NAME

moria - a dungeon game

SYNOPSIS

moria [-o] [-r] [-s] [-S] [-n] [-w] [savefile]

DESCRIPTION

Moria plays a dungeon game with you. It lets you generate a character, lets you buy equipment, and lets you wander in a fathomless dungeon while finding treasure and being attacked by monsters and fellow adventurers. Typing ? gives you a list of commands.

The ultimate object of moria is to kill the Balrog, which dwells on the 50th level of the dungeon, 2,500 feet under- ground. Most players never even reach the Balrog, and those that do seldom live to tell about it.

For a more complete description of the game, read the docu- ment The Dungeons of Moria.

By default, moria will save and restore games from a file called moria.save in your home directory. If the environ- ment variable MORIA_SAV is defined, then moria will use that file name instead of the default. If MORIA_SAV is not a complete path name, then the savefile will be created or restored from the current directory. You can also expli- citly specify a savefile on the command line.

If you use the -n option, moria will create a new game, ignoring any savefile which may already exist. This works best when a savefile name is specified on the command line, as this will prevent moria from trying to overwrite the default savefile (if it exists) when you try to save your game.

You move in various directions by pressing the numeric keypad keys, VMS-style. If you specify -r, you move the same way you do in rogue(6). You can also specify -o to force the VMS-style command set. These options will over- ride defaults stored in the savefile. If these options are given multiple times, only the last one will take effect.

If you specify -s, moria prints all of the scores in the score file and exits. On a multiuser system, if you specify -S, moria prints prints only those scores belonging to you and then exits.

If you specify -w, moria will start up in wizard mode.   You can resurrect a dead character by using this option when starting the game. Resurrected characters are teleported to the town level and given zero hitpoints. Wizard mode is intended for debugging the game, and for experimenting with new features. Any other use is considered cheating. Games played with wizard mode are not scored.

AUTHORS

The original version of Moria was written in VMS/Pascal by Robert Alan Koeneke, Jimmey Wayne Todd, Gary McAdoo, and others at the University of Oklahoma.   This version was written by Jim Wilson at the University of California,

Berkeley, and released with minor revisions by David Gra-
biner at Harvard University.

BUGS
A suspended game that gets a hangup signal will die without
creating a save file.

Rerolling with a % at the class prompt not implemented.

For a more comprehensive list, see the ERRORS file in the
source distribution.

The Dungeons of Moria

Robert Alan Koeneke
James E. Wilson
David J. Grabiner

October 13, 2008

The Dungeons of Moria

Robert Alan Koeneke
James E. Wilson
David J. Grabiner

1. Introduction

The game of moria is a single player dungeon simulation.   A
player may choose from a number of races and classes when creat-
ing a character, and then 'run' that character over a period of
days, weeks, even months, attempting to win the game by defeating
the Balrog which lurks in the deeper levels.

The player will begin his adventure on the town level where he
may acquire supplies, weapons, armor, and magical devices by bar-
tering with various shop owners. After preparing for his adven-
ture, the player can descend into the dungeons of moria where
fantastic adventures await his coming!

Before beginning your first adventure, you should read this docu-
ment carefully.   The game of moria is a complicated game, and
will require a dedicated player to win.

2. The Character

All characters have six main attributes which modify their basic
abilities.   These six attributes, called stats, are strength,
intelligence, wisdom, dexterity, constitution, and charisma.
Stats may vary from a minimum of 3 to a maximum of 18. At the
highest level, stats are further qualified by a number from zero
to one hundred, so that the highest value is actually 18/100. A
value of 18/100 can be thought of as equivalent to 19, and 18/00
(not actually used) is equivalent to 18. Because adventurers of
interest tend to be better than average characters, moria stats
will average about 13, and are further adjusted by race and
class. Some races are just naturally better at being certain
classes, as will be shown later.

In addition to the more visible stats, each character has certain
abilities which are mainly determined by his race, class, and
level, but are also modified by his stats.   The abilities are
fighting, throwing/bows, saving throw, stealth, disarming, magi-
cal devices, perception, searching, and infravision.

Characters will be assigned an early history, with money and a
social class based on that history. Starting money is assigned
based on history, charisma, and somewhat upon the average of a
character's stats.   A character with below average stats will
receive extra money to help him survive the first adventure.

Each character will also have physical attributes such as race, height, weight, sex, and a physical description. None of these, except weight, play any part in the game other than to give the player a "feeling" for his character. Weight is used for computing carrying capacity and also for bashing.

Finally, each character is assigned hit points based on their race, class, and constitution. Spell casters will also receive mana which is expended when casting spells. Mana is based on Wisdom for Priests and Intelligence for Mages.

2.1. Character Stats

Strength
     Strength is important in fighting with weapons and hand to hand combat. A high strength can improve your chances of hitting, and the amount of damage done with each hit. Characters with low strengths may receive penalties. Strength is also useful in tunneling, body and shield bashing, and in carrying heavy items.

Intelligence
     Intelligence is the prime stat of a mage, or magician. A high intelligence increases a mage's chances of learning spells, and it also increases the amount of mana a mage has. No spell may be learned by mages with intelligences under 8. Intelligence also modifies a character's chance of disarming traps, picking locks, and using magic devices.

Wisdom
     Wisdom is the prime stat of a priest. A high wisdom increases the chance of receiving new spells from a priest's deity, and it also increases the amount of mana a priest has. No spell may be learned by priests with wisdom under 8. Wisdom also modifies a character's chance of resisting magical spells cast upon his person.

Dexterity
     Dexterity is a combination of agility and quickness. A high dexterity may allow a character to get multiple blows with lighter weapons, thus greatly increasing his kill power, and may increase his chances of hitting with any weapon and dodging blows from enemies. Dexterity is also useful in picking locks, disarming traps, and protecting yourself from pick pockets.

Constitution
     Constitution is a character's ability to resist damage to his body, and to recover from damage received. Therefore a character with a high constitution will receive more hit points, and be more resistant to poisons.

Charisma
     Charisma represents a character's personality, as well as physical looks. A character with a high charisma will receive better prices from store owners, whereas a character with a very low charisma will be robbed blind. A high charisma will also mean more starting money for the character.

2.2. Character Sex

You may choose to be either a male or a female character.   Only
height and weight are affected by a character's sex. Female
characters tend to be somewhat smaller and lighter than their
male counterparts. No adjustments to stats or abilities are made
because of the sex of a character. Female characters start out
with slightly more money than male characters to help offset the
weight penalty.

2.3. Character Abilities

Characters possess nine different abilities which can help them
to survive. The starting abilities of a character are based upon
race and class. Abilities may be adjusted by high or low stats,
and may increase with the level of the character.

Fighting
>   Fighting is the ability to hit and do damage with weapons or
>   fists.   Normally a character gets a single blow from any
>   weapon, but if his dexterity and strength are high enough,
>   he may receive more blows per round with lighter weapons.
>   Strength and dexterity both modify the ability to hit an
>   opponent.   This skill increases with the level of the char-
>   acter.

Throwing/Bows
>   Using ranged missile weapons and throwing objects   is
>   included in this skill. Different stats apply to different
>   weapons, but this ability may modify the distance an object
>   is thrown/fired, the amount of damage done, and the ability
>   to hit a creature. This skill increases with the level of
>   the character.

Saving Throw
>   A Saving Throw is the ability of a character to resist the
>   effects of a spell cast on him by another person/creature.
>   This does not include spells cast on the player by his own
>   stupidity, such as quaffing a nasty potion. This ability
>   increases with the level of the character, but then most
>   high level creatures are better at casting spells, so it
>   tends to even out. A high wisdom also increases this abil-
>   ity.

Stealth
>   The ability to move silently about is very useful.   Charac-
>   ters with good stealth can usually surprise their opponents,
>   gaining the first blow. Also, creatures may fail to notice
>   a stealthy character entirely, allowing a player to avoid
>   certain fights. This skill is based entirely upon race and
>   class, and will never improve unless magically enhanced.

Disarming
>   Disarming is the ability to remove traps (safely), and
>   includes picking locks on traps and doors. A successful
>   disarming will gain the character some experience.   A trap
>   must be found before it can be disarmed. Dexterity and
>   intelligence both modify the ability to disarm, and this
>   ability increases with the level of the character.

Using Magical Devices
>   Using a magical device such as a wand or staff requires
>   experience and knowledge.   Spell users such as mages and
>   priests are therefore much better at using a magical device
>   than say a warrior. This skill is modified by intelligence,
>   and increases with the level of the character.

Perception

Perception is the ability to notice something without actively seeking it out. This skill is based entirely upon race and class, and will never improve unless magically enhanced.

Searching

To search is to actively look for secret doors, floor traps, and traps on chests. Rogues are the best at searching, but mages, rangers, and priests are also good at it. This skill is based entirely upon race and class, and will never improve unless magically enhanced.

Infravision

Infravision is the ability to see heat sources. Since most of the dungeon is cool or cold, infravision will not allow the player to see walls and objects. Infravision will allow a character to see any warm-blooded creatures up to a certain distance. This ability works equally well with or without a light source. The majority of moria's creatures are cold-blooded, and will not be detected unless lit up by a light source. All non-human races have innate infravision ability. Humans can gain infravision only if it is magically enhanced.

2.4. Choosing A Race

There are eight different races that you can choose from in moria. Some races are restricted as to what profession they may be, and each race has its own adjustments to a character's stats and abilities.

Human

The human is the base character, all other races are compared to him. Humans can choose any class, and are average at everything. Humans tend to go up levels faster than any other race, because of their shorter life spans. No racial adjustments occur to characters choosing human.

Half-Elf

Half-elves tend to be smarter and faster than a human, but not as strong. Half-elves are slightly better at searching, disarming, perception, stealth, and magic, but they are not as good at hand weapons. Half-elves may choose any class.

Elf

Elves are better magicians then 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, and magic, but they are not as good at hand weapons. Elves may choose any class except Paladin.

Halfling

Halflings, or Hobbits, are very good at bows, throwing, and have good saving throws. They also are very good at searching, disarming, perception, and stealth; so they make excellent thieves (but prefer to be called burglars...). They will be much weaker than humans, and no good at bashing. Halflings have fair infravision, so they can detect warm creatures at a distance. Halflings can choose between being a warrior, mage, or rogue.

Gnome

Gnomes are smaller than dwarfs, but larger than halflings. They, like the halflings, live in the earth in burrow-like homes. Gnomes are practical jokers, so if they can kill something in a humorous way, so much the better. Gnomes make excellent mages, and have very good saving throws. They are good at 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 infravision, so they can detect warm creatures at a distance. A gnome may choose between being a warrior, mage, priest, or rogue.

Dwarf

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 have higher constitutions, but are slower and less intelligent than humans. Because they are so head-strong and are somewhat wise, they resist spells which are cast on them. Dwarves also have good infravision 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, scream-ing out challenges at imagined foes. In other words, dwarves have a miserable stealth.

Half-Orc

Half-Orcs make excellent warriors, and decent priests, but are terrible at magic. They are as bad as dwarves at stealth, and horrible at searching, disarming, and percep-tion. Half-Orcs are, let's face it, ugly. They tend to pay more for goods in town. Half-Orcs do make good priests and rogues, for the simple reason that Half-Orcs tend to have great constitutions and lots of hit points.

Half-Troll

Half-Trolls are incredibly strong, and have the highest hit points of any character race. They are also very stupid and slow. They will 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 also happen to be fun to run...

2.4.1. Race Versus Skills and Stats

Stat, hit dice, and experience points per level modifications due to race are listed in the following table.

	Str	Int	Wis	Dex	Con	Chr	Hit Dice	Rqd Exp/level
Human	0	0	0	0	0	0	10	+0%
Half-Elf	-1	+1	0	+1	-1	+1	9	+10%
Elf	-1	+2	+1	+1	-2	+1	8	+20%
Halfling	-2	+2	+1	+3	+1	+1	6	+10%
Gnome	-1	+2	0	+2	+1	-2	7	+25%
Dwarf	+2	-3	+1	-2	+2	-3	9	+20%
Half-Orc	+2	-1	0	0	+1	-4	10	+10%
Half-Troll	+4	-4	-2	-4	+3	-6	12	+20%

Racial abilities as compared to each other, with 1 the lowest, or worst, and 10 the highest, or best, are listed in the following table.

	Disarm	Search	Stealth	Percep	Fight	Bows	Save	Infra
Human	5	5	5	5	5	5	5	None
Half-Elf	6	7	7	6	4	6	6	20 feet
Elf	8	9	7	7	3	9	7	30 feet
Halfling	10	10	10	10	1	10	10	40 feet
Gnome	9	7	9	9	2	8	9	30 feet
Dwarf	6	8	3	5	9	5	8	50 feet
Half-Orc	3	5	3	2	8	3	3	30 feet
Half-Troll	1	1	1	1	10	1	1	30 feet

2.5. Choosing A Class

Once a race has been chosen, you will need to pick a class. Some classes will not be available to certain races, for instance, a Half-Troll cannot become a Paladin. For the first few adventures it is suggested that you run a warrior or rogue. Spell casting generally requires a more experienced player that is familiar with survival techniques.

Warrior
    A Warrior is a hack-and-slash character, who solves most of his problems by cutting them to pieces, but will occasion- ally 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. A Warrior will be good at Fight- ing and Throwing/Bows, but bad at most other skills.

Mage
    A Mage must live by his wits. He cannot hope to simply hack his way through the dungeon, and so must therefore use his magic to defeat, deceive, confuse, and escape. A mage is not really complete without an assortment of magical devices to use in addition to his spells. He can master the higher level magical devices far easier than anyone else, and has the best saving throw to resist effects of spells cast at him.   Intelligence and Dexterity are his primary stats. There is no rule that says a mage cannot become a good fighter, but spells are his true realm.

Priest
    A Priest is a character of holy devotion. He explores the dungeon only to destroy the evil that lurks within, and if treasure just happens to fall into his pack, well, so much more to the glory of his temple! A priest receives his spells from a deity, and therefore does not choose which spells he will learn. He is familiar with magical devices, preferring to call them instruments of god, but Is not as good as a mage in their use. Priests have good saving throws, and make decent fighters, preferring blunt weapons over edged ones.   Wisdom and Charisma are the priest's primary stats.

Rogue
    A Rogue is a character that prefers to live by his cunning, but is capable of fighting his way out of a tight spot. He is the master of traps and locks, no device being impossible for him to overcome. A rogue has a high stealth allowing him to sneak around many creatures without having to fight, or sneak up and get the first blow. A rogue's perception is higher than any other class, and many times he will notice a trap or secret door before having to search. A rogue is

better than a warrior or paladin with magical devices, but
still can not rely on their performance. Rogues can also
learn a few spells, but not the powerful offensive spells
mages can use. A rogue's primary stats are Intelligence and
Dexterity.

Ranger
     A Ranger is a warrior/mage. He is a good fighter, and the
     best of the classes with a missile weapon such as a bow.
     The ranger learns spells much more slowly than a mage, but
     is capable of learning all but the most powerful spell.
     Because a ranger is really a dual class character, more
     experience is required for him to advance. A ranger has a
     good stealth, good perception, good searching, a good saving
     throw, and is good with magical devices. His primary stats
     are Intelligence and Dexterity.

Paladin
     A Paladin is a warrior/priest. He is a very good fighter,
     second only to the warrior class, but not very good at mis-
     sile weapons. He receives prayers at a slower pace then the
     priest, but can eventually learn all the prayers. Because a
     paladin is really a dual class character, it requires more
     experience to advance him. A paladin lacks much in the way
     of abilities. He is poor at stealth, perception, searching,
     and magical devices.   He has a decent saving throw due to
     his divine alliance. His primary stats are Strength and
     Charisma.

2.5.1. Race Versus Class

	Warrior	Mage	Priest	Rogue	Ranger	Paladin
Human	Yes	Yes	Yes	Yes	Yes	Yes
Half-Elf	Yes	Yes	Yes	Yes	Yes	Yes
Elf	Yes	Yes	Yes	Yes	Yes	No
Halfling	Yes	Yes	No	Yes	No	No
Gnome	Yes	Yes	Yes	Yes	No	No
Dwarf	Yes	No	Yes	No	No	No
Half-Orc	Yes	No	Yes	Yes	No	No
Half-Troll	Yes	No	Yes	No	No	No

2.5.2. Class Versus Skills

Class abilities as compared to each other, with 1 as the lowest,
or worst, and 10 as the highest, or best are shown in the follow-
ing table.

	Fight	Bows	Save Throw	Stea-lth	Disarm	Magic Device	Percep	Search	Extra Exp/lev
Warrior	10	6	3	2	4	3	2	2	+0%
Mage	2	1	10	5	6	10	8	5	+30%
Priest	4	3	6	5	3	8	4	4	+20%
Rogue	8	9	7	10	10	6	10	10	+0%
Ranger	6	10	8	7	6	7	6	6	+40%
Paladin	9	5	4	2	2	4	2	2	+35%

3. Adventuring

After you have created your character, you will begin your moria adventure. Symbols appearing on your screen will represent the dungeon's walls, floor, objects, features, and creatures lurking about.   In order to direct your character through his adventure, you will enter single character commands.

Moria symbols and commands each have a help section devoted to them.   You should review these sections before attempting an adventure. Finally, a description of the town level and some general help on adventuring are included.

4.   Symbols On Your Map

Symbols on your map can be broken down into three categories: Features of the dungeon such as walls, floor, doors, and traps; objects which can be picked up such as treasure, weapons, magical devices, etc; and creatures which may or may not move about the dungeon, but are mostly harmful to your character's well-being. Some symbols can be in more than one category. Also note that treasure may be embedded in a wall, and the wall must be removed before the treasure can be picked up.

It will not be necessary to remember all of the symbols and their meanings. A simple command, the '/', will identify any character appearing on your map. See the section on commands for further help.

Features

.	A floor space, or hidden trap	1	Entrance to General Store
#	A wall	2	Entrance to Armory
'	An open door	3	Entrance to Weapon Smith
+	A closed door	4	Entrance to Temple
^	A trap	5	Entrance to Alchemy Shop
<	A staircase up	6	Entrance to Magic Shop
>	A staircase down	:	Obstructing rubble
;	A loose floor stone		An open pit (Blank)
%	A mineral vein	@	The character

Objects

!	A flask or potion	?	A scroll
"	An amulet	[	Hard armor
$	Money (Can be embedded)	\	A hafted weapon
&	A chest	]	Misc. armor
(	Soft armor	_	A staff
)	A shield	{	Missile (arrow, bolt, pebble)
*	Gems (Can be embedded)			Sword or dagger
-	A wand	}	Missile arm (Bow, X-bow, sling)
/	A pole-arm	~	Misc
=	A ring	,	Food
s	A skeleton		

Creatures

a	Giant Ant	A	Giant Ant Lion
b	Giant Bat	B	The Balrog
c	Giant Centipede	C	Gelatinous Cube
d	Dragon	D	Ancient Dragon
e	Floating Eye	E	Elemental
f	Giant Frog	F	Fly
g	Golem	G	Ghost
h	Harpy	H	Hobgoblin
i	Icky-Thing	I	
j	Jackal	J	Jelly
k	Kobold	K	Killer Beetle
l	Giant Louse	L	Lich
m	Mold	M	Mummy
n	Naga	N	
o	Orc or Ogre	O	Ooze
p	Human(oid)	P	Giant Human(oid)
q	Quasit	Q	Quylthulg
r	Rodent	R	Reptile
s	Skeleton	S	Scorpion
t	Giant Tick	T	Troll
u		U	Umber Hulk
v		V	Vampire
w	Worm or Worm Mass	W	Wight or Wraith
x		X	Xorn
y	Yeek	Y	Yeti
z	Zombie	Z	
$	Creeping Coins	,	Mushroom Patch

5. Commands

All commands are entered by pressing a single key. Some commands
are capital or control characters, which require you to hold down
the shift or control key while pressing another key. As a spe-
cial feature, control keys may be entered in a single stroke, or
in two strokes, with a '^' character first.

There are two command sets: the original command set which is the
default, and the rogue like command set. The rogue like command
is generally more convenient, especially if you don't have a
keypad.

The following tables summarize the two command sets.   Certain
commands may be preceded by an optional count, and certain com-
mands must be followed by a direction.   These conditions are
indicated in the tables by '@' for an optional count, and '~' for
a direction. If a particular command requires additional key
strokes, then they will be prompted for.

```
                     Original command summary.
     a   Aim and fire a wand          @ B ~    Bash (object/creature)
     b   Browse a book                  C      Change name
     c ~ Close a door                 @ D ~    Disarm a trap/chest
     d   Drop an item                   E      Eat some food
     e   Equipment list                 F      Fill lamp with oil
     f   Fire/Throw an item             G      Gain new magic spells
     i   Inventory list                 L      Locate with map
   @ j ~ Jam a door with spike          M      Map shown reduced size
     l ~ Look given direction         @ R      Rest for a period
     m   Magic spell casting            S      Search Mode
   @ o ~ Open a door/chest            @ T ~    Tunnel in a direction
     p   Pray                           V      View scoreboard
     q   Quaff a potion                 =      Set options
     r   Read a scroll                  ?      Command quick reference
   @ s   Search for trap or door        {      Inscribe an object
     t   Take off an item             @ - ~    Move without pickup
     u   Use a staff                    . ~    Run in direction
     v   Version, credits and manual    /      Identify a character
     w   Wear/Wield an item             CTRL-K Quit the game
     x   Exchange weapon              @ CTRL-P Repeat the last message
     <   Go up an up staircase          CTRL-X Save character and quit
     >   Go down a down staircase     @ ~      for movement


                     Rogue like command summary.
     c ~     Close a door              C      Character description
     d       Drop an item           @ D ~    Disarm a trap/chest
     e       Equipment list           E      Eat some food
   @ f ~     Force/bash item/monster  F      Fill lamp with oil
     i       Inventory list           G      Gain new magic spells
     m       magic spell casting      M      Map shown reduced size
   @ o ~     Open a door/chest        P      Peruse a book
     p       Pray                     Q      Quit the game
     q       Quaff a potion         @ R      Rest for a period
     r       Read a scroll          @ S ~    Spike a door
   @ s       Search for trap or door  T      Take off an item
     t       Throw an item            V      View scores
     v       Version, and manual      W      Where: locate self
     w       Wear/Wield an item       X      Exchange weapon
     x ~     Examine surroundings     Z      Zap a staff
     z       Zap a wand               #      Search Mode
     =       Set options              <      Go up an up staircase
     /       Identify a character     >      Go down a down stair
   @ CTRL-P Previous message review   {      Inscribe an object
   @ - ~    Move without pickup       ?      Type this page
   @ CTRL ~ Tunnel in a direction     CTRL-X Save game and exit
   @ SHFT ~ Run in direction        @ ~      for movement
```

5.1. Special keys.

Certain commands may be entered at any time input is accepted.
The special character control-R, entered as a single key stroke,
will always refresh the screen. This may be used at any prompt
for input, and is otherwise ignored.

If you are playing on a UNIX or similar system, then there are
some additional special characters used by moria. The special
character control-C will interrupt moria, and ask if you really
want to die and quit the game. If you choose not to die, moria
merely continues as before, except that resting, running,
repeated commands, etc will be terminated. You can suspend the
game with control-Z, and return to the original command shell.

In this case, moria is not terminated, and may be restarted at
any time from the shell. Alternatively, the special command `!'
is available to run any normal shell command. When it is com-
plete, moria will restart.

For many input requests or queries, the special character ESCAPE
will abort the command. For the "-more-" message prompts, any of
SPACE, ESCAPE, RETURN (control-m), or LINEFEED (control-j) can be
used to continue after pausing to read the displayed message.

It is possible to give control character commands in two key
stroke, by typing a `^' followed by the appropriate letter of the
alphabet. This is useful when running moria in circumstances
where control characters are intercepted by some external pro-
cess, or by the operating system.

5.2. Direction.

For the original style command set, a direction is given by a
digit which is in the appropriate orientation on your keypad.
For the rogue like command set, a direction is given by one of
the letters `hykulnjb'. Again, the relative position of the keys
on the keyboard gives a clue as to the direction. The digit `5'
for the original commands, and the period `.' for rogue like com-
mands, is a null direction indicator. This is only allowed in a
movement command (to stay in one place) or in a look command (to
look in all directions).

       Original Directions

      \ | /
       7   8   9

    - 4   6 -

       1   2   3
      / | \

       Rogue-like Directions

      \ | /   \   /
       y   k   u   y   u
                                      |
    - h   l -   - h   j   k   l -
                                      |
       b   j   n   b   n
      / | \   /   \

Movement is accomplished by specifying a direction immediately.
Simply press the appropriate key and you character will move one
step in that direction. You can only move onto and through floor
spots, and only if they contain no creatures or obstructing
objects such as a closed door.

Other commands that require a direction will prompt for it.

Moving your character one step at a time can be time consuming
and boring, so a faster method has been supplied. For the origi-
nal style command set, by using the Run command `.', you may move
in a direction until something interesting happens.   For
instance, by pressing the period key `.' followed by the direc-
tion 8, your character would continue to move up the screen, only
coming to a stop after at least one condition is satisfied.   For

the rogue like command set, typing a shifted directional letter
will move you in that direction until something interesting hap-
pens.   The stopping conditions are described more completely in
the run command description below.

5.3. Command counts.

Some commands can be executed a fixed number of times by preced-
ing them with a count. Counted commands will execute until the
count expires, or until you type any character, or until some-
thing significant happens, such as being attacked. Thus, a
counted command doesn't work to attack another creature.   While
the command is being repeated, the number of times left to be
repeated will flash by on the command line at the bottom of the
screen.

To give a count to a command in the rogue like mode, type the
number in digits, then the command. A count of zero defaults to
a count of 99.

To give a count to a command in the original mode, type a `#',
followed by the digits. To count a movement command (which is
itself a digit), type a space after the number, and you will then
be prompted for the command.

Counted commands are very useful for searching or tunneling, as
they automatically terminate on success, or if you are attacked.
You may also terminate a counted command, or a Run command, by
typing any character.   This character is ignored, but it is
safest to use a SPACE or ESCAPE which are always ignored as com-
mands.

5.4. Selection of objects.

Many commands will also prompt for a particular object to be
used.   For example, the command to read a scroll will ask you
which of the scrolls that you are carrying that you wish to read.
In such cases, the selection is made by typing a letter of the
alphabet; if you are selecting from your pack, you may also type
a digit to select the item whose inscription is that digit. The
prompt will indicate the possible letters, and will also allow
you to type the key `*', which causes all of the available
options to be described.

The particular object may be selected by an upper case or a lower
case letter.   If lower case or a digit is used, the selection
takes place immediately. If upper case is used, then the partic-
ular option is described, and you are given the option of con-
firming or retracting that choice. Upper case selection is thus
safer, but requires an extra key stroke.

5.5. Command descriptions

In the following command descriptions, the original style key is
given. If the rogue like key for that command is different, then
it will be shown inside the braces following the command name.

B <Dir> - Bash. {f - force}
     The bash command includes breaking open doors and chests, or
     bashing an opponent.   Your bashing ability increases with
     weight and strength. In addition, when bashing an opponent,
     you will either perform a body bash, or, if wielding a

shield, perform a shield bash which is more effective.

       Bashing a door can throw you off balance, but this will not
       generally be a problem. Doors that have been jammed closed
       with spikes can only be opened by bashing. Locked doors may
       also be bashed open. Bashing a door open will permanently
       break it.

       Bashing a creature affects both you and the opponent.
       Depending on your dexterity, you may or may not be thrown
       off balance allowing free moves to your opponent.   If the
       bash is successful, your opponent may be thrown off balance,
       thus giving you some free hits or a chance to run.   Huge
       creatures such as ancient dragons will be difficult or
       impossible to bash successfully.

       A player automatically performs a shield bash instead of a
       body bash, if he is currently wearing a shield. A shield
       bash adds the damage of a shield to that of the bash, so it
       is more effective. Size and material both affect the damage
       that a shield will do.

       You can apply a count to this command, but if you are thrown
       off balance, the count will be reset straight away.

C - Print character (to screen or file).
       This command allows the player to either display his charac-
       ter on the terminal screen, or to print an entire character
       info listing to a file. The character's history, equipment,
       and inventory list are also included if you chose to print
       it to a file.

D <Dir> - Disarm a trap.
       You can attempt to disarm floor traps, or trapped chests.
       If you fail to disarm a trap, there is a chance that you
       blunder and set it off. You can only disarm a trap on a
       chest after finding it with the search command. This com-
       mand can have a count.

E - Eat some food.
       A character must eat occasionally to remain effective. As a
       character grows hungry, a message will appear at the bottom
       of the screen saying "Hungry".   If a character remains
       hungry long enough, he will become weak, eventually start
       fainting, and finally die of starvation.

F - Fill a lamp or lantern with oil.
       If your character is currently using a lamp for light, and
       if he has a flask of oil in inventory, he may refill the
       lamp by using this command. A lamp is capable of a maximum
       of 15000 turns of light, and each flask has 7500 turns of
       oil contained in it.

G - Gain new spells.
       To actually learn new spells, you must use this command.
       When you are able to learn some spells, the word "Study"
       will appear on the status line at the bottom of the screen.
       Mages, rogues, and rangers must have the magic books con-
       taining new spells to be able to learn them.   Priests and
       Paladins are given their prayers by their gods, and hence do
       not need a holy book before learning the prayers in it.
       They do need the book in order to use the prayers.

L - Location on map. {W - where}
       The location command allows you to look at all parts of the

current dungeon level. The displayed view of the dungeon is
shifted to bring your current position as close to the
center as possible. You may then shift the displayed map in
any of the eight possible directions. Each shift moves your
view point by one half screen. The top line displays a map
section number, each map section having a height and width
one half that of the display, and indicates the direction of
the display from your current position. If you exit this
command while you are not on the display, then the display
is centered again.

M - Map shown reduced size.
     This command will show the entire map, reduced by a factor
     of nine, on the screen. Since nine places map into every
     character on the screen, only the major dungeon features
     will be visible. This is especially useful for finding
     where the stairs are in relation to your current position.
     It is also useful for identifying unexplored areas.

R - Rest for a number of turns.
     You may rest one turn with the null movement command. Rest-
     ing for longer periods of time is accomplished by using the
     Rest command, followed by the number of turns you want to
     rest your character. Resting will continue until the speci-
     fied duration has expired, or something to wake the charac-
     ter happens, such as a creature wandering by, or getting
     hungry, or some disability like blindness expiring.   It is
     sometimes a good idea to rest a beat-up character until he
     regains some of his hit points, but be sure to have plenty
     of food if you rest often.

     If you have accidentally entered in a rest period too large,
     or change your mind about the resting period, you may wake
     your character up by typing any character. Space is best,
     since if the rest ends just before the character is typed,
     the space is ignored as a command.

     It is also possible to rest by typing the count first, and
     using either the Rest or the null movement command.

     If you type '*' for the rest count, your character will rest
     until both hp and mana reach their maximum values. As
     above, you will immediately stop resting if anything
     interesting happens.

S - Search mode toggle. {#}
     The Searching toggle will take you into and out of search
     mode.   When first pressed, the message "Searching" will
     appear at the bottom of the screen. You are now taking two
     turns for each command, one for the command and one turn to
     search. This means that you are taking twice the time to
     move about the dungeon, and therefore twice the food. If a
     creature should happen by or attack you, search mode will
     automatically shut off. You may also turn off search mode
     by again pressing the 'S' {or #} key.

T <Dir> - Tunnel through rock. {control-<Dir>}
     Tunneling (Mining) is a very useful art.   There are four
     kinds of rock present in the dungeons of moria: Permanent
     Rock, Granite Rock, Magma Intrusion, and Quartz Veins. Per-
     manent Rock is exactly that, permanent. Granite is very
     hard, therefore hard to dig through, and contains no valu-
     able metals.   Magma and Quartz veins are softer and some-
     times bear valuable metals and gems, shown as a '$' or a '*'
     character.   You can tell if the metal or gems are embedded

into the wall by trying to move onto them.   If you can't
move over them, you'll have to dig them out. There is an
option which causes magma and quartz to be displayed dif-
ferently than other rock types.

Tunneling can be VERY difficult by hand, so when you dig be
sure to wield either a shovel or a pick. Magical shovels
and picks can be found which allow the wielder to dig much
faster than normal, and a good strength also helps.

Tunneling can have a count.

V - View scoreboard.
     This command will display the contents of the score board on
     the screen. On a multiuser system, typing 'V' the first
     time will show only those scores from the score board that
     are yours, and typing 'V' again will show all users' scores.

a <Dir> - Aim a wand. {z - zap}
     Wands must be aimed in a direction to be used.   Wands are
     magical devices and therefore use the Magical Devices abil-
     ity of the player.   They will either affect the first
     object/creature encountered, or affect anything in a given
     direction, depending upon the wand. An obstruction such as
     a door or wall will generally stop the effects of a wand
     from traveling further.

b - Browse a book. {P - peruse}
     You can only read a book if you are of its realm. Therefore
     a magic user could read a magic book, but not a holy book.
     Warriors will not be able to read either kind of book. When
     the browse command is used, all of the spells or prayers
     contained therein are displayed, along with information such
     as their level, the amount of mana used up in casting them,
     and whether or not you know the spell or prayer. There are
     a total of 31 different magical spells in four books, and 31
     different prayers in four books.

c <Dir> - Close a door.
     Nonintelligent and certain other creatures will not be able
     to open a door.   Therefore shutting doors can be a life
     saver. You must be adjacent to an open door, and you cannot
     close broken doors. Bashing a door open will break it.

d - Drop an object from your inventory.
     You can drop an object onto the floor beneath you if that
     floor spot does not already contain an object. Doors and
     traps are considered objects in this sense.   If you have
     several objects of the same kind, you will be prompted for
     dropping one or all of them. It is possible to directly
     drop things which you are wielding or wearing.

e - Display a list of equipment being used.
     Use the Equipment command to display a list of objects
     currently being used by your character. Each object has a
     specific place where it is placed, and that only one object
     of each type may be used at any one time, excepting rings of
     which two can be worn, one on each hand.

f <Dir> - Fire/Throw an object/use a missile weapon. {t - throw}
     You may throw any object carried by your character. Depend-
     ing upon the weight of an object, it may travel across a
     room or drop down beside you. If you throw an object such
     as an arrow, only one will be used at a time.

If you throw at a creature, your chance of hitting the
creature is determined by your plusses to hit, your ability
at throwing, and the object's plusses to hit. Once the
creature is hit, the object may or may not do any actual
damage to it. Certain objects in the dungeon can do great
amounts of damage when thrown, but it's for you to figure
out the obscure ones. Oil flasks are considered to be lit
before thrown; therefore, they will do fire damage to a
creature if they hit it.

To use a bow with arrows, simply wield the bow and throw the
arrows. Extra plusses to damage and hitting are gained by
wielding the proper weapon and throwing the corresponding
ammo. A heavy crossbow with bolts for example, is a
killer...

i - Display a list of objects being carried.
      This command displays a list of all objects being carried,
      but not currently in use. You may carry up to 22 different
      kinds of objects, not including those in your equipment
      list. Depending upon your strength, you will be able carry
      many identical objects before hitting your weight limit.

j <Dir> - Jam a door with an iron spike. {S - spike}
      Most humanoid and many intelligent creatures can simply open
      a closed door, and can eventually get through a locked door.
      Therefore you may spike a door in order to jam it. Each
      spike used on a door will increase its strength, although
      the more spikes you add, the less effect each additional
      spike has. It is very easy to jam a door so much as to make
      it impossible for your character to bash it down, so spike
      doors wisely. The bigger a creature is, the easier it can
      bash a door down. Therefore twenty or more spikes might be
      necessary to slow down a dragon, where one spike would slow
      down a kobold. This command can be counted.

l <Dir> - Look in a direction. {x - examine}
      The Look command is useful in identifying the exact type of
      object or creature shown on the screen. Also, if a creature
      is on top of an object, the look command will describe both.
      You can see creatures and objects up to 200 feet away (20
      spaces). You may freely use the Look command without the
      creatures getting a move on you.

      Looking in a particular direction sees everything within a
      cone of vision which just overlaps the cones of the two
      adjacent directions. Looking with the null direction '5'
      (or '.') sees everything which there is to be seen.

      You are also able to access you monster memories with this
      command. If you see a creature, you are prompted to ask if
      you wish to see a short paragraph of information about your
      experiences with that creature. See also the section on
      being attacked.

m - Cast a magic spell.
      To cast a spell, a character must have previously learned
      it, and must also have in the inventory a magical book from
      which the spell may be read. Each spell has a chance of
      failure which starts out fairly large but decreases as a
      character gains levels. If a character does not have enough
      mana, the chance of failure is greatly increased, and he
      gambles on losing a point of constitution. You will be
      prompted for confirmation before trying to cast a spell when
      you don't have enough mana. Since a character must read the

spell from a book, he cannot be blind or confused when cast-
ing a spell, and there must be some light present.

o <Dir> - Open a door, chest, or lock.
        To open an object such as a door or chest, you must use the
        Open command.   If the object is locked, the Open command
        will attempt to pick the lock, based on your ability at
        disarming.   If an object is trapped and you open it, the
        trap will be set off. This command can be counted, because
        you may need several tries to get a locked door or chest
        open.

p - Read a prayer.
        To pay effectively, a character must have learned the
        prayer, and must also have in the inventory a holy book from
        which the prayer may be read. Each prayer has a chance of
        being ignored which starts out fairly large but decreases as
        a character gains levels. If a character does not have
        enough mana, the chance of failure is greatly increased, and
        he gambles on losing a point of constitution. You will be
        prompted for confirmation before trying to pray when you
        don't have enough mana. Since a character must read the
        prayer from a book, he cannot be blind or confused when
        praying, and there must be some light present.

q - Quaff a potion.
        To drink a potion use the Quaff command. A potion affects
        the player in some manner. The effects of the potion may be
        immediately noticed, or they may be subtle and unnoticed.

r - Read a scroll.
        To read a scroll use the Read command. Most scroll spells
        either affect the player or the area around the player; a
        few cases such as identify scrolls act on other objects.
        Two scrolls, the identify scroll and the recharge scroll,
        have titles which can be read without setting them off, and
        by pressing ESCAPE can be saved for future use.

s - Search general area one turn.
        The Search command can be used to locate hidden traps and
        secret doors about the player. More than a single turn of
        searching will be required in most cases. You should always
        search a chest before trying to open it because they are
        generally trapped. This command can be counted, which is
        useful if you are really sure of finding something eventu-
        ally. A counted search ends as soon as anything is found.

t - Take off a piece of equipment. {T}
        Use the Take Off command to remove an object from use, and
        return it to your inventory. Occasionally you will run into
        a cursed item which cannot be removed.   Cursed items are
        always bad, and can only be taken off after removing the
        curse.

u - Use a staff. {Z - Zap}
        The Use command will activate a staff. Like scrolls, most
        staffs have an area effect. Because staffs are generally
        more powerful than most other items, they are also harder to
        use correctly.

v - Display current version of game.
        The Version command displays the credits for the current
        version of moria.

w - Wear or wield an item being carried.

To wear or wield an object in your inventory, use the Wear/Wield command. If another object is already in use for the same function, it is automatically removed first; if you are wearing two rings, you are given a choice of which one to remove. An object's bonuses cannot be gained until it is worn or wielded.

x - Exchange primary and secondary weapons. {X}
A secondary weapon is any weapon which may be needed often. Instead of searching through your inventory, you may use the exchange command to keep the weapon ready. For instance, if you wanted to use your bow most of the time, but needed a sword for close combat, you could wield your sword, use the exchange command to make it the secondary weapon, then wield your bow. If the sword was suddenly needed, simply use the exchange command to switch between the bow and the sword.

/ - Identify a character shown on screen.
Use the identify command to find out what a character displayed on the screen stands for. For instance, by press- ing `/.', you can find out that the `.' stands for a floor spot.   When used with a creature, the identify command will tell you only what class of creature the symbol stands for, not the specific creature; therefore, use the look command for this information.

If you identify the character for a creature in your monster memory, you are also prompted to ask if you wish to see a paragraph of information on those creatures identified by the given character. Several creatures may be identified in this way.   Typing ESCAPE after the paragraph for any creature will abort back to command level. See also the section on being attacked.

? - Display a list of commands.
The ? command displays a quick reference help page on the screen.

- - Move without pickup.
This is followed by a move command, and causes you to move over any object without picking it up. You can associate a count with this command.

= - Set options.
This is a free move, to set various moria options.   The available options are:

 (1) Cut known corners when running. This is on by default, and the only reason for switching it off would be if you had the search flag on and wished to look for doors in the extremity of every corner.

 (2) Examine potential corners when running.   This is on by default, and allows you to run along an unknown curving cor- ridor. If, however, you are running from a creature, you may wish to switch this option off, because the creature will cut the corner.

 (3) Print self during a run. This is off by default, which gives faster screen updating.

 (4) Stop when map sector changes. This is off by default, but can be switched on if you wish to stop running whenever a new part of the dungeon appears in view.

(5) Treat open doors as empty space while running. This is off
    by default, in which case you stop whenever you run up to an
    open door.

(6) Prompt to pick up objects. This is off by default, in which
    case stepping over an object automatically causes you to
    pick it up. With the option on, you get prompted in all
    such cases with a description of the object to see if you
    really want to take it.

(7) Rogue like command set. This option controls the command
    set in use. It is off by default.

(8) Show weights in inventory. This is off by default: switch-
    ing it on causes the inventory and equipment listings to
    include the weight of all objects. This may be useful to
    know if your pack is getting too heavy.

(9) Highlight and notice mineral seams. This is off by default.
    Switching it on causes quartz and magma to be displayed as
    '%' instead of '#'; also, it causes the look command to
    treat them as interesting objects. This is handy when min-
    ing. Setting this option does not immediately highlight all
    minerals, but only those which are subsequently displayed.
    To display all minerals, just move the map around a bit with
    the 'Locate' (or 'Where') command.

(10)Beep for invalid character. This is on by default.   When
    on, the program will beep for most invalid characters, such
    as trying to choose a spell that you haven't learned yet.
    When off, there are no such beeps.

(11)Display rest/repeat counts. This is on by default.   When
    on, the program will progressively display the remaining
    turns left while resting, and for repeated commands.   For
    those trying to play over a 2400 bps or less connection, or
    for those playing on very slow microcomputers, turning this
    off will make resting and repeated commands work much fas-
    ter.

    The setting of all these options persist in your savefile,
    even after you die.

^P - Previous message.
    The Control-P command will redisplay the last message
    printed on the message line at the top of your screen. A
    second such command will display all of the saved messages.
    You may also give this command a count to specify the number
    of previous messages to display. At present, only 22 mes-
    sages are saved.

^K - Quit the game without saving. {Q}
    To exit the game without saving your character (i.e. kill
    him/her) use the Control-K command. Once exited in this
    manner, your character is nonrecoverable.

^X - Save your character and exit the game.
    To save your game so that it can be restarted later, use the
    Control-X command. Save files will also be generated if the
    game crashes due to a system error. When you die, a reduced
    save file is produced containing only your monster memory,
    and your option settings.

{ - Inscribe an object.
    This command can be used to inscribe any short string on an

object. Inscriptions are limited to twelve characters. The
inscription applies only to the particular object, it is not
automatically transferred to all similar objects. Under
certain circumstances, moria will itself inscribe objects:
if they have been discovered to be cursed or enchanted, or
if they have been sampled without being identified. In this
last case, moria does in fact carefully inscribe every such
item.

If the inscription on an item is a single digit, that digit
can be used to refer to it when using, wearing, or wielding
an item from your pack. For example, if you keep a pick in
your pack with the inscription 1, you can switch to the pick
by wielding item 1 without checking your full inventory list
to find out which item the pick is.

! - Shell out of game.
    Use the Shell command `!' to temporarily exit the game to
    execute UNIX or MSDOS commands. You may reenter the game by
    typing exit to end the spawned process. This is not imple-
    mented in the Macintosh version.

< - Go up an up staircase.
    If you move onto an up staircase you may use the `<' command
    to go up one level. There is always one staircase going up
    on every level except for the town level (this does not mean
    it's easy to find). Going up a staircase will always take
    you to a new dungeon area except for the town level, which
    remains the same for the duration of your character.

> - Go down a down staircase.
    If you are on top of a down staircase you may use the `>'
    command to go down one level. There are always two or three
    staircases going down on each level, except the town level
    which has only one. Going down will always take you to a
    new dungeon area.

. <Dir> - Run in direction. {shift<Dir>}
    The Run command will move you in the indicated direction
    until either you have to make a choice as between two direc-
    tions, or something interesting happens. There are options
    which determine behavior at corners, and at screen boun-
    daries. More precisely, the conditions which stop a run are
    as follows:

(1) A creature appears on the screen, one already on the screen
     moves, or a creature attacks you or casts a spell at you.

(2) You move next to an object, or a feature such as a door or
     trap.

(3) You come to the end of open space, or the end of a passage,
     or a junction of passages, or a hole in a wall.

(4) Anything typed during a run causes the run to stop.   The
     character causing this to occur is ignored. It is best to
     use a space, which is ignored as a command, just in case the
     run stops just before you type the character.

(5) Various changes of state, such as recovery from fear or loss
     of heroism, will stop a run.

     Corners are more complex. A corner allows a choice between
     adjacent rectangular and diagonal directions. If you can
     see walls which ensure that the diagonal gives a faster

traversal, then action is determined by the "cut corners" options. If it is set, then you move diagonally through the corner. This gives you maximum speed (as is nice if you are fleeing a hidden creature). On the other hand, this option should not be set if you want more careful coverage (as when you are searching) so that you take two moves through the corner.

At a potential corner, where walls are not yet visible ahead of the rectangular direction, the "examine corners" option is considered. If set, you will move straight into the corner, which will light up all the corner and so determine where you can go from there. This allows you to follow corners in new passages. If the option is not set, you stop. This allows highly cautious running where you want to stop at all potential choice points.

If you move off the screen while running, then a new section of the dungeon is displayed and the run continues. However, if the "stop when map changes" option is set, you will stop. Again, this is an option for nervous players; after all, there may be a dragon on the new screen.

6. The Town Level

The town level is where you will begin your adventure. The town consists of six buildings, each with an entrance, some townspeople, and a wall which surrounds the town. The first time you are in town it will be daytime, but you may return to find that darkness has fallen. (Note that some spells may act differently in the town level.)

6.1. Townspeople

The town contains many different kinds of people. There are the street urchins, young children who will mob an adventurer for money, and seem to come out of the woodwork when excited.

Blubbering Idiots are a constant annoyance, but not harmful. Public drunks wander about the town singing, and are of no threat to anyone. Sneaky rogues hang about watching for a likely victim to mug. And finally, what town would be complete without a swarm of half-drunk warriors, who take offense or become annoyed just for the fun of it.

Most of the townspeople should be avoided by the largest possible distance when you wander from store to store. Fights will break out though, so be prepared. Since your character grew up in this world of intrigue, no experience is awarded for killing on the town level.

6.2. Supplies

Your character will begin his adventure with some supplies already on him. Use the Inventory 'i' command to check what these supplies are. It will be necessary to buy other supplies before continuing into the dungeon, however, so be sure to enter each of the stores.

6.3. Town Buildings

You may enter any of the stores, if they are open, and barter

with the owner for items you can afford. When bartering, you
enter prices you will pay (or accept) for some object. You can
either enter the absolute amount, or precede a number with a plus
or minus sign to give a positive or negative increment on your
previous offer. If you have previously given an increment or
decrement amount, you can just type RETURN, and the program will
use the last increment amount that you typed. But be warned that
the owners can easily be insulted, and may even throw you out for
a while if you insult them too often. To enter a store, simply
move onto the entrance represented by the numbers 1 through 6.

If you consistently bargain well in a store, that is, you reach
the final offer much more often than not, then the store owner
will eventually recognize that you are a superb haggler, and will
go directly to the final offer instead of haggling with you.
Items which cost less than 10 gold pieces do not count, as hag-
gling well with these items is usually either very easy or almost
impossible.

Once inside a store, the store inventory will appear on the
screen along with a set of options for your character. You may
browse the store's inventory if it takes more than one page to
display, and you may sell to, or purchase items from, his inven-
tory. You can execute your inventory and equipment commands to
see what you are carrying. Not shown with the options are the
wear, take off, and exchange commands which will also work, but
were excluded to keep the options simple.

Stores do not always have everything in stock. As the game
progresses, they may get new items, so check from time to time.
Also, if you sell them an item, it may get sold to a customer
while you are adventuring, so don't always expect to be able to
get back everything you have sold.

Store owners will not buy harmful or useless items. If an object
is unidentified, they will pay you some base price for it. Once
they have bought it they will immediately identify the object.
If it is a good object, they will add it to their inventory. If
it was a bad bargain, they simply throw the item away. In any
case, you may receive some knowledge of the item if another is
encountered.

The General Store
     The General Store sells foods, drinks, some clothing,
     torches, lamps, oil, shovels, picks, and spikes. All of
     these items, and some others, can be sold back to the Gen-
     eral store for money. The entrance to the General Store is
     a '1'.

The Armory
     The Armory is where the town's armor is fashioned. All
     sorts of protective gear may be bought and sold here. The
     entrance to the Armory is a '2'.

The Weaponsmith's Shop
     The Weaponsmith's Shop is where the town's weapons are
     fashioned. Hand and missile weapons may be purchased and
     sold here, along with arrows, bolts, and shots. The
     entrance to the Weaponsmith's is a '3'.

The Temple
     The Temple deals in healing and restoration potions, as well
     as bless scrolls, word of recall scrolls, some approved pri-
     estly weapons, etc. The entrance to the Temple is a '4'.

The Alchemy Shop
    The Alchemy Shop deals in all manner of potions and scrolls.
    The entrance to the Alchemy Shop is a '5'.

The Magic User's Shop
    The Magic User's Shop is the most expensive of all the
    stores. It deals in all sorts of rings, wands, amulets, and
    staves. The entrance to the Magic Shop is a '6'.

7. Within The Dungeon

Once your character is adequately supplied with food, light,
armor, and weapons, he is ready to enter the dungeon. Move on
top of the '>' symbol and use the down '>' command. Your charac-
ter enters a maze of interconnecting staircases and finally
passes through a one-way door. He is now on the first level of
the dungeon (50 feet), and must survive many horrible and chal-
lenging encounters to find the treasure lying about.

There are two sources for light once inside the dungeon: per-
manent light which has been magically placed within rooms, and a
light source carried by the player. If neither is present, the
character will be unable to map or see any attackers. Lack of
light will also affect searching, picking locks, and disarming.

A character must wield a torch or lamp in order to supply his own
light. Once a torch or lamp has only 50 or less turns left
before burning out, the message "Your light is growing faint"
will be displayed at random intervals. Once a torch is burnt
out, it is useless and can be dropped. A lamp or lantern can be
refilled with oil by using the Fill 'F' command. You must of
course be carrying extra oil to refill a lantern.

8. Attacking and Being Attacked

Attacking is simple in moria. If you move into a creature, you
attack it.   You can attack from a distance by firing a missile,
or by magical means such as aiming a wand. Creatures attack in
the same way; if they move into you, they attack you. Some
creatures can also cast spells from a distance, and others can
breathe fire or worse on you from a distance.

Creatures moving in walls can not be attacked by wands and other
magic attacks normally stopped by walls.   You can attack a
creature in a wall normally though by trying to move into the
wall space containing the creature. However, in order to attack
an invisible creature in a wall, you must tunnel into the wall
containing the creature. If you just try to move into the wall,
you will bump your head and look quite silly.

If you are wielding a weapon, the damage for the weapon is used
when you hit a creature. Otherwise, you get two fist strikes.
Very strong creatures can do a lot of damage with their fists...
You may have a primary weapon, and a secondary weapon which is
kept on your belt or shoulder for immediate use. You can switch
between your primary and secondary weapons with the exchange com-
mand. Be sure to wield the proper weapon when fighting. Hitting
a dragon over the head with a bow will simply make him mad, and
get you killed.

Missile weapons, such as bows, can be wielded, and then the
proper missile, in this case an arrow, can be fired across the
room into a target. Missiles can be used without the proper mis-

sile weapon, but used together they have a greater range and do far more damage.

Hits and misses are determined by ability to hit versus armor class. A hit is a strike that does some damage; a miss may in fact reach a target, but fails to do any damage. Higher armor classes make it harder to do damage, and so lead to more misses.

8.1. Monster Memories

There are hundreds of different creatures in the mines of moria, many of which look the same on the screen. The exact species of a creature can be discovered by looking at it. It is also very difficult to keep track of the capabilities of various creatures. Rather than forcing you to keep notes, moria automatically keeps track of your experiences with a particular creature. This is called the monster memory. You monster memory recalls the particular attacks of each creature which you have suffered, as well as recalling if you have observed them to multiply or move erratically, or drop treasure, or many other attributes.

If you have killed enough of a particular creature, or suffered enough attacks, recalling the monster memory may also provide you with information not otherwise available, such as a armor class or hit dice. These are not explained, but may be useful to give the relative danger of each creature. This memory can be passed on to a new character even after you die, by means of a reduced save file.

8.2. Your Weapon

Carrying a weapon in your backpack does you no good. You must wield a weapon before it can be used in a fight. A secondary weapon can be kept by wielding it and then using the exchange command. A secondary weapon is not in use, simply ready to be switched with the current weapon if needed.

Weapons have two main characteristics, their ability to hit and their ability to do damage, expressed as `(+#,+#)'. A normal weapon would be `(+0,+0)'. Many weapons in moria have magical bonuses to hit and/or do damage. Some weapons are cursed, and have penalties that hurt the player. Cursed weapons cannot be unwielded until the curse is lifted.

Moria assumes that your youth in the rough environment near the dungeons has taught you the relative merits of different weapons, and displays as part of their description the damage dice which define their capabilities. The ability to damage is added to the dice roll for that weapon. The dice used for a given weapon is displayed as `#d#'. The first number indicates how many dice to roll, and the second indicates how many sides they have. A "2d6" weapon will give damage from 2 to 12, plus any damage bonus. The weight of a weapon is also a consideration. Heavy weapons may hit harder, but they are also harder to use. Depending on your strength and the weight of the weapon, you may get several hits in one turn.

Missile booster weapons, such as bows, have their characteristics added to those of the missile used, if the proper weapon/missile combination is used. Also, these weapons will multiply the base damage of the missile by a number from 2 to 4, depending on the strength of the weapon. This multiplier is displayed as `(x#)'.

Although you receive any magical bonuses an unidentified weapon
may possess when you wield it, those bonuses will not be added in
to the displayed values of to-hit and to-dam on your character
sheet.   You must identify the weapon before the displayed values
reflect the real values used.

Finally, some rare weapons have special abilities.   These are
called ego weapons, and are feared by great and meek. An ego
sword must be wielded to receive benefit of its abilities.

Special weapons are denoted by the following abbreviations:

DF - Defender.
     A magical weapon that helps the wielder defend himself, thus
     increasing his/her armor class, and protecting him/her
     against damage from fire, frost, acid, lightning, and falls.
     This weapon also will increase your stealth, let you see
     invisible creatures, protect you from paralyzation attacks,
     and help you regenerate hit points and mana faster. As a
     result of the regeneration ability, you will use up food
     faster than normal while wielding such a weapon.

FB - Frost Brand.
     A magical weapon of ice that delivers a cold critical to
     heat based creatures. It will inflict one and a half times
     the normal damage when used against a heat based creature.

FT - Flame Tongue.
     A magical weapon of flame that delivers a heat critical to
     cold based creatures. It will inflict one and a half times
     the normal damage when used against cold based or inflamm-
     able creatures.

HA - Holy Avenger.
     A Holy Avenger is one of the most powerful of weapons.   A
     Holy Avenger will increase your strength and your armor
     class. This weapon will do extra damage when used against
     evil and undead creatures, and will also give you the abil-
     ity to see invisible creatures.

SA - Slay Animal.
     A Slay Animal weapon is a special purpose weapon whose sole
     intent is to destroy all the dangerous animals in the world.
     An animal is any creature natural to the world.   Therefore
     an orc would not be an animal, but a giant snake would be.
     This will inflict twice the normal amount of damage when
     used against an animal.

SD - Slay Dragon.
     A Slay Dragon weapon is a special purpose weapon whose sole
     intent is to destroy dragon-kind.   Therefore, when used
     against a dragon, the amount of damage done is four times
     the normal amount.

SE - Slay Evil.
     A Slay Evil weapon is a special purpose weapon whose sole
     intent is to destroy all forms of evil. When used against
     an evil creature, either alive or undead, the damage done
     twice the normal amount.

SU - Slay Undead.
     A Slay Undead weapon is a special purpose weapon whose sole
     intent is to destroy all forms of undead. This weapon is
     hated and feared by the intelligent undead, for a single
     blow from this weapon will inflict three times the normal

amount of damage. This weapon also gives you the ability to
see invisible creatures, which is especially useful against
undead, since many of them are normally invisible.

8.3. Body and Shield Bashes

Weight is the primary factor in being able to bash something, but
strength plays a role too. After bashing, a character may be off
balance for several rounds depending upon his dexterity.

Doors can be broken down by bashing them. Once a door is bashed
open, it is forever useless and cannot be closed.

Chests too may be bashed open, but be warned that the careless
smashing of a chest often ruins the contents. Bashing open a
chest will not disarm any traps it may contain, but does allow
the strong and ignorant to see what is inside.

Finally, a creature may be bashed. If a shield is currently
being worn, the bash is a shield bash and will do more damage.
In either case, a bash may throw an opponent off balance for a
number of rounds, allowing a player to get in a free hit or more.
If the player is thrown off balance, his opponent may get free
hits on him. This is a risky attack.

8.4. Your Armor Class

Armor class is a number that describes the amount and the quality
of armor being worn. Armor class will generally run from about 0
to 60, but could become negative or greater than 60 in rare
cases.

The larger your armor class, the more protective it is. A nega-
tive armor class would actually help get you hit. Armor protects
you in three manners. One, it makes you harder to be hit for
damage. A hit for no damage is the same as a miss. Two, good
armor will absorb some of the damage that your character would
have taken. An armor class of 30 would absorb 15% of any damage
meant for him. Three, acid damage is reduced by wearing body
armor.   It is obvious that a high armor class is a must for sur-
viving the lower levels of moria.

Each piece of armor has an armor class adjustment, and a magical
bonus. Armor bought in town will have these values displayed
with its description. Armor that is found within the dungeon
must be identified before these values will be displayed. All
armor always has the base armor class displayed, to which the
bonus is added. It is always possible to figure this out anyway,
by watching the effect it has on your displayed armor class.

Armor class values are always displayed between a set of brackets
as `[#]' or `[#,+#]'. The first value is the armor class of the
item. The second number is the magical bonus of the item which
is only displayed if known, and will always have a sign preceding
the value. There are a few cases where the form `[+#]' is used,
meaning the object has no armor class, only a magical armor bonus
if worn. Body armor may also have a (-#) displayed in
parentheses; this is a penalty to hit, because the bulk of the
armor makes it more difficult to swing a weapon freely.

Some pieces of armor will possess special abilities denoted by
the following abbreviations:

RA - Resist Acid.
　　　A character using such an object will take only one-third
　　　normal damage from any acid thrown upon him. In addition,
　　　armor so enchanted will resist the acid's effects and not be
　　　damaged by it.

RC - Resist Cold.
　　　A character using a resist cold object will take only one-
　　　third damage from frost and cold.

RF - Resist Fire.
　　　A character using a resist fire object will take only one-
　　　third damage from heat and fire.

RL - Resist Lightning.
　　　A character using a resist lightning object will take only
　　　one-third damage from electrical attacks.

R - Resistance.
　　　A character wearing armor with this ability will have resis-
　　　tance to Acid, Cold, Fire, and Lightning as explained in
　　　each part above.

8.5. Crowns

Some crowns also have special magical abilities that improve your
chances in a battle.

Crown of Might
　　　This is the great crown of the warriors. The wearer will
　　　have an increased strength, dexterity, and constitution, and
　　　will also be immune to any foe's attempt to slow or paralyze
　　　him or her.

Crown of the Magi
　　　This is the great crown of the wizards. The wearer will
　　　have an increased intelligence, and will also be given
　　　resistance against fire, frost, acid, and lightning.

Crown of Lordliness
　　　This is the great crown of the priests. The wearer will
　　　have an increased wisdom and charisma.

Crown of Seeing
　　　This is the great crown of the rogues. The wearer will be
　　　able to see even invisible creatures, and will have an
　　　increased ability to locate traps and secret doors.

Crown of Regeneration
　　　This crown will help you regenerate hit points and mana more
　　　quickly than normal, allowing you to fight longer before
　　　needing to rest. You will use of food faster than normal
　　　while wearing this crown because of the regenerative
　　　effects.

Crown of Beauty
　　　This crown looks impressive, and will increase your
　　　charisma, but is otherwise not useful.

9. Objects Found In The Dungeon

The mines are full of objects just waiting to be picked up and
used. How did they get there? Well, the main source for useful

items are all the foolish adventurers that proceeded into the dungeon before you. They get killed, and the helpful creatures scatter the various treasure throughout the dungeon. Most cursed items are placed there by the joyful evil sorcerers, who enjoy a good joke when it gets you killed.

You pick up objects by moving on top of them. You can carry up to 22 different items in your backpack while wearing and wielding many others. Although you are limited to 22 different items, you may be carrying several items of each kind, restricted only by the amount of weight your character can carry. Your weight limit is determined by your strength. Only one object may occupy a given floor location, which may or may not also contain one creature. Doors, traps, and staircases are considered objects for this purpose.

If you try to carry more weight than your limit, you will move more slowly than normal until you drop the extra weight. If picking up an object would take you over your weight limit, then you will be asked whether you really want to pick it up. It is a good idea to leave the object alone if you are fleeing from a monster.

Many objects found within the dungeon have special commands for their use. Wands must be Aimed, staffs must be Used, scrolls must be Read, and potions must be Quaffed. In any case, you must first be able to carry an object before you can use it. Some objects, such as chests, are very complex. Chests contain other objects and may be trapped, and/or locked. Read the list of player commands carefully for a further understanding of chests.

One item in particular will be discussed here. The scroll of "Word-of-Recall" can be found within the dungeon, or bought at the temple in town. It acts in two manners, depending upon your current location. If read within the dungeon, it will teleport you back to town. If read in town, it will teleport you back down to the deepest level of the dungeon on which your character has previously been. This makes the scroll very useful for getting back to the deeper levels of moria. Once the scroll has been read, it takes a while for the spell to act, so don't expect it to save you in a crisis.

The game provides some automatic inscriptions to help you keep track of your possessions. Wands and staves which are known to be empty will be inscribed with "empty". Objects which have been tried at least once, but haven't been identified yet will be inscribed with "tried". Cursed objects are inscribed with "damned". Also, occasionally you will notice that something in your inventory or equipment list seems to be magical. High level characters are much more likely to notice this than beginning characters. When you do notice this, the item in question will be inscribed with "magik".

And lastly, a final warning: not all objects are what they seem. Skeletons lying peacefully about the dungeon have been known to get up...

9.1. Cursed Objects

Some objects, mainly armor and weapons, have had curses laid upon them. These horrible objects will look like any other normal item, but will detract from your character's stats or abilities if worn. They will also be impossible to remove until a remove curse is done.

If you wear or wield a cursed item, you will immediately feel
something wrong. The item will also be inscribed "damned".

9.2. Mining

Much of the treasure within the dungeon can be found only by min-
ing it out of the walls. Many rich strikes exist within each
level, but must be found and mined. Quartz veins are the
richest, yielding the most metals and gems, but magma veins will
have some hordes hidden within.

Mining is virtually impossible without a pick or shovel. Picks
and shovels have an additional magical ability expressed as
`(+#)'. The higher the number, the better the magical digging
ability of the tool. A pick or shovel also has plusses to hit
and damage, and can be used as a weapon.

When a vein of quartz or magma is located, the character should
wield his pick or shovel and begin digging out a section. When
that section is removed, he should locate another section of the
vein, and begin the process again. Since granite rock is much
harder to dig through, it is much faster to follow the vein
exactly and dig around the granite. There is an option for
highlighting magma and quartz.

If the character has a scroll or staff of treasure location, he
can immediately locate all strikes of treasure within a vein
shown on the screen. This makes mining much easier and more pro-
fitable.

It is sometimes possible to get a character trapped within the
dungeon by using various magical spells and items. So it is a
very good idea to always carry some kind of digging tool, even
when you are not planning on tunneling for treasure.

9.3. Staircases, Secret Doors, Passages, and Rooms

Staircases are the manner in which you get deeper, or climb out
of the dungeon. The symbols for the up and down staircases are
the same as the commands to use them. A `<' represents an up
staircase and a `>' represents a down staircase. You must move
your character over the staircase before you can use them.

Each level has at least one up staircase, and at least two down
staircases. There are no exceptions to this rule. You may have
trouble finding some well hidden secret doors, but the stairs are
there.

Many secret doors are used within the dungeon to confuse and
demoralize adventurers foolish enough to enter. But with some
luck, and lots of concentration, you can find these secret doors.
Secret doors will sometimes hide rooms or corridors, or even
entire sections of that level of the dungeon. Sometimes they
simply hide small empty closets or even dead ends.

Creatures in the dungeon will generally know and use these secret
doors. If they leave one open, you will be able to go right
through it. If they close it behind them you will have to search
for the catch first. Once a secret door has been discovered by
you, it is drawn as a known door and no more searching will be
required to use it.

10. Winning The Game

Once your character has progressed into killing dragons with but
a mean glance and snap of his fingers, he may be ready to take on
the Balrog. The Balrog will appear on most levels after level
49, so don't go down there until you are ready for him.

The Balrog cannot be killed in some of the easier methods used on
normal creatures.   Because of the Balrog's cunning, he will
teleport away to another level if a spell such as destruction is
used upon him, and the Balrog cannot be polymorphed, slept, con-
fused, or genocided. Magical spells like coldball are effective
against him, as are weapons, but he is difficult to kill, and if
allowed to escape to another level can heal himself.

If you should actually survive the attempt of killing the Balrog,
you will receive the status of WINNER. Since you have defeated
the toughest creature alive, your character is ready to retire
and cannot be saved.   When you quit the game, your character
receives a surprise bonus score.

11. Upon Death and Dying

If your character falls below 0 hit points, he has died and can-
not be restored.   A tombstone showing information about your
character will be displayed. You are also permitted to get a
record of your character, and all your equipment (identified)
either on the screen or in a file.

Your character will leave behind a reduced save file, which con-
tains only the monster memory and your option choices. It may be
restored, in which case the new character is generated exactly as
if the file was not there, but the new player will find his mon-
ster memory containing all the experience of past incarnations.

12. Wizards

There are rumors of moria Wizards which, if asked nicely, can
explain details of the moria game that seem complicated to
beginners.

Addendum to the Moria manual

Proposed Contribution. Written by Mike Marcelais
                                 North Carolina School of
                                     Science And Math
                                 mrm@odin.ncssm.edu
                                 games@odin.ncssm.edu

1. Experience

All characters receive experience during the game. Experience
determines your level, which determines hit points, mana points,
spells, abilities, etc. The amount of experience required to
advance a level is a base value (shown below) plus a penalty
for race and class.

1.1 Calculating Experience Levels

Base Experience

Lv	Exp to Adv	Lv	Exp to Adv	Lv	Exp to Adv
1	10	14	1,400	27	35,000
2	25	15	1,800	28	50,000
3	45	16	2,300	29	75,000
4	70	17	2,900	30	100,000
5	100	18	3,600	31	150,000
6	140	19	4,400	32	200,000
7	200	20	5,400	33	300,000
8	280	21	6,800	34	400,000
9	380	22	8,400	35	500,000
10	500	23	10,200	36	750,000
11	650	24	12,500	37	1,500,000
12	850	25	17,500	38	2,500,000
13	1,100	26	25,000	39	5,000,000

Maximum level is 40 and maximum experience is 9,999,999

There are percent penalties for various races and classes to
help even them out. The table below lists all the penalties.

Human	0%	Warrior	0%
Half-Elf	10%	Mage	30%
Elf	20%	Priest	20%
Halfling	10%	Rogue	0%
Gnome	25%	Ranger	40%
Dwarf	20%	Paladin	35%
Half-Orc	10%		
Half-Troll	20%		

For example: For a 10'th level Gnomish Mage to achieve 11'th level
needs:
            500 * 1.25 * 1.30 = 812.5
          (base) (gnome) (mage)

Note: Even for the worst case (Gnomish Ranger) it is still possible
to achieve the 40th level. (5,000,000*1.25*1.40=8,750,000 experience)

The program internally keeps experience out to the fourth decimal place
even though it only displays the integer portion on the screen.

1.2 Getting Experience

There are many ways to gain experience. This list shows a few.

1. Defeating monsters
2. Disarming traps
3. Picking locks
4. Using a scroll, potion, staff, wand, or rod for the first time
      and discovering what it did.
5. Casting a spell successfully for the first time.
6. Drinking a potion of gain experience or gain level

1.3 Titles

Each experience level has a title which is displayed under your name
and class. Below is a listing of all the titles for each level and
class.

	Warrior	Mage	Priest	Rogue	Ranger	Paladin
1	Rookie	Novice	Believer	Vagabond	Runner(1st)	Gallant
2	Private	Apprentice	Acolyte(1st)	Footpad	Runner(2nd)	Keeper(1st)
3	Soldier	Trickster-1	Acolyte(2nd)	Cutpurse	Runner(3rd)	Keeper(2nd)
4	Mercenary	Trickster-2	Acolyte(3rd)	Robber	Strider(1st)	Keeper(3rd)
5	Veteran(1st)	Trickster-3	Adept(1st)	Burglar	Strider(2nd)	Keeper(4th)
6	Veteran(2nd)	Cabalist-1	Adept(2nd)	Filcher	Strider(3rd)	Keeper(5th)
7	Veteran(3rd)	Cabalist-2	Adept(3rd)	Sharper	Scout(1st)	Keeper(6th)
8	Warrior(1st)	Cabalist-3	Priest(1st)	Magsman	Scout(2nd)	Keeper(7th)
9	Warrior(2nd)	Visionist	Priest(2nd)	Common Rogue	Scout(3rd)	Keeper(8th)
10	Warrior(3rd)	Phantasmist	Priest(3rd)	Rogue(1st)	Scout(4th)	Keeper(9th)
11	Warrior(4th)	Shadowist	Priest(4th)	Rogue(2nd)	Scout(5th)	Protector-1
12	Swordsman-1	Spellbinder	Priest(5th)	Rogue(3rd)	Courser(1st)	Protector-2
13	Swordsman-2	Illusionist	Priest(6th)	Rogue(4th)	Courser(2nd)	Protector-3
14	Swordsman-3	Evoker(1st)	Priest(7th)	Rogue(5th)	Courser(3rd)	Protector-4
15	Hero	Evoker(2nd)	Priest(8th)	Rogue(6th)	Courser(4th)	Protector-5
16	Swashbuckler	Evoker(3rd)	Priest(9th)	Rogue(7th)	Courser(5th)	Protector-6
17	Myrmidon	Evoker(4th)	Curate(1st)	Rogue(8th)	Tracker(1st)	Protector-7
18	Champion-1	Conjurer	Curate(2nd)	Rogue(9th)	Tracker(2nd)	Protector-8
19	Champion-2	Theurgist	Curate(3rd)	Master Rogue	Tracker(3rd)	Defender-1
20	Champion-3	Thaumaturge	Curate(4th)	Expert Rogue	Tracker(4th)	Defender-2
21	Superhero	Magician	Curate(5th)	Senior Rogue	Tracker(5th)	Defender-3
22	Knight	Enchanter	Curate(6th)	Chief Rogue	Tracker(6th)	Defender-4
23	Superior Knt	Warlock	Curate(7th)	Prime Rogue	Tracker(7th)	Defender-5
24	Gallant Knt	Sorcerer	Curate(8th)	Low Thief	Tracker(8th)	Defender-6
25	Knt Errant	Necromancer	Curate(9th)	Thief(1st)	Tracker(9th)	Defender-7
26	Guardian Knt	Mage(1st)	Canon(1st)	Thief(2nd)	Guide(1st)	Defender-8
27	Baron	Mage(2nd)	Canon(2nd)	Thief(3rd)	Guide(2nd)	Warder(1st)
28	Duke	Mage(3rd)	Canon(3rd)	Thief(4th)	Guide(3rd)	Warder(2nd)
29	Lord(1st)	Mage(4th)	Canon(4th)	Thief(5th)	Guide(4th)	Warder(3rd)
30	Lord(2nd)	Mage(5th)	Canon(5th)	Thief(6th)	Guide(5th)	Warder(4th)
31	Lord(3rd)	Wizard(1st)	Low Lama	Thief(7th)	Guide(6th)	Warder(5th)
32	Lord(4th)	Wizard(2nd)	Lama-1	Thief(8th)	Guide(7th)	Warder(6th)
33	Lord(5th)	Wizard(3rd)	Lama-2	Thief(9th)	Guide(8th)	Warder(7th)
34	Lord(6th)	Wizard(4th)	Lama-3	High Thief	Guide(9th)	Warder(8th)
35	Lord(7th)	Wizard(5th)	High Lama	Master Thief	Pathfinder-1	Warder(9th)
36	Lord(8th)	Wizard(6th)	Great Lama	Executioner	Pathfinder-2	Guardian
37	Lord(9th)	Wizard(7th)	Patriarch	Low Assassin	Pathfinder-3	Chevalier
38	Lord Gallant	Wizard(8th)	High Priest	Assassin	Ranger	Justiciar
39	Lord Keeper	Wizard(9th)	Great Priest	High Assassin	High Ranger	Paladin
40	Lord Noble	Wizard Lord	Noble Priest	Guildmaster	Ranger Lord	High Lord

Addendum to the manual for Moria.

Proposed contribution written by Mike Marcelais
                                North Carolina School of
                                   Science And Math
                                mrm@odin.ncssm.edu
                                games@odin.ncssm.edu

1. Magic Spells

All player characters except Warriors are able to learn some form of
magic spells. There are two kinds of magic, Magic spells, which Mages,
Rogues, and Rangers get, and prayers, which Priests and Paladins have.
Each spell has a minimum level required for learning it, a mana score,
which is the mana points required to cast it, and a failure percentage.

Mana points are determined by your experience level, and the level of
your key stat. For Mages, Rogues, and Rangers, the key stat is intelligence,
for Priests and Paladins the key stat is wisdom. The effect of your key
stat is shown by the following table.

Stat Level	Factor
3-7	0
8-17	1
18-18/49	3/2
18/50-18/69	2
18/70-18/89	5/2
18/90-18/99	3
18/100	4

Your Mana score is the Factor times your experience level plus 1.
If your key stat is 7 or less, your Mana score will be zero (not one)
and you will not be able to use any spells. If you attempt to cast a
spell that calls for more Mana than you have, the rate of failure is much
greater than normal, you will faint for a few turns afterward, and you stand
the chance of damaging your health.

1.1 Priest Spells

Priest spells are received from the character's deity. When the 'G'
command is issued to learn new spells, spells are chosen randomly from
the spells that you are able to cast. You need not
have the book the spell is in to learn it, because your God gave it to you,
but you do need the book to cast the spell. Failure percentages and spell
effectiveness are based on Wisdom for priests and paladins.

1.1.1 Priest spell levels and Mana

This is a table of all the spells, with the mana and level of achievement
for Priests and Paladins.

	Priest		Paladin	
(Beginner's Handbook)	Lv	Mana	Lv	Mana
A Detect Evil	1	1	1	1
B Cure Light Wounds	1	2	2	2
C Bless	1	2	3	3
D Remove Fear	1	2	5	3
E Call Light	3	2	5	4
F Find Traps	3	3	7	5
G Detect Doors/Stairs	3	3	7	5
H Slow Poison	3	3	9	7
(Words of Wisdom)				
A Blind Creature	5	4	9	7
B Portal	5	4	9	8

```
C  Cure Medium Wounds      5   4    11   9
D  Chant                   5   5    11  10
E  Sanctuary               7   5    11  10
F  Create Food             7   5    13  10
G  Remove Curse            7   6    13  11
H  Resist Heat and Cold    7   7    15  13

(Chants and Blessings)
A  Neutralize Poison       9   6    15  15
B  Orb of Draining         9   7    17  15
C  Cure Serious Wounds     9   7    17  15
D  Sense Invisible        11   8    19  15
E  Protection from Evil   11   8    19  15
F  Earthquake             11   9    21  17
G  Sense Surroundings     13  10    23  17
H  Cure Critical Wounds   13  11    25  20
I  Turn Undead            15  12    27  21

(Exorcisms and Dispellings)
A  Prayer                 15  14    29  22
B  Dispel Undead          17  14    31  24
C  Heal                   21  16    33  28
D  Dispel Evil            25  20    35  32
E  Glyph of Warding       33  24    37  36
F  Holy Word              39  32    39  38
```

1.1.2 Priest Spell Descriptions

This is a short description of each of the spells, listed alphabetically.

Bless - Improves armor class and fighting ability for a short period of time.
Blind Creature - Blinds a creature for a short period of time.
Call Light - Lights up an area.
Chant - Improves armor class and fighting ability for a medium period of time.
Create Food - Causes a food item to be dropped at your feet.
Cure Critical Wounds - Cures a very large number of hit points.
Cure Light Wounds - Cures a small number of hit points.
Cure Medium Wounds - Cures a medium number of hit points.
Cure Serious Wounds - Cures a large number of hit points.
Detect Doors/Stairs - Finds all the doors and stairs on the screen.
Detect Evil - Finds all the evil creatures on the screen.
Dispel Evil - Attempts to destroy the evil creature.
Dispel Undead - Attempts to destroy the undead creature.
Earthquake - Randomly toggles corridors into walls and vice versa.
Find Traps - Locates all the traps on the screen.
Glyph of Warding - Leaves a 'Glyph' that monsters won't pass over.
Heal - Restores 200 Hit Points.
Holy Word - Dispels evil, removes fear, cures poison, restores 1000 HPs,
            restores all stats, and invulnerability for 3 turns.
Neutralize Poison - Cures you of poison.
Orb of Draining - Offensive spell that drains levels from monsters.
Portal - Teleports you a short distance away.
Prayer - Improves armor class and fighting ability for a long period of time.
Protection from Evil - Causes evil creatures to do less damage to you.
Remove Curse - Removes {damned} objects that you are welding.
Remove Fear - Negates the fear placed on you by an enemy.
Resist Heat and Cold - Reduce damage you suffer from heat or cold attacks.
Sanctuary - Causes neighboring monsters to fall asleep for a while.
Sense Invisible - Finds all invisible creatures on the screen.
Sense Surroundings - Maps the dungeon appearing on the screen.
Slow Poison - Reduces the rate HP are lost due to poison.
Turn Undead - Attempts to cause undead creatures to flee.

1.2 Mage Spells

Mage Spells are more powerful and offensive in nature than Priest
spells. This offsets the fact that magicians are generally weaker
than any other class. Because mage spells are learned though
study, you must have the correct Magic book to learn and cast a
spell. Learning spells can be banked up. For example: You are a
second level Mage who had learned Magic Missile and can learn one
more spell. You do not wish to learn Detect Monsters, Phase Door
or Light Area. You can wait until you are third level and learn
both the Cure Light Wounds and Stinking Cloud, both third level
spells. Spell failure and effectiveness is based on intelligence
for Mages, Rangers, and Rogues. Rangers can learn all but the most
powerful offensive spell. Rogues can not learn any offensive spell.

1.2.1 Mage Spell levels and Mana

	Mage		Ranger		Rogue	
(Beginners-Magik)	Lv	Mana	Lv	Mana	Lv	Mana
A Magic Missile	1	1	3	1	--	--
B Detect Monsters	1	1	3	2	5	1
C Phase Door	1	2	3	2	7	2
D Light Area	1	2	5	3	9	3
E Cure Light Wounds	3	3	5	3	11	4
F Find Hidden Traps/Doors	3	3	5	4	13	5
G Stinking Cloud	3	3	7	5	--	--
(Magik I)						
A Confusion	3	4	7	6	15	6
B Lightning Bolt	5	4	9	7	--	--
C Trap/Door Destruction	5	5	9	8	17	7
D Sleep I	5	5	11	8	19	8
E Cure Poison	5	5	11	9	21	9
F Teleport Self	7	6	13	10	--	--
G Remove Curse	7	6	13	11	23	10
H Frost Bolt	7	6	15	12	--	--
I Turn Stone to Mud	9	7	15	13	--	--
(Magik II)						
A Create Food	9	7	17	17	25	12
B Recharge Item I	9	7	17	17	27	15
C Sleep II	9	7	21	17	--	--
D Polymorph Other	11	7	21	19	--	--
E Identify	11	7	23	25	29	18
F Sleep III	13	7	23	20	--	--
G Fire Bolt	15	9	25	20	--	--
H Slow Monster	17	9	25	21	--	--
(Mages Guide to Power)						
A Frost Ball	19	12	27	21	--	--
B Recharge Item II	21	12	29	23	--	--
C Teleport Other	23	12	31	25	--	--
D Haste Self	25	12	33	25	--	--
E Fire Ball	29	18	35	25	--	--
F Word of Destruction	33	21	37	30	--	--
G Genocide	37	25	--	--	--	--

Note: Rangers don't get spells until 3'rd level, Rogues 5'th level.

1.2.2 Mage Spell Descriptions

Confusion - Confuses a monster for a short time.
Create Food - Causes a food item to be dropped at your feet.
Cure Light Wounds - Restores a small number of hit points.
Cure Poison - Neutralizes the poison running through your veins.
Detect Monsters - Displays all the monsters on the screen.
Find Hidden Traps/Doors - Locates all the secret traps and doors.

Fire Ball - Shoots a ball of flame toward a monster.
Fire Bolt - Shoots a bolt of flame toward a monster.
Frost Ball - Shoots a ball of frost toward a monster.
Frost Bolt - Shoots a bolt of frost toward a monster.
Genocide - Destroys a particular monster on the level.
Haste Self - Causes you to move faster temporarily.
Identify - Identifies an unknown object in your pack.
Light Area - Illuminates the area you are in with light.
Lightning Bolt - Shoots a bolt of lightning at your enemy.
Magic Missile - Traditional bolt of magic used to damage enemies.
Phase Door - Teleports you a short distance.
Polymorph Other - Polymorphs a monster into a different creature.
Recharge Item I and II - Recharges a staff, rod, or wand.
Remove Curse - Allows you to unwield {damned} items.
Sleep I - Causes a monster of your choosing to fall asleep.
Sleep II - Causes neighboring monsters to fall asleep.
Sleep III - Causes all monsters in range to fall asleep.
Slow Monster - Causes a monster to move slower.
Stinking Cloud - Shoots a ball of noxious vapors to do damage.
Teleport Self - Teleports you to a new place on the level.
Teleport Other - Teleports an enemy to a new place on the level.
Trap/Door Destruction - Destroys all neighboring doors and traps.
Turn Stone to Mud - Causes a wall (or other stone object) to melt.
Word of Destruction - Destroys the entire screen.

For spells that come in numbered versions (Sleep I, II, III, etc), the
higher numbers have a higher effectiveness, but greater change
of spell failure and greater Mana cost.

1.3 Using Offensive Spells Against Monsters

Monsters have a chance to save themselves from damage caused by
offensive spells, just like the player has a chanced to be saved from
damage by monster spells. This chance is greater for higher level
monsters than for lower level monsters. Also, some spells will never
work against monsters whose level is higher than the character's
experience level.

Many monsters are immune to certain kinds of attack, and will suffer little
or no damage from such attacks. For example, a fire breathing dragon will
suffer little damage from a fire ball, but will suffer greatly from a
frost ball. Also, Undead creatures will not be affected by sleep spells,
since they never sleep.