useful opener against sleeping monsters. Aiming will be interrupted by most actions, including walking.

(Aiming precisely costs a turn of energy.)

Craft Ammunition - (10.000 Archery)

Craft ammunition for your currently equipped ranged weapon from bones, skeletons or broken sticks in your inventory or from a pile of rubble (':') next to your character.

If you wield a bow or crossbow, you'll need to have bones, skeletons or broken sticks and it'll create arrows if you wield a bow or bolts if you wield a crossbow.

If you wield a sling, you'll need to stand next to rubble and it'll create sling ammunition from it.

The quality mainly depends on your archery skill and somewhat on your ranged mastery skill, but is still somewhat random.

If you want to create larger stacks of the same type of ammunition, collect a large stack of materials and use the skill on that stack (the total weight of that inventory slot determines the stack size).

The level of the raw materials has no effect on the outcome.

(Creating ammunition costs a turn of energy.)

Double Shot 1 stamina* (16.000 Archery)

(*: 20% chance per turn of actively using it to drain 1 stamina.)

Toggle, making you enter or leave double shot mode. While active, you will fire 2 projectiles at once on each shot, dealing way less damage than a single shot though. Useful to eradicate weak critters.

Note: If your stamina drops below 1 you will continue to fire normally, but not leave double shot mode. That means as soon as you get stamina back you'll start firing double shots again.

To permanently leave double shot mode, you have to toggle it explicitly in the 'm' menu.

(Double-shooting does not cost more energy than shooting normally.)

Barrage 9 stamina (25.000 Archery)

Prepares to fire a powerful multi-shot which will cost you half a turn. It stuns the target (if it doesn't resist stunning attacks).

Because 6 shots are fired at once you will need at least as many projectiles in your quiver in order to use it.

(Firing a barrage costs half a turn of energy.)

Note: The ability 'fire-till-kill' is available to any class and not considered to be a special shooting technique. It appears directly in the 'm' key menu. See (5.2a) for details.

Stamina regenerates slowly over time, faster while resting. Your CONstitution stat and 'Health' skill will further improve regeneration speed.

Different classes learn fighting techniques at the following levels, if at all:

	Sprint	Taunt	Distract	Percv.N.	Flashbomb	Spin	Berserk	Shadowrun
Warrior	2	4				6	20	
Istar								
Priest								
Rogue	2	3	6	9	12			50
Mimic	13	16				20		
Archer								
Paladin	11	17				20		
Ranger	5	9				17		
Adventurer	6	15						
Druid	5							
Shaman								
Runemaster	4	9						
Mindcrafter		8	12					

(6.13) PvP mode

PvP stands for "Player vs player". This describes the act of player characters fighting each other, usually to the death.

In that regard, it is quite different to the 'blood bond' duel, which always ends without anyone getting hurt for real.

If you want to fight other players to death in a real pvp match, create a 'pvp-mode' character. It's an option during the character creation process, much like 'everlasting mode' or 'normal mode'.

PvP-mode characters can use the /pvp command to enter/leave the pvp arena. This arena also releases monsters from time to time. The entry point of a player is random, because he gets teleported on arrival.

Note that you don't HAVE to use the pvp arena. PvP characters are always automatically hostile to all other PvP characters everywhere, for example you could surprise an opponent in a normal dungeon while he tries to kill a unique monster for items. The only safe zones are towns.

Before you go and fight others to the death, look at your inventory. You will see a parchment "Gladiator's Entrance". When you turn this in at the mayor's office in Bree, you will get a semi-random excellent item for free, to start your career with. Semi-random because it partially depends on your skill point distribution, so before turning in your parchment for an item at the office, make sure you hit SHIFT+G and distribute your skill points to your liking. For details about how this item is generated, see (8.5) Reward item creation, it actually uses the same mechanics.

PvP-mode characters are called 'Gladiators' and use special rulesets that make it easier to rise in levels and less of a hassle when you get actually killed by an opponent! The special rules that apply are as follows:

- PVP chars have only one life and no ghost, ie are erased on death same as no-ghost chars. However, they play more fast-paced and are quickly brought up again. The purpose of PvP chars is to fight other players to the death without remorse, which would otherwise be an unacceptable loss if done with regular characters (who can at least use Blood Bond scrolls for friendly duels though).
- yellow name in chat, yellow * marker in @-list, completely yellow entry in @-list if viewed by another PvP mode char.
- start at level 10 and with about 10000 Au.
- reach level 30 at most.
- cannot team up or exchange goods with non-PVP chars.
- will automatically be hostile to all other PVP chars, except for towns which are safe zones!
- will always ESP all other PvP chars as well as see their location in @-list.
- get no credit for killing uniques (hence cannot become king/queen), cannot use static artifacts, can gain loot and money from killing monsters but no exp.
- gain no exp from any other source except killing other PvP characters. Lower level PvP opponents will give less exp than equal/higher.
- if a pvp char dies to a monster or trap, all nearby pvp chars may receive a kill credited depending on the number of kills that character had.
- walk faster by default, similar to 'sprint' fighting technique.
- cannot chase PvP chars much lower than himself by entering their dungeon level, because he will get auto-recalled then (anti-chicken).
- will get rewards (similar to highlander tournament) for reaching high/top level or killing an amount of opposing gladiators (other PVP chars).
- when killed at high level, the player will get a deed on his next PvP character he logs on with, which can be exchanged for an extra item. The highest level deed (obtained when dying at level 30) can be received on a non-pvp char too.
- mimicry users gain one free transformation of their choice on (multiple) levelup, and also learn forms 3x as fast as regular characters.
- diminishing effect on healing: if you spam heal pots, the effect will lessen more and more. over time, it returns to normal. entering a town will reset it too.
- temporary speed buffs (potions, mimic powers, spells) have no effect.
- teleportation will be suppressed during combat, phase door is allowed though.
- while in a fight with another pvp-char, you cannot teleport away easily (takes about 30 seconds to wear off, or just enter a town to reset).
- PvP characters are unaffected by certain effects caused by other players: Hallucination, Life force drain (exp drain), Stat drain, Nexus scrambling.
- They may not own more than one house.

Note: Item rewards depend on your character, see (8.5) for more information about item rewards.

(6.14) Miscellaneous character properties

Characters also have the following miscellaneous properties:

-Sex
-Age
-Height
-Weight
-Social Class

These currently have no effect in the game, and modifying them has no effect either: Traps of aging, shrinking or growing may change these values but will not affect the gameplay in any way.

(6.15) Character sheet boni page

This page of the character overview displays equipment and intrinsic boni. The four tables list resistances, miscellaneous flags, numeric boni, and slays/brands/esp, complete with a header/footer to identify each column. Each worn item has a header based on equipment slot, notated [a-n]. Class/race/form boni use the @ header. A representation of any equipment worn and current form occupy the footer. The columns between each header/footer pair display boni, which correlate to the row title, shown to the left of each table.

A dark grey row title or column header indicates no relevant modifications to that particular boni, or an empty equipment slot. An equipped column is highlighted grey by default, unless the item has hidden properties, in which case both the column header and unknown boni will be highlighted yellow. A column representing a cursed item will have a red header. When a particular boni is applied to your character, the row title will highlight white, unless the boni is detrimental, in which case the title may appear yellow or red. A gold row title indicates an improved boni, such as immunity, sustained stats or lite source, or a maximum value, such as for stealth, luck, or AM Field.

Here is an explanation of the common glyphs which may occupy a row/column grid:

- (red)	Susceptibility, HP/MP Drain, Random Teleportation
+ (red)	Aggravation
+ (white)	Resistance, Miscellaneous Flags, Slay+ESP, Brand+Aura
* (gold)	Immunity, Anti-Teleportation (yellow), Kill/ESP (white)
# (green)	A number, dark green adds 10, gold indicates sustenance.
# (red)	A number, red subtracts 10.
s (gold)	A sustained ability without numerical modification.
s (white)	Slay (2x)
k (white)	Kill (3x)
e (white)	ESP, Full ESP applies one to all the ESPs in that item's column
a (white)	Aura
b (white)	Brand

Some row specific glyphs:

s (gold)	Immunity to Cuts (shards row)
~ (blue)	Swimming (levitation row)
# (green)	Pass Forests (levitation row)

(7) Tactics & strategy

=====

(7.1) Preparing the inventory for diving into the dungeon

Depending on your character level you will always want to stock up on certain items before entering the dungeon. Here are some guidelines for your inventory:

Beginners (level 1)

- + Some Rations of Food, one or more Flask of Oil
Know that there are traps that can empty your stomach or drain the fuel of your light. If you don't have supplies then you might be doomed.
- + Potion of Heroism
because it can approximately double the hitpoints of level 1 characters (depending on race/class) for a short period of time as well as greatly improve the chance to hit the opponent, which will raise the fighting potential for example against enemies like Farmer Maggot's dogs. Even if your character has a decent amount of Hit Points, these potions raise your

- fighting abilities a good deal.
- + Potion of Cure Light Wounds
They become useless quickly while you gain some character levels since they don't heal very many HP (Hit Points). At the beginning they are very helpful however.
 - + Scroll of Phase Door
This one does a short range teleportation, allowing you to escape if you are surrounded or get some distance between an enemy and yourself, allowing you to shoot him on distance using a ranged weapon. Since Phase Door teleports randomly, you might have to read several of them quickly after each other until you come out in a good position.
 - + Maybe a scroll of Word of Recall
If read in the dungeon it will far-distance teleport you back to the town. This allows you to quickly "dive" deep and gain levels and find items that can be sold for good cash, then read Word of Recall to quickly get back home with all the loot without having to start an annoying search for the staircases leading upwards back to town.

Low level character (up to 15)

- + Several Rations of Food or Scrolls of Satisfy Hunger, some Flasks of Oil
- + Some Potions of Heroism
- + Some Potions of Cure Serious Wounds / Critical Wounds
Note that Potions of Cure Wounds also remove certain effects like blindness and confusion, depending on the exact potion type (light/serious/critical).
- + Several Scrolls of Phase Door
- + Some Scrolls of Word of Recall
- + Some Scrolls of Identify
These will allow you to identify unknown items that you may find!

Medium level character (up to 25)

- + Some Flasks of Oil. Replace rations of food with "Scrolls of Satisfy Hunger"
These will always fully satisfy your hunger and they are not eaten by rot jellies ;) Lembas (elvish waybread) are also nice but very rare.
- + Many Potions of Cure Critical Wounds, maybe some Potions of Healing.
- + Some Potions of Berserk Strength (mainly for fighter classes)
These potions work similar to heroism, they rise your damage output instead of your hit chance, allowing you to deal very extreme damage. Unfortunately they are quite rare. If they are used together with potions of speed the result can be devastating.
- + Several Scrolls of Word of Recall
- + Several scrolls of Identify
Since you will encounter the more nice (or more dangerous..) loot the deeper you descend, you will need a bunch of identification scrolls to find out what is worth being kept and which items should be thrown away.
- + A potion of Restore Life Levels. It can be very annoying if a monster drains your experience (its colour will turn from light green to yellow to indicate that it's been drained) and all the monsters you subsequently kill yield almost nothing in experience since it's all pouring into refilling the drained amount. These potions instantly restore all drained experience! (Note that scrolls of Life also restore experience, same as this potion.) Most monsters that drain experience are undead and the first ones you will probably encounter are liches and vampires. Bloodletter demons drain too. A notable low-level monster is the grape jelly. But then again you shouldn't fight stationary melee-specialist monsters in melee in the first place..
- + Some Potions of Speed
These will temporarily boost your global speed (movement/attack/cast) by +10. In case you are moving at normal speed this means that your speed is doubled, effectively doubling your combat power as well since you can shoot and hit twice as fast now. These potions also allow to quickly retreat...
- + a Staff of Teleportation
This neat baby is your ticket out of most hazard situations where Phase Door wouldn't help at all. However keep in mind that staves can be destroyed. So if you consider a situation very dangerous and your staff of teleportation is suddenly burned to ashes, you should think about reading Word of Recall! Unfortunately staves of teleportation are very expensive. Staves can be used even while blind or confused!
It's not a good idea to use staves if your character isn't quite good at 'Magic Device', press 'C' to check your character screen.
It's a good idea to try the staff a few times in town before relying on it.
If needed you could increase your 'Magic Device' skill, see (6.2).

- + You should have found some "Rods of Trap location"
Keep 2 or 3 of those with you. If you encounter a pit or vault you can easily detect all the nasty traps inside. Rods of Door/Stair Location can also be helpful.
- + Especially for clearing vaults you might find a staff of light, a wand of trap/door destruction and maybe a wand of teleport other useful. However, that would be 3 more inventory slots less to pick up loot :)
- + Potions of curing insanity (all types). If you find these, pick them up and store them in your house! If you encounter a sanity-blasting monster you will want to have these to restore your sanity after the fight.

Higher characters (up to 35)

(If you came this far, good work!)

- + Some Scrolls of Satisfy Hunger or some Lembas if you can find enough. Some flasks of oil if your light source needs those.
- + Lots of Potions of Cure Critical Wounds (20..40 for example), if possible Potions of Healing instead of cure crits.
- + Some Potions of Berserk Strength (mainly for fighter classes)
- + Several Scrolls of Phase Door
- + Some potions of Restore Life Levels, probably, depending on how often you get annoyed by experience drain. If you're fighting a lot of undead, for example in the "Paths of the Dead" dungeon, you probably want a bunch of these potions.
- + a Rod of Recall
A rod cannot be destroyed by fire or acid, and you won't have to buy new scrolls of WOR since the rod never runs out.
A rod of recall is especially useful to travel between towns, so you won't burn through a lot of scrolls just for visiting all the town stores.
- + Lots of Scrolls of Identify (up to 99!). If you're great at handling magic devices, maybe get a Rod of Perception. It does the same thing as a scroll of Identify, but you might want one 'of charging' or 'of the istari'.
- + Several Potions of Speed
- + Some Potions of Resistance, since they stack with resistance from items. Always quaff these when fighting dragons, demons or hounds.
- + Potions of Healing
These potions heal you way more than pots of cure critical wounds. However, they are more expensive.
- + Maybe rods for support: Trap location, disarming, detection.
- + Some Scrolls of Teleportation.
- + a "Sprig of Athelas"
This one cures "Black Breath", which you can get infected with if you fight a Nazgul (ring wraith)! Normal high undead monsters have a very slim chance too to give you Black Breath.
You can leave the sprig in your house since Black Breath saps your soul very slowly, so there should be enough time to finish business in the dungeon and recall to town afterwards to eat a sprig. (See (1.3a) for more information about Black Breath.)
- + Scrolls of *Remove Curse*. These are expensive in the black market, but are sometimes sold in the temple cheaply, so always check the temple when you come by. You will want these for getting rid of heavily cursed items, such as Nazgul rings of power that you don't use.
- + Potions of curing insanity. If you find these, pick them up and store them in your house! If you encounter a sanity-blasting monster you will want to have these to restore your sanity after the fight.

Very high characters (36 and above)

-
- + Satisfy Hunger scrolls or Lembas
 - + Potions of Healing
 - + Potions of Speed, if you don't have magic providing this
 - + Potions of Resistance, if you don't have magic providing this
 - + Scrolls of Teleportation
 - + a Rod of Recall (mainly for travelling between towns).
 - + Support rods, such as Trap Location, Detection or Disarming (especially useful for clearing vaults).
 - + Sprigs of Athelas, scrolls of *Remove Curse*, potions for curing insanity (these supplies can be stored in your house, no need to carry them with you).

Depending on your character level you will need to equip certain items before entering the dungeon. Here are some guidelines for your equipment:

Beginners (level 1)

- + Lantern
because it provides light within a radius of 2 fields instead of 1 field of a torch.
- + A ranged weapon as soon as possible (a boomerang if you use martial arts). Don't forget the ammunition ;)
Try to get a sling or even better a long bow as soon as possible, especially if you are weak at hand-to-hand combat.
At the beginning a ranged weapon can make all the difference and help you to proceed quickly. Enchant the bow to (+hit,+dam) where +dam helps a lot to increase the total damage you inflict on enemies, since it's multiplied by the bow's power factor.
Note that martial arts users can only use boomerangs, other ranged weapons will nullify their Martial Arts skills.
- + An appropriate melee weapon (except if using martial arts, eg Druids!)
Check out how many blows per round you get with a light dagger, whip, cleaver or spear, depending on your favourite weapon class. If you get more BpR than with your starter weapon, switch!
If your character has only one blow per round even with light weapons, choose a heavy weapon that can deal more damage in one blow. If your character is low on strength, pay attention that you don't buy a weapon that is too heavy to use at all. You can press 'x' in shops to examine weapons (and all other items), to check if you can benefit from buying it or not.
If you have only 1 BpR, make sure to dual-wield if your character can do that because that will give you a bonus BpR. Don't forget that you cannot dual-wield with heavy armour. Rogues should always be dual-wielding.

Low level character (up to 15)

- + Enchant the damage of your melee and/or ranged weapon a bit using "Scrolls of Enchant Weapon To-Dam"
- + Get some armor. Note that certain armor can decrease your dexterity or spellcasting abilities, partially because it is too heavy. Also some weapons will become less powerful if used together with a shield, and some weapons cannot be used at all in conjunction with a shield. A fighter should have approx. 30..45 AC or more.
Before buying a piece of armour in a shop, press 'x' to examine it. This will tell you if you'd get encumbered wearing it.
- + Buy a fire resistance ring as soon as possible because many monsters can use fire spells early on. Also get an acid resistance amulet maybe, since acid damage is especially nasty to your inventory and equipment.
If you're an Ent, early on fire resistance is absolutely mandatory.

Medium level character (up to 25)

- + Enchant your melee and ranged weapons to at least +8 to damage! Best would be (+9,+9) or maybe even (+10,+10). Going over +10 is not feasible with normal enchant scrolls, you can use *enchant* scrolls later on.
You could also ask a high level character if he/she helps you by taking your weapons, armour and ammunition to one of the shops that offer an enchantment service. Those shops can enchant the items quite high, depending on the level of the customer. It's costly though..
Don't sell scrolls of *enchant weapon* or *enchant armour* if you find those, but use them to enchant your items above +9 and up to +15!
- + A fighter should have approx. 40..70 AC or more.
- + Get "Fear Resistance" also know as "Boldness".
- + Get Free Action. You should have this before going much deeper than 1000 ft. It prevents you from being paralyzed by traps or monsters.
- + Get the 4 basic resistances, which are: Lightning/Electricity, Acid, Frost/Cold, Fire/Heat.
- + Consider buying a small house to store backup equipment or special items instead of carrying them around with you.
- + If you manage to find an item that lets you telepathically sense trolls, keep it. Use it to locate troll pits, those tend to give a lot of experience! Typical items that provide troll-ESP are dwarven helmets or weapons of *slay troll*. (ESP = extra sensory perception, ie the ability to sense a

presence telepathically without a direct line of sight).

Higher characters (up to 35)

- + A fighter should have approx. 65..100 AC or more.
- + Try to get a lantern of Brightness or even *Brightness*, a Dwarven Lantern or a Feanorian Lamp. These provide more light and/or don't need to be fueled and cannot be extinguished. They may also have some special abilities like preventing you from getting overwhelmed by fear!
- + Get "See Invisible" if possible. Some very nasty monsters are invisible and "cold-blooded", that means they cannot be seen by infra-vision.
- + Get Poison Resistance! For example Boots of Mirkwood provide poison resistance. Also Elven armour often provide it. If you are trained in the art of mimicry, you could try to use the form of a monster which has poison resistance intrinsically. Drolems and other monsters might insta-kill you without poison resistance.
Elven armour also provides base resistance and has a chance to provide an additional 'high' resistance, so it's really useful to get your resistances covered. Elven armour is not that expensive and not that rare. If you can't find any, ask other players or check the player stores (there tend to be a lot of player stores around the town of Gondolin) for offers!
- + Try to Get Confusion Resistance, so you can always read teleport scrolls! Note that chaos resistance also provides confusion resistance.
- + Get Nexus Resistance. Nexus attacks can scramble your body, swapping your stats, which can mess up your character. (See (5.6).)
- + Try to get Blindness Resistance, so you can always read teleport scrolls! Helmets or Caps of seeing give this!
- + Before venturing into Mordor you should have basic (fire/cold/lightning/acid) and poison resistance and 'free action' (paralysis resistance).
Confusion resistance and nexus resistance are a plus.
- + Try to get Hold Life.
This prevents your life force from being drained, making you lose experience and going back in character level. Cloaks of Teleri Hold Life and provide Free Action too.
- + Try to get items that provide ESP (extra sensory perception). ESP is a telepathic power that allows you to sense monsters even though they aren't in your line of sight! This is tremendously useful as you know what monsters are lurking on the map and where, so you won't run into nasty surprises.
Typical item that provide ESP are:
Crowns of telepathy (full ESP!)
Weapons of *slay evil* (ESP evil), Weapons of Aman (ESP evil), Weapons of Gondolin (ESP evil).

Very high characters (36 and above)

- + A fighter should have at least 90 AC. He might also have already AC as high as about 130 at level 36 if he is lucky.
- + Get as many high resistances as you can.. You will want Nether, Nexus, Disenchantment, Chaos, Sound for example. Note that Saruman and many high undead monsters (L and W) have disenchanting melee attacks that waste your equipment pretty badly if you don't resist disenchantment.
Sound resistance will prevent stun effects, which if they accumulate can even knock you out completely, leaving you unable to do anything at all!
Also, your damage and spell casting chance are reduced while stunned.
Notorious for k.o. are Water Hounds, Impact Hounds, to some extent Gravity Hounds, and *especially* Plasma Hounds.
Note that "Feather Falling" provides resistance to gravity damage.
('Levitation' automatically includes feather falling, by the way.)
Nether and Chaos drain your experience if not resisted (can be cured with a potion of restore life levels or according magic). The great thing about chaos resistance is that it includes confusion resistance! So if you were wearing a ring of confusion resistance, just replace it with a ring of chaos resistance and you are set.
- + Get "See Invisible", various nasty monsters are invisible.
- + Get items that sustain your stats, for example a Robe of Permanence if you wear light armour, or a kolla (it's a cloak) if you're a fighter class.
- + Get full ESP: Crowns of telepathy typically provide these.
Some classes have an ESP spell available so they don't need ESP items.
- + Get Randarts (randomly generated artifacts) or Artifacts (predefined artifacts / static artifacts) for melee weapon:
You will have to fight ring wraiths. Normal weapons, even those from Gondolin or the most powerful *Defenders* will quickly shatter if they come

in contact with those corrupted creatures of terror and hate.

Your only way to fight them is to equip an artifact since these resist ring wraiths greatly - their chance of getting destroyed when striking a Nazgul is 1 in 1000, compared to a few hits for non-artifact weapons.

(Note that the 'Stormbringer' counts as an artifact in this regard.)

+ You will want items that permanently increase your speed!

+10 speed or +20 speed will make you approximately twice or three times as fast as you usually are. Note that the curve will become flatter the higher your speed is, so at some point, increasing your speed any further might be less beneficial to you than boosting your attack speed (items that give extra attacks) or your critical hit chance (items that give critical hits).

Use the target dummy in town to test your actual damage output and compare, the /tym (test your might) command may prove useful.

(7.3) Surviving critical situations

Not getting into a critical situation:

Best thing is to not get into a critical situation at all.

To help you estimate the threat of a particular dungeon floor, there are 'feelings' your character may get when you enter the floor:

When you've spend some time in town or on a dungeon floor, your depth number in the bottom right corner will turn light-blue. This means that you will get a special feeling on the next dungeon floor you enter, displayed in yellow.

That feeling will tell you about the threat of that particular floor, so you may consider leaving it again if it sounds too nasty. See (4.8) for details.

Map structures:

There are certain situations and constellations that will occur often in a very similar manner. Here are some of them, together with some advice how to manage it.

-A pack of approaching monsters (here orcs), often orcs or trolls:

```
##### # #
# ooooo# # #
# ooooo#####@ # <- stand there to intercept the incoming orcish horde.
# ooooo oo # As soon as three or four of them stand on adjacent fields
# o # move up one field to limit the attackers to 3 at a time.
##### # Sometimes the AI is very smart and monsters will try to
# # surround you anyways. Phase door scrolls will help you out
then.
```

-Usually, animal packs will retreat if you chase them in hallways, and will only attack if you enter a room or if your hit points are around 50% or worse. You might want to just take them out with a bow or another ranged weapon instead of chasing them.

If you decide to chase them to the next room make sure you have enough phase door scrolls and healing pots to win a fight where you are attacked from all sides at once.

If you try to chase them through corridors, use the 'Sprint' fighting technique in case your character has learned it (see (6.12)).

-If you prefer close combat over ranged and your character can use fighting techniques, make sure to use the 'Sprint' or 'Taunt' technique to catch annoying monsters like shamans or priests that otherwise try to keep a distance.

-The range of your missile weapon (slings, bows, crossbows, boomerangs) is often greater than your own range of sight when it comes to dark hallways. Just by shooting into the dark you can take out monsters, if you know they're there.

-If you open a door, especially doors to pits with unknown content, be very careful and open the door diagonally to have as little creatures as possible see you from inside the pit. If you open the door to a so-called "jelly pit" (contains icky-things, jellies, mold, mushroom patches) you might be insta-killed otherwise. Here is how to open the door:

```
#####
#jm$,m#
#$m,jj#
#ijmm,#
#,mjjj#@ <- stand here and open the door diagonally
#j$m,i+ <- don't stand here or more monsters will see and immediately
##### target you from inside
```

Prepare to close the door again as quickly as possible, it might be needed (or just teleport away). In general you should leave jelly pits alone. Coin pits (lots of '\$' inside) can also contain very powerful mimics!

-If you fight monsters that can cast ball spells or breathe on you, be aware that they might target a field adjacent to you and hence still hit you (thanks to the radius of the spell around the actually targetted grid) even if they cannot target you directly!
Similar goes for monsters who can cast summoning spells.

-Pack monsters can be very nasty if those farther away from you can still shoot or cast spells over the heads of their comrades in the front line, from behind, novice paladin packs come to mind at low levels.
In that case you should make sure that only very few of them can see you at a time. If your health suddenly drops, teleport away at once, or at least retreat behind a corner.

-Sometimes it might be a good idea to use a "Stone-to-mud" or "Trap/Door destruction" spell to open a door from a distance.

-For weaker characters it might be a good idea to stay around 1000..1500 ft and try to get enough stat potions (potions that raise your six primary stats, STR INT WIS DEX CON CHR) until they have a considerably high amount of hit points and/or combat potential before they dive deeper!

-If you fight a monster that is capable of casting powerful summoning spells, teleport at once if any summoned monsters appear around you!
Don't hesitate for a split second, just to "check whether that was actually a dangerous summon or whether you might just take on all of them on".
Hesitating in order to do so may well be your death sentence.

Some monsters that people often get killed by are:

-At very low levels there are especially 2 death causes:

- a) Pack monsters that have ranged attacks and fire at you all at once. See the map structures section above.
- b) Monsters that are simply a little bit faster than you so you can't run away if you decide that you can't beat them.
Don't forget to use your 'Sprint' or 'Flash Bomb' fighting technique if you have learned it, might be useful to get away, or even to kill your opponents instead.
See (7.1) and (7.2) how to equip yourself to minimize risks.

-If you recognize that you cannot win a fight and it will likely end deadly it might be a good idea to read a scroll of Word of Recall as early as possible and then try to survive until it kicks in and carries you to safety.

-Druid monsters, for example druid snotlings or druid kobolds. They can appear at very low level and they are able to cast firebolts that insta-kill you (instantly kill you).
Again you should try to utilize fighting techniques if you can.

-Elite Uruks, they fire extremely sharp arrows, always posing a high threat.

-Chieftain/Warrior/Monk/Unbeliever monsters of any kind. You will often see someone being killed by a hill troll monk or forest troll chieftain for example.. Prepare to hit your phase door macro if you spot a shimmering extraordinarily fast moving monster within a potentially dangerous mob. Especially dangerous are such ego versions of a base monster type that has elementally branded melee attacks. You should quaff a potion of resistance when fighting those to reduce the elemental damage part of their melee attacks.

-Veteran archer/Master archer monsters of any kind can pose a very high threat. Better get reflection ability if you are planning to fight these in

a ranged duel.

-Hounds with breaths that need a high resistance or that cannot be resisted at all. For example..

At lower levels: Air hounds, Nexus hounds, Vibration hounds, Impact hounds, Inertia hounds, Aquatic & Water hounds (avoid aquatic & water hounds especially; the others still give very good experience at a reasonable danger exposure.)

At higher levels: Plasma hounds, Gravity hounds, Time hounds, Aether hounds, Hounds of Tindalos (beware of Gravity & Time hounds especially, Aether hounds can also give you some surprise).

-Dark-Elven Warlocks. These belong to the few monsters that can cast mana bolts, which inflict very high damage. Even worse, DEW (Dark-Elven Warlocks) appear in packs. Beware!

-Will o' the wisps are very hard to spot and catch, their curses are devastating.

-The Glass Golem drives everyone insane whom it manages to hit, high AC helps.

-Drolems. A constructed dragon that will breathe poison for high damage and takes a lot of hits before ceasing to function.

-The Stormbringer, an animated blade that bears mad wrath within. It swings so powerful that it can knockout its enemies with ease. Defeating it, however, will make it usable to its defeater!

-Ulik the Troll. He is so strong that his hits cause earthquakes and he cannot be stopped by (non-permanent) walls. Beware his prowess in melee combat! Also he moves surprisingly swiftly!

-Dracolichs and Spectral Tyrannosaurs. They have high hit points and are able to breathe nether, which means their damage will be maxed out. A dark/light green blinking D is actually a Death Drake, and although it can also breathe nether it is much less dangerous than a Dracolich because of its low hit points. Dracolichs and especially Spectral Tyrannosaurs can occur on fairly low levels (usually 55 and 46) which makes them a very nasty surprise.

-Wyrms. The base element variations of these (hell, ice, storm, bile and swamp) as well as the multi-hued one do look exactly like ancient dragons, but are a magnitude stronger. So make sure to 'look at that "dragon" before waking it up or it might be too late. In particular you *need* potions of resistance, of speed and of healing to take on a wyrm.

The most powerful representant of each class:

-Ranger chieftains are tough opponents who can nail you on the spot and use magic attacks as well as summon.

-Knight Templars, powerful paladins who are immune to holy attacks and are even able to call an angel for support.

-Patriarchs, these unfaltering priestlords can summon and curse rapidly.

-Master Mindcrafters, their ability to summon mighty support and to smash your brain by psi attacks is feared.

-Old sorcerors are able to summon ancient dragonkind and wyrms, beware!

-(Grand) Swordsmasters, most skilled swordsmen that will disarm you easily.

-(Grand) Master mystics, most powerful martial artists. With their special moves they can manage to stun you easily. Best remedy is high AC so they won't hit you in the first place. Alternatively you can quaff potions to remove any stun effect.

-(Grand) Master thieves, very fast and stealthy they steal your possessions!

-Unique enemies. If you see a monster blinking in different colours, before trying to kill it you should consult other players or 'look at the monster, to find out whether it is an unique monster. If so, then you should examine it by pressing ~ 7 in game to look up its abilities and make sure you are prepared to fight him. If possible, consult fellow players for their opinions. (You can also check r_info.txt, see (7.4) for more info about spoiler files.)

-If you see an enemy that you don't know anything about and that could pose a threat (especially if it's inside a vault!), STAY AWAY and consult either an experienced player or look it up by pressing ~ 7 to find out what the opponent is capable of. The safest (and most boring and least rewarding) way to play is to avoid vaults! Vaults can contain an enemy against whom you don't have the slightest

chance of winning. Vaults however can also contain great treasure!
(See (4.6) for more information about vaults.)

- The most powerful monsters of the demon realm, the dragonkind and the heavenly planes, namely Star-spawns of Cthulu, Great Wyrms of Power, balance keepers of the skies, sun and stars (Blades), Nether Realm guards.
- Blinking 'A' (unique angels) or 'U' (powerful or unique demons) as well as bright coloured 'U' (greater demons) and blinking 'W' (zephyr lords or Nazgul) always pose a high threat. While Zephyr lords aren't that strong on their own they are able to summon packs of hounds which can mean a swift doom if those have dangerous breathing attacks.
Some other dangerous demons are..
Servitors of the outer gods, Lords of Change, Greater Balrogs, Bloodthirsters, Pit Fiends, Great Unclean Ones, Keepers of Secrets.
- High undead can also pose a high threat and are responsible for many a death, those are Nightwalkers, Nightcrawlers, Nightwings and their likes.
- Nazgul have quite some chance to destroy your melee weapon if you hit them! In case your melee weapon isn't your main way of fighting you could inscribe it @0x before fighting a Nazgul to avoid auto-retaliation and then use spells or whatever to destroy it. If you rely on melee weapons get an artifact since these resist Nazgul greatly!
However, you probably still don't want to risk your best artifact weapon, so try to get a worse artifact which you can solely (ab)use for fighting Nazgul. Some people are rumoured to defeat Nazgul with nothing but their ability to read, although they aren't even remotely magically talented..
(Compare (1.3a).)
- Unique 'P's are often very dangerous, some say the most dangerous next to Morgoth himself is Nodens, Lord of the Great Abyss.

Mistakes / Carelessness:

- Further, players are often killed if they lack resistances and/or free action (against paralyzation) but nevertheless dive down into the dungeon very quickly.
- Teleport out of trouble
If you are not an anti-magic-user, you should buy a staff of teleportation as soon as possible since it can take you out of dangerous situations.
However, the staff is no guarantee :)
After you bought it, try if you can actually use it well or if you keep failing! If you're not good at magic devices you might have to spend points into your 'Magic Device' skill.
I recommend to always have at least 3 charges in the staff before diving into the dungeon.
Another possibility is to use a Scroll of Remove Curse (buy it in the temple ie the green '4') on a Ring or Amulet of Teleportation. Try to activate one of them.
- Quaff potions of cure critical wounds or healing if you get (heavily) stunned to prevent a lethal knockout in the next round! Further you can't use martial arts special moves while stunned, cutting your damage a lot.
Get sound resistance to not waste potions to cure stun effects from water/sound/gravity/ice/plasma attacks.
- Don't wait till you are a '1' or '0' before you try to teleport out.
If you want to be on the safe side, teleport out when you are a '4' or '3'.
Remember that your teleport staff may fail sometimes.
- Before AND after a larger fight, check your inventory if you can carry on or if you have to return to town to stock up. A common problem is that some monsters can drain charges from or burn up your teleport items, which you might overlook.
- If you are surrounded by huge piles of loot from dead monsters you might be tempted to drop cheaper items like phase door scrolls to make room for the precious loot, and go /afk to wait for pseudo-id. However, know that you _can_ all of a sudden be ambushed during that time by enemies. By enemies that _require_ you to use phase door..

- I do not recommend to drop food nor oil in exchange for loot if you're not planning to recall instantly after you picked up the loot.
- If you team up, make sure that you stick closely together all the time. Wandering off usually greatly increases both players' risk of death!
- Learn from your mistakes. If you die, think about if you were taking too high a risk, and check if you overlooked anything, maybe you were missing essential items (cure critical wound potions to get rid of confusion and blindness).
Next time, be more careful. Playing TomeNET means learning a lot about the monsters/items.

Teamplay:

- Team up with fellow players that are approximately at your character level. This means more fun and less danger. Your teammates can save your life and support you with helpful spells, items and knowledge.
A player in a party gets a share of experience points from the kills of other party members if they are within 7 levels to the player.
A character cannot gain any exp from a monster which has previously encountered a player more than 8 levels higher than this character himself. (So there is 1 level tolerance towards sharing experience.)
For winners (queens/kings/empresses/emperors) the range in which they share experience is as far as 11 levels.
Winners don't share experience with non-winner characters.
If a party member gets reduced experience because his level is too high for the dungeon floor, this penalty will affect all of his team mates on this floor too, even if their level is lower. This means the party should always dive at the optimum depth for its highest member.
See (6.9) for details about partying!
- Good combinations are the classical meat shields / damage dealers / supporters. Mages usually make a great team with whomever they team up. Keep your teammates in mind and don't teleport out if it meant certain death to them while you could still take some hits.
- Make sure you stick together with your team mates. If you wander off instead of staying close you will greatly increase your risk of dying to something.

Manage your spells and items:

- It can happen often that you die in a specific situation that you could have survived had you actually used everything at your disposal, that you forgot about, either because..
- you panicked or because
 - you expected a new, strong opponent to perform just as weakly as the other hundred monsters you slew before even though it gives away that it is special by its blinking colour or by being represented by a symbol/letter that you are not familiar with and haven't seen before in that dungeon.

Some examples:

- Forgetting to apply a buff, such as a berserk strength potion or resist heat against strong fire breathers (which are one of the early threats in the game)
- Neglecting to use a protective/defensive spell before engaging in a fight
- Not casting 'damage-add' spells, ie spells that don't deal high damage but that deal _additional_ damage to your main damage spells, which is a welcome bonus that can make a difference. Examples are mainly storm-type spells but can also be cloud spells, ie all spells that continue to deal damage over time after being initially cast, allowing you to cast direct damage spells in addition to them being active, increasing your total overall damage output.
- Not using items because you weren't aware of their beneficial uses. Such as throwing a potion of salt water at a pack of monsters that is trying to surround you, to temporarily blind them (which has the same result as applying confusion state to them), allowing you to either escape or kill them while they're groping around blindly, even though it only lasts for a moment.

(7.4) Spoiler files

In the folder tomenet/lib/game you find several data files containing

various information about all monsters, items and other features of TomeNET. These files are named X_info.txt and can be read via a normal text editor. The most important files are:

- a_info.txt contains all artifacts.
(You can also access this information in-game by pressing ~6 .)
- r_info.txt contains all monsters.
(You can also access this information in-game by pressing ~7 .)
- k_info.txt contains all base item types.
- e_info.txt contains all ego item types.

All files contain a block of information, either at the beginning or at the very end, which explains the meaning of each discrete info-line.

(7.5) Monster tactics

Monsters may follow certain schemes regarding their movement, target selection and spell-casting.

Movement:

Rather mindless monsters might just try to get to the player straight away while more clever monsters might try to avoid being kited, depending on their hit points or if there are buddies around. Also, some pack animals might avoid to encounter you in hallways but jump you all at once when you enter a room or when your hit points drop to around 50% or worse.

Target selection:

When a monster has multiple players next to it it might choose its target depending on its cleverness, power and health state. For example it might go for the target it perceives as most squishy. Players may counter this by using techniques such as Taunt or Distract.

Spell-casting:

Despite appearing random sometimes monsters prefer certain spells over others. If a player is close a monster might especially try to blink away to continue to throw attack or summon spells at the player from afar. If a monster is low on HP or scared it might try to use escape spells and if it's low on HP or stunned it might emphasize heal spells (the chance to successfully cast those is also negatively affected by stun same as all other spells - compare (4.12)).

(7.6) Town/dungeon related hints

- Before going as deep as 1000 ft (ie dungeon level 20) or deeper, make sure that you have 'free action' because many monsters will be able to try and paralyze you.
- For Mordor make sure you have the four base resistances and also free action. You might also want to get nexus resistance as soon as possible because nexus attacks can swap your six character attributes randomly.
- For Paths of the Dead you should also have nether resistance and 'hold life' because many undead monsters have nether-based attacks or can drain your experience points.
- When going even deeper the next resistance you want is probably chaos, since it can deal excessive damage and potentially deadly side effects (experience drain, hallucination and confusion) all at once. After that maybe comes disenchantment resistance to protect your equipment, or sound resistance to avoid getting knocked out by certain attacks such as sound, and especially water and plasma (hound packs of those types can knock you out quickly).
- In Gondolin mindcrafters and archers may spawn. You should enter the local inn if you want to go AFK so you don't get killed by their ranged attacks.
- Minas Anor, Lothlorien and especially Khazad-dum can spawn swordmasters or even grand swordmasters, which can disarm you and deal heavy damage. Beware.
- Before challenging a dungeon boss, look it up in the monster lore (press ~7)

because dungeon bosses sometimes have extraordinary abilities or stats that you want to be aware of. They do give extraordinary amounts of experience points and sometimes special item drops too.

(8) Miscellaneous

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(8.1) 'The Art Not To Die'

You died. Hm, very annoying indeed. If you are a "No-ghost" or "Hellish" character, then you are wiped out now. Otherwise you became a ghost on the same dungeon level as you died on. Your items are scattered on the floor, now what to do? The items will disappear forever if you leave that dungeon level and noone remains down there to "keep the level static" or "hold the level", as the technical terms are. If you think you really need the items, ask someone to get down to your dungeon level and either revive you there using a 'Scroll of Life' or pick up your items and give them back to you in town after you revived in the town's temple (green '4').

If your character level is still very low, you can just decide to suicide and start over. That is sometimes easier.

In TomeNET you will often encounter new situations that can lead to death. The most important thing here is that you keep in mind your mistakes of the past to prevent them from happening again. A key to winning is a firm knowledge of the monsters that you encounter, so you will be able to decide if you should attack or flee.

In my opinion playing TomeNET can be called "the art not to die".

Notes:

- As an everlasting character you can somewhat cheat death by activating "Instant Resurrection" in any temple, see (4.5a) for details and drawbacks.
- You can use the /page command to get someone's attention if he seems afk and you need his help. This command will make his game client beep 3 times.

(8.2) Character Dumps

You should send in character dumps, if you have reached an intermediate level, to <http://angband.oook.cz/> or if it died an interesting death or if something unusual happened to your character, or if you just want to show off your special way of distributing skill points. Character dumps are always nice to view. :)

You can create a character dump by invoking the character screen by pressing 'C' and then pressing 'f' (as it states at the bottom).

Character dumps are automatically created in your /TomeNET/lib/user folder if your character dies. The filename is charactername-death.txt, for example Gandalf-death.txt. (no overwrite-check is performed.)

Clients of version greater than plain 4.4.2 will also generate an automatic dump when you win the game by defeating Morgoth. Following above's example, it will be named Gandalf-victory.txt accordingly.

Also, newer clients will automatically take an xhtml screenshot too when a char dump is made, of same name but with .xhtml ending. Those can be viewed in most webbrowsers.

(8.3) Golem creation

Players can create golems, mindless animated humanoids that will fight for them. As long as the golem is not in their way of moving, monsters won't attack golems, but instead the controlling player.

Although golems can kill monsters, you don't get credit for it and they are more of a fun feature than a serious enhancement to your character, so don't be too hell-bent on creating a golem or you will be disappointed.

To create a golem, you will need these parts:

-A 'scroll of Golem Creation'

- A massive piece of a specific material
 - Arms, up to 4. (Arms are optional, but without arms it cannot attack!)
 - Legs, must be exactly 2.
 - Command scrolls (see below). If a command scroll is not in your inventory when you create the golem, it will not understand that command later on even if you acquire that type of scroll afterwards! So make sure you carry all 3 command scrolls before creating it.
- (Command scrolls are not consumed upon golem creation.)

After the golem has been created it will start out passively, not following any particular command. It will just sit there doing nothing. To actually control it and make it do something you will need 3 command scrolls. These aren't read but activated, meaning you don't use 'r' key but 'Shift+a' to toggle them. On activation they toggle the golem's behaviour. They are infinitely reusable. If you toggle a scroll a second time, the golem will return to sitting around idly, doing nothing.

The scrolls are:

- A 'Golem Scroll of Attack'
- When activated, the golem will move towards your current target (provided it is actually hostile) to attack it.
- A 'Golem Scroll of Guard'
- When activated, the golem will automatically attack any hostile creature that moves up next to it.
- A 'Golem Scroll of Following'
- When activated, the golem will follow you around as long as it has nothing else to do (no guard/attack command being executed), see below:

These three command stack. For example you can activate both 'attack' and 'following' command, in which case the golem will follow you around, but as soon as you target any hostile creature it will go to attack it!

If you have gathered all these items in your inventory, read the scroll of golem creation!

Each arm will inflict (x)d(arm value) damage on a target.
The arm value is displayed in brackets, part of the item name.
The 'x' are listed in the materials table below.
Example: A 'Golem Arm (+8)' of an 'Iron Golem' will do 6d8 damage which means that each hit will inflict between 6 and 48 damage (27 on average).
Each leg will increase the golem's speed by the number displayed on the leg.

The material determines armour class, hit points and the damage dice count of the golem. Materials are:

Wood	20 AC,	10d10 hit dice,	2 damage dice.
Copper	40 AC,	10d20 hit dice,	4 damage dice.
Iron	70 AC,	10d40 hit dice,	6 damage dice.
Aluminium	90 AC,	10d60 hit dice,	8 damage dice.
Silver	100 AC,	10d70 hit dice,	10 damage dice.
Gold	130 AC,	10d80 hit dice,	12 damage dice.
Mithril	160 AC,	10d100 hit dice,	14 damage dice.
Adamantite	210 AC,	10d150 hit dice,	16 damage dice.

Some rumours say that the highest materials can only be found on even deeper dungeons than where Morgoth, Lord of Darkness resides.

If the creator inscribes items in his inventory with '@G' and then creates a golem, those items will be transferred to the golem (careful, they cannot be retrieved!) and fuse with it, bestowing it with their abilities.

The following rules are applied:

- An item 'of life (+x)' increases the hit dice number by x, by up to +3 in total (so the golem gets 13dXXX hit points).
 - An item that improves the player's tunneling ability bestows the KILL_WALL ability upon the golem.
 - An item that gives fire or acid resistance will make the golem immune(!) to fire or acid.
 - An item that gives nether or nexus or disenchantment resistance will give the according resistance to the golem.
 - Appropriate runes can be used for the resistances/immunities listed above, which may be cheaper than using items.
- All other items/abilities have no effect.

Golems can't be detected by ESP, they regenerate quickly, they are powerful and can push past weaker monsters, they can bash doors. They can dig through rock, they are immune to cold, electricity and poison, they don't know fear

and can neither be confused nor paralyzed. They are immune to teleportation attacks. Golems have always the maximum possible hit dice. Further, golems count as '100 %clones', hence giving no experience, items or form credit (for mimicry users) if someone kills them. Golems always attack by hitting with their arms for raw physical damage. A golem has the same level as its owner had at the time of creation. Golem owners don't get experience for monsters killed by the golem.

- *If the scroll of attack is toggled, the golem will attack its master's current target.
- *If the scroll of guard is toggled, the golem will start attacking monsters nearby. If there aren't any, it just waits.
- *If the scroll of following is toggled, the golem will just follow its master. If a scroll is activated although the according state is already active, the golem will stop doing that.

Last but not least, the golem is..

- following you on staircases up/downwards.
- transported with you by word of recall.
- not transported by normal teleportation.
- saved if you exit the game.
- the golem will never attack other players unless you set them to hostile via the party menu ('P'). If they are hostile, the same rules as for monsters apply (see the description of the 3 command scrolls above).
- never attacked in melee by other players except if hostile.
- Spells cast by other players will always hurt it though.

(8.4) Artifact creation

(Also see (5.9b) for details about artifacts in general.)

"Scrolls of Artifact Creation" count to the most wanted items in the game because of their power to turn a normal piece of equipment into a powerful random artifact. Often kings and queens look out for these since they are unable to use static artifacts, so they depend on rand-arts. The scrolls are very rarely found; occasions to buy one are fair in the expensive black market, but also the normal BM may sometimes offer some.

It doesn't matter where you are, what level you are, or whether your character has 'luck' or not when you read the scroll, the resulting artifact's power is always determined randomly and cannot be influenced by the player, except for hit point bonus available for characters that have 'winner' status (defeated Morgoth), which can be suppressed by inscribing the artifact creation scroll '!L' (also see 'type-dependant mods' list further below).

Note that randarts created by scrolls of artifact creation do not differ in any way from randarts that are found instead of created. (With the only difference that scrolls offer you the '!L' option.) The artifacts' power, price, stats, abilities and curses are generated exactly the same way, by the same program code, using the same probabilities.

Here is some advice how to use these most valuable scrolls wisely:

DOESN'T ENCHANT WHOLE STACKS:

- Don't use scrolls of artifact creation on item stacks, it would reduce the stack to 1.

ONLY WORKS ON STANDARD EQUIPMENT:

- Artifact creation only works on items that can be equipped - with the exception of tool items like diggers, picklock, money belt, device of theft prevention, tarpaulin, flint, mummy wrapping, climbing set. These won't work! Also, it does not work on rings of polymorphing or amulets of telepathy!

DOESN'T WORK ON EGOS / ARTS:

- Don't use them on ego items or artifacts, or you will lose the scroll!

Watch out: 'Indestructible' and 'Cursed' rings are ego items too, so are 'Amulets of Telepathy' and Dragon Scale Mails 'of Defense', so you cannot art these!

Also you cannot art 'Rings of Polymorphing'!

-Ammo that is '(exploding)' is actually not an ego item! Contrary to intuition, it is technically just a pval. This means that you can artify basic ammo that is '(exploding)'.

Note that using exploding ammo instead of non-exploding ammo for artifact creation does not affect whether or not the resulting randart will actually be exploding or not, so it does not matter.

THE BASE ITEM MATTERS, ENCHANTMENTS DO NOT (except for jewelry, see below):

-You will want to use the cheapest base item version you can find, because it will get rerolled randomly anyway. This means that you can even use cursed items, it doesn't matter (just make sure it's not a ring named 'A Cursed Ring of...' because that kind of curse is an ego-power!).

For example there is no difference between "arting" a ring of extra attacks (+3) and a ring of extra attacks (-1) {cursed}. In fact, you should art the cursed one, because you can still get money out of the (+3) one by selling it to a store.

However, jewelry that has +hit, +dam or +AC mods is a special case, read on:

HOW IT WORKS ON JEWELRY:

-In general, it's not a good idea to try to turn a ring or amulet that has high bonus numbers into an artifact, like for example a ring of speed (+11) because these numbers will get erased and randomly re-rolled. Your great speed ring will not get more than +7 speed as a randart, much likely less, so speed rings in particular are very poor targets for artifact creation.

So if you want to use the scroll on say a ring of extra attacks, you should actually use the cheapest one you can find, like (+1), or even a cursed one. It doesn't matter, because it will get rerolled randomly anyway, and your cursed version could just as likely end up as an awesome (+3) high end randart ring of extra attacks.

However... read on:

-On jewelry (+to-hit,+to-dam) and [+AC] will stay the same, for example a ring of slaying (+10,+15) will keep the (+10,+15) and an Amulet of Reflection [+11] will keep the [+11] to AC when turned into a randart.

(Any dice (xdy) as well as _base_ AC [x,+0] on jewelry will always become 0, but there is currently no jewelry in the game that has damage dice or base AC.)

-When arting jewelry, keep in mind that it does NOT work on amulets of telepathy, rings of polymorphing or on rings that are named 'a Cursed Ring of..' (because that's not a normal curse but an ego-power)!

HOW IT WORKS ON NON-JEWELRY:

-All boni, to-hit/to-dam/to-ac and the pval/bpval (those (+x) bonus) are randomly rerolled. So it won't matter what stats the item has, only its base type is important.

ITEMS THAT ALREADY HAVE ONE OR MORE ABILITIES:

-Some items already possess certain abilities even without ego powers.

For example dragon scale mails or jewelry. Important: The abilities of these items will be added to the randart abilities when it comes to determining the total power of that random artifact. That means that you're less likely to see many additional abilities on an item which already has several abilities in it's basic form.

For example it's hard to get extra mods on a Multi-hued Dragon Scale Mail, and in fact impossible to get any extra mod on a Power Dragon Scale Mail, so don't waste a scroll on this one.

-However, IGNORE_ flags on items are an exception and do not count into this. Also, when selecting randart mods, the game will not check if that mod already existed on the base item (example: 'everburning' mod being added to a feanorian lamp, which already has that by default ie needs no fuel), so if unlucky it might seem as if an item did not gain any mods, but in fact it just did not gain any NEW mods it didn't already possess.

-'Activation' does not tax the base power either. It's a free property same as ignore-flags mentioned above. (Prominent example: Dragon scale mails.)

-Note that any mod the base item type already possesses will definitely also be

in the final randart.

Examples: Shadow Blades and Witan Boots will modify stealth, Demon Hammers will always have SLAY_DEMON mod.

However, there are certain exceptions:

- 1) if an item gains AGGRAVATE flag in the artifying process, it will lose any stealth or invisibility. This allows more than +5 speed on Witan Boots for example.
- 2) Slay flags can be upgraded to kill flags. So a Demon Hammer will lose its granted SLAY_DEMON flag if it gets KILL_DEMON instead.
- 3) -Resistances can be upgraded to immunities. So a Serpent Scale Mail will lose its acid resistance if it gets acid immunity.
-Confusion resistance is overwritten by chaos resistance.
- 4) Minor ESP base flags can be removed from the item in these ways:
-Dragons replaces Dragonriders
-Evil replaces Orc/Troll/Giant/Undead/Demon
-Full ESP removes all other ESP flags
- 5) If the item ends up cursed, certain granted base flags can be removed too:
-Curse removes blessing
-Experience drain removes hold-life
-attribute mali remove the according sustenance (STR/INT/WIS/DEX/CON/CHR)

MULTI-HUED DRAGON SCALE MAIL IMMUNITIES:

-As a specialty, the immunities on MHDSM are actually *retained*! They are not rerolled randomly but survive the artifying process. So you can pick a MHDSM with two immunities of your choice and attempt to use an artifact creation scroll on it to make it acquire additional powers (it cannot gain any further immunities though, since 2 are the maximum for any type of item).

Note that MHDSM are poor targets for artifact creation though, because their immunities and resistances already account for a high amount of 'item power', meaning that it will be very hard to get good additional powers on them from the artifact creation process.

POWER DRAGON SCALE MAIL:

As mentioned above, it is impossible to gain any additional powers on PDSM, so don't waste your artifact creation scroll on it!

DISCOUNTED ITEMS:

-Items will lose any discount tag when they are artified.

Also note that randarts cannot get more than two immunities in total.

Mods on the final randart:

The item will gain a random number of random properties. The more powerful it becomes, the higher a chance of also becoming 'aggravating' will be.
(See (5.8) for more information about AGGRAVATE flag.)

There is always a 10% chance that the resulting randart will be 'cursed'. Cursed randarts cannot be sold to shops even if the curse is broken. They gain only very few abilities, which are accompanied by different types of curses.

All armour-type randarts will have at least +10 to AC bonus (except if they happen to be cursed), usually much more, dragon scale mails especially. Also, the higher level the base type of an armour, the more +AC it can expect as a randart, because armour gets baselevel/15 added to its AC. Base item types that come with +AC (Mithril Helmet always comes with +10 AC pre-enchanted for example, see k_info.txt) get half of that added to their AC too. These +AC boni from base item level and base item pre-enchancement do not factor into the artifact's power, ie they do not "count" in the flag cost calculation, except when the +AC exceeds +30, which is always costly. So basically for armour, you want to use the base item type with the highest pre-enchancement and with the highest base level. Usually you won't need to pay attention to this though, because the higher level items are automatically the better items anyway and hence you will pick them without much thinking. :-p

The base Item's weight, price or rarity (not to be confused with the item's base level, which however only matters for armour pieces as explained above) do not have any influence on the randart creation process.

Possible mods that randarts may get depend on its base type.

Further, there are general mods that may appear on all items regardless of its type. For each applied mod there is a chance of 50% to be picked from either type-dependant mods or general mods.

- Ammunition (shots/pebbles, arrows, bolts) will never get general mods but only type-dependant ones.
- Boomerangs, bows, crossbows and slings will somewhat less often receive type-dependant mods than general mods.
- Dragon Scale Mails will more often receive type-dependant mods than general mods.

All types not listed under 'Type-dependant mods' will only gain general mods (for example all jewelry, ie rings and amulets).

Last but not least certain mods will limit or even cancel certain other mods, sometimes following general rules, sometimes item-type specific rules:

For example an item that provides critical strike and strength bonus might at first randomly obtain a +8 bonus for its critical strike mod, but then the strength mod will cut down the final randart bonus to a +5, because items aren't allowed to give more than +5 to any character stat (str, int, etc).

Similarly, stealth is limited to +5 on most items except for cloaks, so you cannot get Witan Boots that give more than +5 to speed, since they also always modify stealth (because the base item type modifies stealth), and stealth is capped at +5. (Exception: If they get aggravation flag.)

On boots, +speed mod takes precedence over most other limiting mods, which means that speed-limiting mods will be erased from the boots in most cases if they threaten to cut down the final pval. Note that mods provided by the base item type can never be removed, so the stealth mod will never be removed from Witan Boots and therefore always limit their speed to the stealth cap of +5.

Type-dependant mods:

(Note: The probability of each mod varies, depending on the item type)

Bows, crossbows, slings

- Extra shots
- Extra might
- +hit bonus
- +dam bonus

Weapons

- Blessed (usable for priests without penalty)
- Hit point bonus (+LIFE) (*)

Weapons, boomerangs

- Elemental (acid/elec/fire/cold/poison) brands
- Increased damage dice/dice sides
- All SLAY mods (also have a chance to add the corresponding ESP)
- All KILL (*SLAY*) mods (will also add the corresponding ESP)
- Critical hit bonus
- Vorpal mod (swords only, see (5.8) for details)
- Extra attacks
- Extra +hit and +dam bonus
- Extra +AC bonus
- Vampiric life leech
- Chaotic (same as ego power)
- Reduced weight

Mage staves

- Sustain wisdom
- Sustain intelligence
- See invisible
- All possible ESP mods (including ESP_ALL)
- Extra +mana capacity bonus

Boomerangs (also see 'Weapons' above)

- Extra shots

Dark swords (also see 'Weapons' above)

- Increased anti-magic (not over 30% in total, see (5.9)).

Ammunition

- All elemental brands (acid/elec/fire/cold/poison)
- All SLAY mods
- All KILL (*SLAY*) mods
- Vampiric life leech
- Exploding property. The type of explosion damage is randomly picked

from this list:

Acid, electricity, fire, cold, poison,
light, dark, confusion, plasma, sound, shards,
force, inertia, mana, meteor, ice, chaos, nether,
nexus, time, gravity, stone-to-mud, teleport away,
scare monster, nuke, disintegration, hellfire.

Extra +hit and +dam bonus, this caps at +12 hit and +6 dam.

Either +1 extra damage die sides or +1 extra damage dice.

Boots

Feather falling
Levitation
Climbing
Extra +AC bonus
Stealth
Speed
Reduced weight

Gloves

Free action
Mana capacity bonus
Auto-ID
Strength bonus
Dexterity bonus
Extra attacks (+1 or +2)
Critical hit bonus
One of the elemental brands (acid/elec/fire/cold/poison) or SLAY mods
Vampiric life leech
Hit point bonus (+LIFE) (*)
Extra +AC bonus (less common than on other items)
+hit and +dam bonus

Caps and helmets

Resist blindness
Auto-ID
All possible ESP mods (including ESP_ALL)
See invisible
Intelligence bonus
Wisdom bonus (less common than on crowns)
Extra +AC bonus (somewhat more common than on other items)
Infra-vision
Resist confusion
Resist fear
Hit point bonus (+LIFE) (*)

Crowns

Resist blindness
Auto-ID
All possible ESP mods (including ESP_ALL)
See invisible
Intelligence bonus
Wisdom bonus
Extra +AC bonus
Mana capacity bonus
Infra-vision
Faster mana regeneration
Resist confusion
Resist fear
Hit point bonus (+LIFE) (*)

Shields

All basic resistances (acid/elec/fire/cold)
Reflection
Reduced weight

Cloaks

Stealth
Feather falling
Levitation
Fire/cold/acid/lightning resistances
Chance for either lightning or fire aura and corresponding resistance
Chance for shard resistance
Hold life
Invisibility (see (5.16) for details.)
Extra +AC bonus (somewhat more common than on other items)

Body Armour (except for Dragon Scale Mails)

Stealth
Hold life
Constitution bonus (has a chance to include constitution sustenance)
All basic resistances (acid/elec/fire/cold)

Hit point bonus (+LIFE) (*)
 Reduced weight
 Extra +AC bonus
 Royal Armour (Heavy mithril/adamantite armour only usable by winners):
 (these mods may spawn additionally to body armour specific mods above)
 Reflection
 Mana resistance
 somewhat increased chance to spawn base immunities or +LIFE.
 Dragon Scale Mails
 Hold life
 Strength bonus (has a chance to include strength sustenance)
 Constitution bonus (has a chance to include constitution sustenance)
 Hit point bonus (+LIFE) (*)
 Extra +AC bonus
 Rings
 Rings that come with one of the four basic resistances in their base
 version (fire, cold, lightning, acid) will have an especially high
 chance to obtain the according immunity.
 Light sources
 Increased light radius
 Everburning (no fuel needed; applies only if item usually needs fuel)
 (*): This mod (+LIFE) may only spawn on a randart (no matter how it is created,
 be it via scroll or via killing of monsters) if either
 a) the player is a winner (Queen/King/Empress/Emperor) or
 b) the server has the 'Fallen Kings Etiquette' enabled, meaning that
 players who won once but then died cannot use static artifacts either
 (press '~' followed by 'd' to check the server settings), and the
 player is actually a fallen winner who lost his title due to death,
 AND his level is at least 50.
 If a player actually wears/wields a +LIFE randart, the +LIFE mod will only
 have an effect on winners (Queens/Kings/Empresses/Emperors).
 If you don't want to create a randart that has a chance for +LIFE, you can
 inscribe your scroll of artifact creation: !L

General mods:

(Note: The probability isn't equal for each mod)

Bonus on any stats
 (has chance to include sustenance for that stat;
 wisdom might also include 'Blessed' flag)
 Sustenances on any stats
 (has chance to include bonus for that stat)
 Stealth
 Searching
 Speed
 (cannot spawn on shields)
 Any base immunities:
 Acid, Electricity, Fire, Cold.
 (A randart cannot have more than two immunities at once.)
 Free action
 Hold life
 Any base resistances
 Acid, Electricity, Fire, Cold.
 Any of these medium and high resistances:
 Poison, Light, Dark, Blindness, Confusion, Sound,
 Shards, Nether, Nexus, Chaos, Disenchantment
 Feather falling
 Glowing
 (+1 light radius)
 See invisible
 All possible ESP mods
 (including ESP_ALL aka full 'telepathy')
 Slow digestion
 Faster mana regeneration
 Faster HP regeneration
 Anti-magic shell
 (Legendary saving throw is raised to 95% cap,
 also see 'NO_MAGIC' in (5.8) for more details.)

Item Mod Limits:

Certain power limits are applied on items, depending on mod-combinations or the item's base type.

Items cannot give more than +11 to speed, crit or mana.
Items that give two of speed, crit or mana cannot give more than +7.
Items that give speed, crit and mana cannot give more than +5.
Items that give +speed via base-item enforced mod (eg Rings of Speed) cannot get more than +7 speed (which is already *extremely* rare).
Items cannot give more than +6 luck.
Items cannot have more than +5 stealth, except for cloaks which can have +6.
Items cannot give more than +5 to stats (STR/INT/WIS/DEX/CON/CHR).
Items cannot have more than +4 searching.
Items cannot give more than +3 extra attacks. Gloves can only give up to +2.
Items cannot give more than +3 life (+30% base hit points).
Items that give both extra attacks and life are capped at +1.
Items that add mana, give mana regeneration or are blessed will never have an anti-magic shell.

Headgear cannot give more than +6 infra-vision.
Headgear cannot give more than +3 speed.
Headgear cannot give more than +3 mana.

Gloves cannot get more than +6 to-hit or to-dam bonus, so (+6,+6) is max.
Gloves cannot give more than +2 extra attacks.

Amulets cannot give more than +3 to stats.

1-handed weapons and shields cannot give more than +3 speed.
1-handed weapons cannot give more than +2 life (+20% base hit points).
2-handed weapons cannot give more than +6 speed.

Shields cannot gain +speed mod.
Boomerangs cannot gain +speed mod.

+Hit points mod (LIFE) caps at +3 and can only spawn on..
melee weapons (caps at +2 if the weapon can be dual-wielded),
hats, gloves and body armour.

Technical internals

More details about how randart creation works internally:
First, a 'target power' is chosen randomly, usually in the range from 40..120.
Then, TomeNET tries several times to generate a randart that approximately fits into that target power. To do this, after a randart is randomly created, all its abilities are checked and calculated into a single number, the 'artifact_power'. If this approximately matches the 'target power', the randart is finally created. If the numbers differ a lot, the randart is erased and randomly recreated until its powers are fitting. The higher the target power is, the more likely the randart will be 'aggravating nearby creatures'.
(See (5.8) for more information about AGGRAVATE flag.)

(8.5) Reward item creation

PvP-mode characters may obtain item rewards by killing a lot of opponents (see (6.13) for details on PvP mode), and events such as Highlander Tournament and Dungeon Keeper will give parchments to the winners that can be turned in at the mayor's office for reward items.

Reward items are different from all other items (those obtained from extermination orders, monsters, chests, acquirement scrolls or even artifact creation scrolls) in the way that they are specifically tailored to fit your character relatively well.
There is still some randomness playing a part in it though, so the outcome will always vary and not necessarily be exactly what you wished for.

Since the resulting item will be affected by your character and skill chart, what you must actively do BEFORE turning in a deed for a reward item is:

- spend skill points! Never get a reward item without having spent any skill

points. Make sure that you have at least 3.000 in your vital skill(s) so the reward-creating algorithm notices it.

If you have increased your 'Magic' skill even just a little bit (note that increasing Mimicry will also increase Magic skill slightly!) you will have a chance to receive caster items (eg some hat of intelligence).

Especially important: Magic skills, weapon skills, Martial Arts skill. These determine weapon (or mage staff) reward probabilities and armour weight if you happen to get an armour piece. Magic classes also have a somewhat higher chance to get a crown instead of helmet/cap.

Note: Critical-strike skill will aim at sword-type weapons, same as if you skilled Sword-mastery skill.

If you have Sword-mastery and Anti-magic skill, you will get a Dark Sword in case you receive a weapon as reward.

- wear roughly the appropriate type of armour (ie light vs heavy) and..
 - wield the type of weapon (dual, 1-handed or 2-handed) that you prefer.
- This might affect three factors randomly: An actual weapon reward, whether or not you might gain a shield for reward, whether you might get light or heavy armour for reward. Keep in mind that there is still a random factor in what item you will actually get.
- Note that you will not receive a shield if you're dual-wielding or if your class is rogue.
- Regarding weapon weight, note that a weapon reward will usually not give you less attacks per round than the weapon you are already wielding (if any). If you don't wield one, it aims for 3 attacks per round as default.
- runemasters who receive a piece of armour will usually (as long as it's reasonably possible regarding ego-power type and value) get one that provides resistance to one of the elements they can conjure up with their runecraft skills. For this special feature any skill greater than zero in a particular rune element is sufficient, instead of the usual 3.000 threshold.
- Resistances your character already possesses do not become prerequisites for the item, so it will not end up redundant with Draconian resistances for example.
- druids will never receive a mage staff even if they haven't trained their Martial Arts skill above the starting value yet.

It does not matter if a skill is trained further above 3.000 or what your character level is. Skills are used to 'unlock' item classes such as 'mage staff' or 'specific melee weapon' but for example you won't have a higher chance to get a sword if you increase Sword-mastery to 5.000 than if you only had it at the minimum threshold value of 3.000.

If you qualify for multiple reward classes, which are 'specific melee weapon', 'specific ranged weapon', 'mage staff', 'trap', the following priorities apply:

- A melee weapon chance will nullify a mage staff chance.
- A melee weapon vs ranged weapon will have about equal chance to get picked.
- A mage staff will have somewhat better chances vs a ranged weapon.
- Traps have about 75% chance to override any other reward class.
- Aside from the reward class picked, there is still about a 50% chance to receive an armour piece instead (even true for trap class).

Aside from these, randomness is always a factor so the result may vary. The final quality of the item is therefore pretty random, except that certain bad or very cheap item types or unfitting ego powers (depending on your character) are banned.

(8.6) Alternative ruleset 'Ironman Server'

A server might be configured with a special ruleset called 'Ironman Server' rules. Such a server will be listed on the meta server under

"TomeNET Ironman ..."

instead of just

"TomeNET ..."

and when you connect to it and enter the character overview screen, at the bottom there will be a line reading

"The server is running 'IRONMAN_SERVER' settings".

In general, Ironman rules are stricter than normal server configurations.

The differences between Ironman ruleset and normal servers are as follows:

- Only one character is allowed per account.
- All characters are no-ghost mode, so they have only 1 life (ie 'unworldly').
- Usually, accounts expire slower (183 days instead of 62 days).

- The Training Tower is empty, no monsters or items spawn in there (except for the Arena Monster Challenge event).
- Certain extra stores may spawn in the dungeons ('Seasoned Tradesman', or specialized stores similar to town stores).
- All dungeons are ironman (see (4.3)):
- Bree's dungeon 'Barrow-Downs' is normal ironman,
- other town dungeons allow recalling every 500 ft (10 floors),
- non-town dungeons allow random recalling at a 20% chance per floor,
- on dungeon levels shallower than level 20 (eg easier than -1000 ft Bree), recalling is impossible, overriding the above rules.
- Players may recall INTO dungeons to 50 ft + every 1000 ft, eg to 50 ft, 1050 ft, 2050 ft,
- Players start with more gold (class-dependant) to buy supplies.
- Players additionally start with a few cure wounds potions.
- Players get a message in chat when party members take a staircase.
- If a party owner dies, someone else from the party is automatically promoted to party owner, so parties won't get disbanded easily, making party-diving more effective.
- Mimicry users have a very slim chance of insta-learning a form! (Note that this also works 'in advance', ie while you have not yet the required mimicry skill to actually see the learn-message show up.)
- Item level restrictions are disabled and have no effect.
- Extermination orders can be acquired as early as at level 3 instead of level 5 and the amount of monsters that needs to be slain is even somewhat lower.
- Temporary luck bonus from deeds is somewhat longer.
- Usually, scheduled artifact resets happen less frequently (if at all). (See (5.9b) for more information about artifact resets.)
- Halloween event allows players up to 40 instead of 35, and the Great Pumpkin spawns on floors up to level 49 instead of 39.
- Stealing from stores is possible right away instead of requiring a certain character level (usually 5 on normal servers).
- Server settings that would usually turn items dropped/thrown by very low level characters to level 0 will be ignored, ie item level is kept.

(8.6a) Special server type 'Arcade Server'

*** Under very sporadic development -
 features might be incomplete/not working.
 To check the source code, look for ARCADE_SERVER definitions.
 The arcade server might not be running at all times but
 you could ask for it to be started when an admin is online. ***

Like 'Ironman Server' mentioned in the paragraph above, 'Arcade Server' is an alternate ruleset, which is however *very* different from normal gameplay:

The Arcade Server was originally created and developed by Moltor. Later on Kurzel also joined the project. It has nothing to do with normal dungeon dwelling but instead features some hot action games that merely (ab)use the TomeNET 'engine'. :)

Note: After logging in you may press '?' key for a help screen.
 The descriptions below are partially taken from that help file.

 If you log on to an Arcade Server, your client will automatically attempt to load the required macro file to play, which is
 - 'arcade-win.prf' on Windows OS
 - 'arcade-x11.prf' on X11 (Linux/OSX)

If your client is older than 4.5.3 you probably don't have these macros.
 In that case you can download them at the bottom of the downloads page on www.tomenet.eu and extract them to folder TomeNET/lib/user.
 But of course you should actually just update your whole client instead.

On the Arcade server, you can play..

Smash'em

Smash TV was a kickass arcade game from 1990, similar to Robotron. The player

is attacked from all sides by mostly-unarmed goons. The arcade version uses two joysticks to allow you to run and fire in different directions. Unfortunately tomenet doesn't support joystick input. Here you must use special macros to shoot. For details press '?' in the game.

The Smash'em macros provide the following controls:

F1	starts the game.
F2	starts the game at level 4, skipping the early levels if you feel that those are too easy.
q,w,e a, ,d z,x,c	makes your character auto-fire in the according direction (y key works same as z key).
s	stops firing/bandages.
,	same as '<' key (ie go up one level).
numpad	movement.
Q	quit game.
TAB	switch macro set from "Smash'em" to "Tron".

Tron

Like in the movie "Tron", a light cycle racing game where you leave a trail of energy behind you forming a wall in which you and other competitors can crash which results in their elimination.

Power-ups will randomly spawn and increase the trail length.

Up to four players can participate at once. For details press '?' in the game.

The Tron macros provide the following controls:

F3	enter arena.
F4	start game.
F5	list options.
F6	reduce game speed.
F7	increase game speed.
F9	reduce snake max length.
F10	increase snake max length.
F11	reduce amount of walls.
F12	increase amount of walls.
Arrow keys or numpad 2,4,6,8	movement.
Q	quit game.
TAB	switch macro set from "Tron" to "Smash'em".

Hit F4 as soon as at least two players have joined the areana via F3 key to start the actual match.

To toggle an option, type "option" or "option on"/"option off" in chat. Speed can be changed via "moar speed"/"less speed", length can be changed via "moar length"/"less length", walls can be changed via "moar walls"/"less walls".

Food Fight

<to come>

Boat Arena

<to come>

(8.7) Game engine limits

The TomeNET server, aka the "game engine", runs at 60 frames per second. This imposes certain limits that can clash when your character exceeds certain speed and attack numbers, if you are not on a relatively deep dungeon floor:

The deeper you go, the slower time passes (compare (4.14)). On the world surface time passes the fastest: A turn for your character takes around 0.7 seconds in real time. (Vice versa, 1 second equals ~1.4 game turns there).

A character moving at the maximum possible speed of +90 (actually you can get more speed, but it will only help to counter the slowdown your character might experience from carrying a heavy backpack, it will not increase your speed any further) is able to perform 8 actions per character turn. That means in Bree (or in general on the world surface, it's all the same) that character could perform 8 actions in 0.7 seconds. That is roughly 0.088 seconds per action. This means that the game engine (running at 60 fps) has approximately 5.3 frames for performing each action.

Usually this is fine, because an action only takes one frame. With two notable exceptions! Shooting with ranged weapons and the auto-retaliator for melee weapons.

Those split up the single attacks (each strike/each shot) so that each of them takes one frame, instead of all of them being performed in a single frame. Since the aforementioned character at +90 speed in Bree only has 5 frames available, that means he can only utilise 5 blows or shots at best. So if he attacks a target dummy in Bree to measure his damage, he will get no further damage increase for more blows/round than 5.

If he moves at +70 speed, he can already benefit from a 6th attack, at +50 speed from a 7th. Remember however, this limit is so "low" only because he is at dungeon level 0 (Bree/world surface).

However, this problem is not that bad when you consider that time passes much slower at deeper dungeon levels, giving the game engine more room to fit in all the actions:

At floor level 85 or deeper (aka 4250ft), the slowdown caps (although there is a special further slowdown for the Nether Realm). At level 84 (4200ft) time has already been slowed down so much that a character at max speed ('Fast +90') will benefit from 14 blows or shots per round, which is the maximum you can benefit from at max speed.

This limit can only be reached by a dual-wielding warrior, other warriors will only reach 13 BpR, which is reached at dungeon level 77 aka -3850ft.

If boosted by friendly spells mindboost, zeal and by berserk magic (or ability) a dual-wielding warrior could reach $14 + 1 + 2 + 1 = 18$ BpR. The maximum speed for which this high BpR still makes sense (on dungeon level 4200ft and deeper) is +55 speed. If you regularly get boosted by party members in this crazy way, consider using accuracy/damage or critical-hits equipment instead of extra-attacks items so you can increase your speed above 55 and still get full benefit of the EA boosts.

Even at floor level 67 (the first Angband floor) a character of speed +90 (or higher) could already utilise up to 11 attacks per round without dps loss, and a character of speed +71 can even utilise up to 13 attacks per round! Again a feat that hardly any character will be surpassing.

This means that although the game engine limits get exceeded when testing dps on the target dummies in Bree with a character that moves at extreme speed and uses either melee auto-retaliator or slings/bows/crossbows, there is basically no problem at all when fighting monsters in the deeper dungeons.

If you want to compare dps of different weapons or the effect of extra-attack equipment vs critical-hit equipment in Bree, first remove all items that give +speed (and apply to both scenarios) to make sure you get accurate numbers. The limits in Bree (and hence on the world surface) are:

+90 speed -> max 5 attacks

+72 speed -> max 6 attacks
 +53 speed -> max 7 attacks
 +43 speed -> max 8 attacks
 +37 speed -> max 9 attacks
 +32 speed -> max 10 attacks
 +28 speed -> max 11 attacks
 +25 speed -> max 12 attacks
 +22 speed -> max 13 attacks
 +20 speed -> max 14 attacks
 +18 speed -> max 15 attacks
 +11 speed -> max 20 attacks (the cap for blows per round, actually!)

In case you test this and find rounding errors, let me know! :-p

Likewise, if you want to compare speed vs critical hits, first remove all items that give extra attacks and would apply to both scenarios.

(8.8) Troubleshooting

Note: Some of these problems are deprecated and don't exist in this form or at all anymore. Some messages might also vary slightly.

For trouble with lagging out or freezing up, see PROBLEM 25 and 28.

PROBLEM 00: I am behind a firewall. What ports do I need to open in order to play TomeNET?

SOLUTION: If you want to connect directly to a specific server by specifying its address via command-line or config file, you only need to allow an outgoing TCP/IP connection to remote port 18348, that's the standard port servers run on. (If you'd like to play on the Ironman server, it's port 19348 instead of 18348. See (8.6) for more information about Ironman settings. For the Arcade server it's port 20348, see (8.6a) for more information about Arcade server.) If you want to make use of the server list that appears when you don't specify a particular server, you additionally have to allow the game to connect to the meta server which provides the server list. For this, remote port 8801 TCP must also be opened. If you don't have access to the firewall, for example in school or at work, you can still try to set up an SSH tunnel or a socks proxy server (on either the firewall machine or your PC at home or any other PC outside. Ask google for info about how to do that).

PROBLEM 01: I don't get to see a server list when I start TomeNET. Instead, I am immediately asked for account and password.

SOLUTION: This is a typical problem on Windows XP. There are 3 possible fixes:
 -Use 'Win98 Compatibility Mode' (Create a link from TomeNET.exe, right-click it, choose 'properties', choose 'Compatibility'. This option is available natively on Windows XP systems; for Windows 2000 systems first try the other two points mentioned below, if they don't help, get the compatibility mode update from www.microsoft.com or from www.c-blue.de/appupd.exe).
 -Move the 'TomeNET' directory to your drive's root. For example C:\TomeNET\...
 -Make sure the path name does not contain any spaces!
 -to edit your "TomeNET.ini" file and specify a host directly by specifying "HOST=europe.tomenet.eu".
 Or you can even give the IP address "HOST=37.187.75.24".

PROBLEM 02: I get to a server list, but it doesn't show any servers. It just says 'Press Q to enter a server manually' and that's it.

SOLUTION: There are 2 possible solutions.
 -There is currently no public TomeNET server running. That can happen if a server update is currently being applied or if for some reason the server just crashed. Try again after a minute.
 -There are some DNS problems. These can happen for various reasons although they aren't very likely. DNS problems can last for a longer period of time though, being very annoying. That the server isn't listed doesn't mean that it's down though. You should try to connect manually (press 'Q') to either:
 europe.tomenet.eu
 or (if that doesn't work either) directly to its IP adress:
 37.187.75.24

PROBLEM 03: When I start TomeNET I don't see anything except a small hollow yellow rectangle (the cursor). All windows stay black. It seems that the cursor reacts to my inputs by printing out some black hence invisible text.

SOLUTION: A rare problem that is not caused by TomeNET really, but usually happens on Windows XP and older:
MS Windows sometimes keeps the TomeNET font file opened although the client has already been terminated. Next time you start TomeNET it will be unable to open its font files for that reason, resulting in the lack of any text on the screen.
What to do is restart your MS Windows system and the text should be visible again. Instead of restarting you can also try just logging your Windows user account out and then back in right away.
(This usually only happens once, after updating the client.)

PROBLEM 04: All windows _except for the main window_ stay empty / stay blank.

SOLUTION: First make sure it's really a bug and not just missing window settings: Press '=' key and 'w' key and configure your windows appropriately. It is vital to set one of the windows to display game and/or chat messages, so you can actually read what other players write, and also keep track of combat messages!
When you're done setting up the windows, go to 'save options' (key 's').
If all the windows are still blank, read on:
Exact reasons are unknown but seem to only happen on MS Windows machines. Sometimes a simple reboot helps. If it doesn't, open TomeNET.ini file with a text editor, look for the window sections, change the fonts to the same settings (8x13) as in the [Main window] section: FontFile=8X13.FON , Font=8X13.FON .
Also, you could adjust the width/height of the windows (to 80x24 for example). Try other fonts too, maybe they work for you.

PROBLEM 05: I cannot browse (some) spell books, I see some LUA error messages if I try or when I connect to the server.

SOLUTION: Your LUA script files are outdated. Those files are responsible for any spell-casting and some other things.
To update them, you have 2 possibilities:
-Automatic update: Join the server, you should see a message in the chat window, saying that (some of) your LUA files are being updated.
-If for some reason auto-update doesn't work for you, download the latest client again.
Note: There was a bug in client 4.4.8, preventing it from auto-updating LUA files, which was fixed in 4.4.8a and higher again.

PROBLEM 06: TomeNET seems to freeze up while playing. (Also see PROBLEM 25 and 28, which offer different solutions for similar issues!)

SOLUTION: This can happen if your latency is relatively high and many messages are transported between the server and your client. In fact it's just your display that freezes up. In that state you can for example type a chat message and other players will read it.
Quit the game and join again to continue playing.
Or just start another instance of the game and log in, that will override the old connection, making your client quit with "resume connection" message.

PROBLEM 07: I am disconnected during gameplay. (Note: If it seems to be a lag-out or freeze problem, also see PROBLEM 25 and 28!)

SOLUTION: This can have several reasons. On disconnection a message box will appear, telling you about the problem. The following messages might occur:
"client quit"
 This just shows up if you regularly quit your client.
"Committed suicide"
 You just committed suicide..
"resume connection"
 This happens if you try to log in the same character with two TomeNET clients at once, the older client will quit and the client that just logged in will take over.
"Killed by..."
 Your character was finally killed/destroyed.
"Starving auto-kick"
 Your character was starving due to lack of food, and you

were not moving or performing any action for some time, so the game assumed you were AFK and kicked your character out to prevent it from starving to death without you noticing. What you need to do: Log back in and eat something as soon as possible.

"Starving to death"

You died to starvation.

"Timeout 08"

This happens if you 'lag out' on a slow connection or if the server or your computer is under very heavy load.

"Panic save failed"

This means the server just crashed and even failed to save the characters :(. It will usually be back online after a minute or earlier.

"Panic save succeeded"

This means the server just crashed :(. It will usually be back online after a minute or earlier.

"Server shutdown (save succeeded)"

The server was shut down regularly. It will usually be back online after a minute or earlier.

"Server shutdown (save failed!)"

The server was shut down regularly but saving the characters failed for some reason (insufficient disk space). It will usually be back online after a minute or earlier.

"banned for ..."

You were banned temporarily from the server (includes being kicked out).

"kicked out"

You were kicked out of the server.

"read error"

Can happen if you lag out or if packet loss occurs.

"write error"

Can happen if you lag out or if packet loss occurs.

"flush error"

Can happen if you lag out or if packet loss occurs.

"receive error in play"

Can happen if you lag out or if packet loss occurs.

"can't read on socket"

Can happen if your connection gets disrupted or overloaded. May especially happen on not-so-great connections if you die and the server tries to send a large bunch of death dump information to your client. Note that in that case you didn't die because of this error, but the error occurred because you already died.

"Server closed the connection"

Maybe a firewall or bad network problem.

"No login reply received"

The login process couldn't be completed. Probably a network problem, or really bad lag/timeout.

PROBLEM 08: I am disconnected from the server with an error message, this happens before I can even start playing.

SOLUTION: Read the error message displayed in a message box on quitting. Here is a list of possible errors and solutions:

"Your name is too long!"

Don't use names longer than 15 characters.

"Your name contains control chars!"

Don't use control chars in your name.

"No such character"

Your client tried to log in with a non-existent character (shouldn't happen).

"You are temporarily banned from connecting to this server!"

Self-explaining.

"disconnect in login"

Don't take too long for your character creation or you might time out.

"login failure" or "can't read on socket"+"net input error" in the character overview screen:

A wrong account or password was entered.

"Name already owned"

Account name already exists.

"Your client is outdated. Please get the latest one from <http://www.tomenet.eu/>"

Download the latest client, see (0.1).
 "Server responds 'Unknown client version'. Server might be outdated or client is invalid. Latest client is at <http://www.tomenet.eu/>"
 The server might be running an older version than your client is.
 "Sorry, the game is full. Try again later."
 Wow the game is really full!
 "Your accountname, username or hostname contains invalid characters" (or just "Net input error")
 Player characters are identified by 4 names:
 -Character name
 -Account name
 -Username (The name they are logged on with on their PC)
 -Hostname (The hostname of the connecting computer)
 The hostname is not really important. However, make sure that all of these names may only consist of letters, numbers, spaces, and all other characters with an ASCII code between 32 (SPACE) and 122 ('z').
 The username and hostname must not be empty. The character name needs to start with a letter ('A'..'Z' or 'a'..'z').
 "There is already another character from this user/machine on the server."
 You tried to login with two characters from the same account or machine simultaneously, which is usually forbidden.
 "Sorry, the server is for members only. Please retry with name 'guest'."
 Log in with 'guest'. You need to get an account for this private server in order to play. Check the server's intro screen for information about how to obtain an account.
 "That nick name is already in use. If it is your nickname, wait 30 seconds and try again."
 Happens if you get disconnected and then try to reconnect from a different IP adress before your character timed out (which takes approximately 20-30 seconds).
 ("Connection failed with status xx" (xx is an error code)
 This message should never appear.)
 "That server either isn't up, or you mistyped the hostname."
 The client was unable to connect to the server you specified. If you are sure that you have entered the correct IP adress or hostname, check your firewall (see PROBLEM 00 for more information).
 NOTE: Servers might be down temporarily when they are updated. So make sure to try again after a few minutes. If the server really seems to be down for a longer period of time, us admins are probably not at home and you'll have to wait for a bit, sorry. Such downtimes basically never happen though.
 "Server didn't respond!"
 The server is up, but something is awry. Wait for a few minutes, there might be admins working on it at the moment. Otherwise, visit the forum (see above).
 "Network verify failed!"
 May happen if you specify a wrong password or try to create an account which already exists.
 Also happens (following a "No Verify Response") if your connection to the server is *really* bad.
 If you get kicked out with an error message on the character overview screen (which seems to be empty), also see PROBLEM 14.

PROBLEM 09: I can't connect to the meta-server (the server that displays you a list of online TomeNET servers) or a specific TomeNET server. Instead my connection seems to time-out.

SOLUTION: If you are behind a firewall make sure that the TCP ports 8801 for metaserver and 18348 for the actual TomeNET server aren't blocked. (Well, the metaserver isn't needed to play - specify the game server via command-line or when asked for it after starting up the game then.)
 The meta server's hostname is "meta.tomenet.eu" and its IP is actually the same as the official game servers (37.187.75.24);
 In case there is a DNS problem somewhere in the internet you could just edit TomeNET.ini and replace the hostname by its actual IP.

- PROBLEM 10: I'm not blocked by a firewall, but I still don't see the metaserver when I run Tomenet. Instead after waiting for a short period of time I'm asked to enter a server manually.
- SOLUTION: The meta-server might be down or a DNS problem might be occurring right now. This can happen from time to time. You don't need the meta-server to play TomeNET though.
Just type in the hostname of the server you'd like to connect to, for official main server: `europe.tomenet.eu`
If the hostname doesn't work you can also try entering its IP address `37.187.75.24`.
Make sure your TomeNET.ini file contains the correct server port, usually 18348! This port isn't needed if you use the meta-list to choose a server to connect to, but it's important if you connect directly! (For linux the file is ".tomenetrc".)
You can connect directly to a TomeNET server and skip the meta server list by running your Tomenet directly from the command-line (DOS window) within its folder, adding the server IP as a parameter. (In windows2k choose START/Run... and type 'cmd' without quotation marks to open a command-line window.
Alternatively you can create a shortcut from your TomeNET.exe by right-clicking, dragging, releasing it. Edit this shortcut's properties and add the server IP to the command-line.)
For official main server it would look like this:
`TomeNET.exe europe.tomenet.eu`
If the hostname doesn't work for whatever reason you may try the IP address:
`TomeNET.exe 37.187.75.24`
- PROBLEM 11: The main window doesn't display the floor dots in town and in certain dungeons, like the Training Tower and Angband. Further, fields are sometimes not redrawn correctly, resulting in fake 'trails'.
- SOLUTION: Seems to happen on MS Windows machines sometimes.
Workaround (will slightly change the game's look, ie those dots):
Edit `/lib/user/font-win.prf` and comment out the lines which end on the string `'\31'` (should be 2 lines at the beginning of the file, those labelled 'Floors' and 'Invis Traps').
'Commenting out' means that you simply put a '#' symbol at the beginning of a line.
- PROBLEM 12: Every time I connect to the server it will automatically download LUA script files. However, they will have a size of 0 Bytes.
- SOLUTION: Possibly write-protection on existing files or the folder.
Workaround: Make sure you really have the latest LUA files in TomeNET's `/lib/scpt` folder (you can download them from <http://www.tomenet.eu/> or our personal pages). Then set all LUA files in that directory to write-protected. This will prevent TomeNET from overwriting them with 0 Byte files.
- PROBLEM 13: I seem to be able to login, create a new character or select a character, and see the message of the day (login screen). But right before the actual game starts I get a broken pipe / no packet reply error.
- SOLUTION: This might be caused by a misconfigured router (some D-Link models for example). Try to establish an SSH-tunnel from your PC behind the router to a machine outside of your LAN for port 18348 (TCP). (This might even reduce lag under certain circumstances.)
- PROBLEM 14: I get kicked out with an error message after entering an account name and password.
- SOLUTION: It's most likely because that account name is already in use by someone else so your password was recognized as 'incorrect' since it was most likely different from that user's password. Just try a different account name.
Likewise, if that account indeed belongs to you, you have probably made a typo while entering your password.
- PROBLEM 15: The level completely changed while I was on it.
- SOLUTION: No real solution at this time, sorry. See (0.5) for more information about that problem. ('types of crashes')
IMPORTANT: You should restart the client immediately and recall right after you logged back in, to avoid getting killed.
- PROBLEM 16: I cannot see monster x although I can 'See Invisible'.

SOLUTION: Some monsters have no appearance and cannot be seen at all.

PROBLEM 17: After my character appears in the actual game, I receive an orange message saying "Receiving updated file", followed by a red message saying "No access to lib directory!".

SOLUTION: The first message means, that one or more magic spells or prayers have been changed, and your client tries to automatically update its spell scripts to the latest version (LUA scripts in lib/scpt). Since this update didn't always work for everyone, and sometimes the scripts would be deleted instead of updated due to a bug, all spell scripts (LUA files) were set to be write-protected. This prevents accidental deletion, but also prevents auto-updating, which is indicated by the red error message! To solve this, you will have to delete the files within your /lib/scpt directory and replace them with the latest versions manually. If auto-download fails, download the latest client manually again.

PROBLEM 18: When I try to unpack the latest TomeNET ZIP file, I get strange messages telling of 'write-protected', 'read-only' or 'password-protected'. Afterwards, the client won't function properly.

SOLUTION: Make sure that TomeNET is NOT running while you try to install the new version. If TomeNET is running, the unpacking will fail to overwrite the existing files! Shut down TomeNET, then extract the ZIP (overwriting everything), then start TomeNET again.

PROBLEM 19: On GNU/Linux OS, When someone uses the /page command to page me, I don't hear the three beeps.

SOLUTION A: You are probably using OSS. If your soundcard or soundchip doesn't support mixing of multiple sources, that means only one program at a time can output sound. In that case, do the following: Make sure all your programs, like media players, instant messengers, system setting tools, etc. are set to use 'ALSA' for sound, not OSS. Now that all programs use ALSA, make Tomenet use ALSA too. You can do that by using an "ALSA wrapper" which takes the OSS sound output of any application that doesn't support ALSA natively, and wraps it to ALSA. The ALSA wrapper is called 'aoss'. After installing 'aoss', just use call it with the OSS application as parameter. Example: \$> aoss ./tomenet Another example (to start the Opera webbrowser): \$> aoss opera

SOLUTION B: If you are using X11, this problem may occur depending on your terminal configuration. You can try to change your configuration, or you can press '=' key to go to Audio Options and enable 'Use audio system for paging sounds'. This will result in paging sounds being played via your sound card, instead of the operating system's beep (requires TomeNET v4.4.5 or higher). (See (2.1a) for more information about the audio system.)

PROBLEM 20: Are 'ToME' and 'TomeNET' similar?

SOLUTION: Despite similar name, the only thing these two games have in common is that they are both middle-earth themed, and some visuals might also be similar. Other than that, the two games are quite different in most aspects! In other words: TomeNET is definitely not 'multi-player ToME'. Also, the two games are maintained and developed by completely different persons and teams.

PROBLEM 21: My (mixer) settings or window positions (MS Windows only) aren't saved automatically as they should be, when I quit the game.

SOLUTION: Don't use ALT+F4 or the 'x' button in the title bar of the game window to quit the game. It will result in skipping the normal exit routine, which asks you to save chat and which also saves certain settings. Instead, use CTRL+Q for 'save & quit' (compare (0.2)).

PROBLEM 22: When I try to login, I get a 'security violation'.

SOLUTION: Either your host name (that's your PC's network name you can set in the Windows network settings) or network user name (usually same you use to login with, UNIX-style) is empty, or your TomeNET account name starts with an invalid character (must be A..Z). Another possibility is that you are already logged in, and are now trying to log in again from a different IP address. Resuming a connection is possible, but must be done from the same IP address.

PROBLEM 23: I just quit the game, and tried to log in again with another

character of mine, but I get an error message saying "Multiple logins on the same account aren't allowed".

SOLUTION: When you quit the game while you are still inside a dungeon or a tower or on the world surface but not within a town or housing area around a town, your character will stay in the game for around 20..30 more seconds. This prevents cheating by just quitting when a dangerous situation occurs in gameplay. During this time, if you try to login again, you can only use the same character that is now sitting out the timeout, thereby resuming your gameplay. You cannot log in with any other character until the timeout of 20..30 seconds is over and your old character has finally been taken offline by the server. In general, you should avoid quitting the game outside of towns, since it can put you in danger. Not only because your character will stay in the game for a little while after you quit, but also because you can't be sure what the situation around you will be the next time you log on again!

PROBLEM 24: When trying to macro F-keys, they don't seem to work properly. Especially, when hitting F1, a window about MS Windows Help/Support pops up instead.

SOLUTION: When playing on a notebook, check the state of the 'Fn' special shift key, and toggle it accordingly.

PROBLEM 25: The connection is surprisingly laggy. (Also see PROBLEM 28!)

SOLUTION: -If you're on Wifi (WLAN) plug in an ethernet cable instead! Wireless LAN connections can be pretty unreliable and cause periodic lag from trying to re-scan for available networks. Alternatively you can try to configure your WLAN not to do that, however, WLAN can still be pretty prone to lag sometimes.
 -Test it on another PC on the same internet connection.
 -Test it on a friend's internet connection.
 -Check if it only happens on certain in-game actions you perform.
 -Check if it only happens at a certain time of the day.
 -Make sure you don't have downloads or uploads running in the background.

PROBLEM 26: I resized some TomeNET windows by dragging them with the mouse, but it seems it doesn't have the desired effect.

SOLUTION: After having resized windows via mouse, restart the game once by exiting with CTRL+Q key.

PROBLEM 27: While I am creating a new character, I got disconnected with a "Timeout 04" error message.

SOLUTION: You have about 20 minutes to complete the character creation process. If you exceed this time, you will timeout and get disconnected.

PROBLEM 28: If I or other players nearby fire a lot of arrows or cast a lot of spells, my client lags or freezes somewhat. Could also happen when taking staircases or when there are a lot of monsters on the screen.

SOLUTION: Try to reduce or even disable flush-waits, by toggling the client options 'thin_down_flush' and if that's not enough also 'disable_flush'. For details about these, see (2.3).

PROBLEM 29: I accidentally closed one of the sub-windows and now it's gone. How do I get it back?

SOLUTION: Closing a sub-window sets it to 'invisible'. To change that, there are two ways:
 1) in game: Press = and then f for the window flags menu, select the affected window and press 'v' to toggle its visibility. You will need to restart the game for the change to take effect.
 2) close TomeNET first, then edit the file 'TomeNET.ini' which is located in your TomeNET folder with any text editor, locate the particular window, and you'll see a line saying "Visibility=0". Change the 0 to 1. Have a look at the X and Y coordinate of the same window too and make sure they aren't negative. If they are, just set them to 0. Save the ini file when you are done and start TomeNET again.

PROBLEM 30: Changes I do to my macros seem to not get saved or macros I deleted

seem to still be there or client options I configured seem to reset to their previous values although I saved the macros/options to their respective .prf file.

SOLUTION: Macros or client options can be saved to various .prf files which might `_all_` get loaded automatically and partially override each other. So check `_all_` (except for `font*.prf` and `graf*.prf` usually) .prf files in your `lib/user` folder and/or move or delete them to make sure they don't get loaded if you don't intend them to. For example the file `'user.prf'` usually carries your client options and overrides the default file `'options.prf'`. However, if there's a file `'user-x11.prf'` (system-specific for Linux X11 - on Windows systems it'd be `'user-win.prf'` accordingly) that one in turn will override settings in `user.prf`.
An example regarding macro files: Let's say your character's name is `'Gandalf'` and you saved your macros to `'Gandalf.prf'` faithfully. However, since Gandalf is a human warrior, the client will also automatically load the files called `'Human.prf'` and `'Warrior.prf'` if those exist and also try to load a .prf file named like your account name.

PROBLEM 31: After logging on, the file `'audio.lua'` was updated automatically. Now the wrong sound effects seem to be played for game events.

SOLUTION: Just log out and back in, and your sound should be fine again. This typically happens if `'audio.lua'` was updated.
On a side note: Also check if maybe the sound pack was updated too, so you can redownload it and not miss out on newly added sound effects. Usually an update to file `'audio.lua'` means that the sound pack has also been updated indeed.

PROBLEM 32: When trying to extract a music or sound pack to my xtra folder in order to install it, I get an error message or it doesn't seem to work correctly.

SOLUTION: See (2.1a) for details on how to install audio packs. Also note that some people have reported that the program `'WinRAR'` seems to cause problems in some cases, giving them "file corrupted" errors. A powerful free and open source program that is guaranteed to work is `'7zip'` (a sourceforge project at the time of writing) downloadable at: <http://www.7-zip.org/>

PROBLEM 33: On OSX when entering the game (right after picking a character) in `big_map` mode with already large (46 lines) main window, the window will suddenly become small (24 lines) again.
As of the time of writing this, the exact cause is still unknown. A workaround is to perform the following steps:
-turn off `big_map` mode (= key for options, page 5) and save options
-exit client with `CTRL+Q` (so it will save the main window height)
-log on again, turn on `big_map` mode, save the options again.
-from now on, always exit the game via the window close button in the window's titlebar, never via `CTRL+Q`. That way, your `.tomenetrc` config file is never overwritten and hence your client will always start with only 24 lines, switching back to correct `big_map` mode only when you actually log in with a character, thus circumventing the bug.

PROBLEM 34: On certain terminal emulators, TomeNET when run in `ncurses-mode` (`'-c'` command-line option or just a GCU-only client) will display wrong colours. This used to happen on Xfce4's `'Terminal'` up till TomeNET version 4.5.0 (but didn't happen on `xterm`).

SOLUTION: Since TomeNET 4.5.0a a hack has been added to work with Xfce4's `'Terminal'` terminal emulator.
On other terminals where colours aren't correct, try exporting the `TERM` environment variable with the value `"xterm16-color"`. For example run `tomenet` with this command (assumed you're inside the same folder as the executable binary `'tomenet'`):
`TERM=xterm-16color ./tomenet -c`
Or export it first:
`export TERM=xterm-16color`
`./tomenet -c`
You can also try `xterm-256color` instead of `xterm-16color`.

PROBLEM 35: When running the client in `terminal-mode`, messages like `"ALSA lib pcm.c...:(snd_pcm_recover) underrun occurred"` pop up, but the sound/music actually works ok.
How to get rid of the messages?

SOLUTION: Either tweak your sound settings (buffer size etc.) so ALSA doesn't get underruns anymore, or, if the audio actually sounds ok, you can suppress the messages by starting TomeNET with '-e' option, for example:

```
./tomenet -c -e
```

This will redirect all messages which usually are sent to stderr to a log file "tomenet.log" instead, which will be created in your TomeNET folder.

Alternatively, you can just redirect all error out put to /dev/null to completely discard it:

```
./tomenet -c 2>/dev/null
```

PROBLEM 36: Can I made the game windows larger?

SOLUTION: You can resize windows that hold messages (chat and/or game messages) simply by dragging the lower edge down/upwards with your mouse. This also works for the main window, but this one will not remember its new size unless you also save your client options after you resized it (press '=' and then 's' to save those). Alternatively, you can edit the TomeNET.ini file (on Windows) or the .tomenetrc file (on Linux or OSX) and change the amount of lines for each window manually.

Other than that, you can also increase the font size (that is the text size) in TomeNET: Either press '=' key and then cycle through pre-defined font sizes by tapping 'f' key, or again you can edit the TomeNET.ini file (Windows) or .tomenetrc file (Linux/OSX) to set fonts manually for each game window.

Well, and you could change your actual screen resolution of course.

PROBLEM 37: When I join the server I get spammed with violet LUA error messages and also it will say in orange/dark-green that my LUA files are getting updated.

SOLUTION: This happens when your LUA files are quite outdated. Just wait until the lua update has completed, you see that it has when you get a light green message saying "Reinitializing Lua". When that happened, quit and rejoin the server, the LUA errors should no longer happen now.

PROBLEM 38: I want to edit my TomeNET.ini file to enter name and password, so I don't have to type it in everytime I log on. But I don't see this file in my 'TomeNET' folder.

SOLUTION: Windows by default hides the extension of most files, this means that the ".ini" part is invisible.

Three ways around this:

- 1) In file explorer, go to 'folder options' (usually in the Extras menu) and turn off hiding known file extensions.
- 2) Right-click on a small (3kB) plain-looking file named 'TomeNET' in your TomeNET folder, and choose 'edit' (pick notepad.exe for editing, if asked). This file is most likely TomeNET.ini with its extension being hidden.
- 3) Open an editor (for example notepad) and go to menu File->Open and browse to your TomeNET folder, and then type in 'tomenet.ini' to have notepad open it.

PROBLEM 39: I run the Windows client on Wine, and when I resize the main window it doesn't resize properly or its contents aren't resized properly.

SOLUTION: You need at least Wine 1.5.20 for this to work properly. (That Wine got a bugfix for correctly dispatching WM_EXITSZMOVE).

PROBLEM 40: I see black floor tiles that seem buggy. They can't be lit or they 'smear' if other things pass over them.

SOLUTION: In a file explorer, navigate into the folder 'TomeNET/lib/user' and delete the file 'font-win.prf' in there.

PROBLEM 41: Keyboard input on KDE/Linux is strangely laggy.

SOLUTION: This is a weird one, but what has worked is to use smaller text fonts (at most 9X14).

PROBLEM 42: Aww, the ego power "Holy Avenger" that I'm so fond of does not exist in TomeNET anymore.

SOLUTION: It does. It has just been renamed to "Aman", it does the same (and a little bit more even) as (Holy Avenger) items in other variants.

PROBLEM 43: When trying to connect to the meta server I get an error message: "No setup info received" and the game terminates.

SOLUTION: This can happen on really bad/slow internet connections such as via mobile modems operating on arbitrarily (by the ISP) reduced bandwidth. There is no solution really, except retrying a few times until your connection attempt eventually "gets through". Make sure that no downloads or other bandwidth-using applications are running in parallel to increase your chances of successfully establishing a connection.

PROBLEM 44: The dark blue colour is too dark on my screen to be readable.

SOLUTION: Edit your config file (TomeNET.ini on Windows, .tomenetrc on Linux and OSX) and find the line 'lighterDarkBlue'. In TomeNET.ini set it to 1 instead of 0, in .tomenetrc uncomment the line by removing the leading '#' symbol. Restart your game client.

PROBLEM 45: Sound sound effects, mostly the page sound (when someone pages you with the /page command) sounds oddly distorted.

SOLUTION: Make sure that you don't have all four volume sliders at maximum: Just lower the master slider by 1 or 2 steps.

PROBLEM 46: Testing your character's damage-per-second (dps) on the target dummies in Bree with melee weapons or ranged weapons (slings, bows or crossbows) has weird effects: You don't get more damage from increasing your number of attacks per round, even though all other stats (speed, critical hits) are exactly the same. Or you actually seem to get a sharp increase in damage by bumping into the target dummy instead of using the melee auto-retaliator.

SOLUTION: You are experiencing game engine limits regarding the world surface (including all towns, like Bree). See (8.7) for details.

PROBLEM 47: The TomeNET-Updater for Windows gives a message about captcha when I try to update sound pack or music pack.

SOLUTION: Unfortunately the updater cannot defeat captchas of one-click hosters from where the audio packs are downloaded. This means that you just have to retry after some time has passed, for example an hour, and hope that you won't get a captcha request then.
(In general, captcha requests tend to pop up when the file is very frequently accessed.)

PROBLEM 48: On Linux/X11 I get 100% cpu usage unless I disable audio (with the '-q' command-line option). This usually happens with more special audio hardware.

SOLUTION: Change the audio sample rate in '.tomenetrc' config file to match your audio hardware's native sample rate. Most on-board sound chips use 48000 aka 48kHz, but if you encounter this problem you probably use a more sophisticated system that might run at higher rates such as 96000 aka 96kHz.

PROBLEM 49: On Linux/X11 I get 100% cpu usage when switching workspace away from TomeNET when I have 'recall_flicker' option enabled. (The system on which this happened had AMD graphics drivers, but that might not be relevant.)

SOLUTION: This is suspected to be a problem with 'Awesome' window manager. However, if you use Gnome, starting Awesome through
gnome-session --session=awesome
has been reported to solve the problem.

PROBLEM 50: I get an antivirus warning when I try to run the installer version of TomeNET (the self-installing '.exe' file) or in general for the 'install_tomenet' executable/process. Installation also fails or fails partially.

SOLUTION: Avast and Trendmicro antivirus are known for causing trouble with the Nullsoft NSIS installer system that TomeNET utilises. Disable the antivirus program before you install TomeNET. Also, some scanners like virustotal.com will detect 'killproc' heuristics in the install_tomenet.exe helper process - which makes sense since this installer indeed will attempt to kill any running TomeNET process before it updates, this is the intended behaviour.

PROBLEM 51: On Windows 10 (maybe 8 too), the self-installer freezes on startup.

SOLUTION: Why are you STILL using Windows.. Ok well, you can try to just sit it out, some people have reported that the NSIS installer is known to freeze for about 15 minutes on Windows 10. Maybe it will just continue if you wait for a while.

PROBLEM 52: Windows OS: Using the 'Alt' modifier key in macros doesn't work.
SOLUTION: None. Install Linux in addition to Windows (dual-boot).

PROBLEM 53: I cannot select a server from the meta server list, it seems my key presses get ignored.
SOLUTION: If you are using a non-english keyboard layout with asian or cyrillic letters, switch it to english layout.

PROBLEM 54: Editing config files of all kinds (ini/prf/opt/ins..) doesn't seem to have any effect.
SOLUTION: If you're on Windows and using a game version greater than 4.6.1a, TomeNET will make copies of your 'scpt' and 'user' folders and work with those instead of the original ones (which are probably in your Program Files folder). The working copies are located at folder:
C:\users\yourname\
The drive letter and path could vary depending on your Windows installation, but this is the normal location in almost all cases.
(The reason the game does this is that Windows starting at version 7 will severely limit access to the Program Files folder.)

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