

# Senet Help Contents: Version 1.0s

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# **Version change log:**

Version 1.0s -- Initial Release, May 1995.

## Prolog . . .



## Finally night!

The crescent moon shines dimly in the Egyptian sky, leaving the north face of the smaller pyramid in deep darkness. Slowly, carefully, you make your way up the steep slope, furtively hiding your light from the desert expanse and unfriendly eyes tracing your movement up the dark face. Soon you reach your goal -- a hidden passageway, high and centered -- cleverly hidden for thousands of years until you blundered upon it a few days ago. Your watching, scheming, and patient waiting has paid off. You begin to pry and dig -- carefully clearing the entrance. Then, you are in! Crawling, snaking along the narrow stone passage, twisting around a pile of rubble here and there, until deep into the stone heart of the massive mount you reach the point of no return -- the long sought entrance to the tomb.

On the tomb door, engraved deep in its surface, lies the seal of the jackal over nine captives -- the sign of great nobility and power. You pause; hesitate. Should you break the seal pressed by the ancient priests and open the tomb?

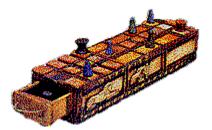
Thoughts of wealth and the dreams of avarice steady your courage, and the sealed door yields to your blows.

#### Whoosh!

An overwhelming sense engulfs you -- the outward rush of ancient musty air and ... something else ... something evil and menacing ... the electric, shocking realization of an equally ancient and alien presence ...waiting, watching, hovering, and protecting for these thousands of years.

You are in big trouble!

### What is Senet?



The Senet board at left came from the tomb of Ak-Hor at Dra abu el-Naga on the West Bank of Thebes. The game box is made of ebony and ivory, and the playing pieces are faience\*.

Senet was an immensely popular game in ancient Egypt. Played by both commoners and nobility, it took on even religious significance in later times.

The most common playing pieces were 5 cones shaped pieces pitted against 5 reel shaped pieces (These pieces were called 'ibau' which means 'dancers' in Egyptian).

The game was played on a board of 30 squares; the object being to get one's pieces on the board, then around the board in an S-shaped pattern, and finally off again at the far end. The game requires strategy in the face of whimsical chance -- the 'chance' coming from 'casting sticks', used as the 'dice' in older times, or in latter times, perhaps from 'knuckle bones'.

Senet is a two player game but during the New Kingdom period a game in progress would often appear painted on tomb walls as a 'one' player game -- the opponent being a spirit from the afterlife. The silver engraving on the 'Splash Screen' is just such as situation. In the engraving, the nobleman Amenmose (to the right) fights against Fate, with the stakes being immortality. May your games never be so serious.

Senet was ancient Egypt's national game for 3000 years. Now it is here again in the present, re-created through the magic of electrons and phosphorus, for you to play.

Welcome to the game of the Pharaohs!



When Howard Carter open Tutankhamun's tomb he found four Senet boards -- two of which were jumbled up and scattered, along with many other articles, by thieves in the distant past. One of these Senet boards is shown (circled), just as it was found, at left (looks just like my son's room; -)) Note: Some of the 'Reel' and 'Cone' playing pieces were never found and it is assumed that they were made of silver and gold and were thus were prime targets for thieves.

\*faience: Egyptian faience is a composite material of ground quartz with a colored, alkaline glaze. It one of the most characteristic materials of ancient Egypt. See "The Complete Tutankhamun", p. 200, for more information.

## How do you play the game?

Senet is a simple game with some strategy but lots of chance. To learn the game, you need to know some things about the playing equipment (the board, the pieces, etc.) and something about the rules of the game.

These topics are discussed in some detail in the following two sections. You can learn about the equipment, if you want to, right now by clicking on the jump text below:

#### The Equipment . . .

The rules are quite simple. You can explore the rules of the game by clicking on the jump text below (I hate reading rules too, but you might want to read them just once).

Note: Actually, this computerized Senet version automatically enforces all the rules, so it's really not necessary to memorize them; you just need to be generally familiar with them so that you can understand why the game does what it does.

### What are the rules?

When you start a game, the reel and cone 'dancers' sit at the top of the Senet window, sort of haphazardly placed just like you might do it yourself. You move a piece on the board by 'dragging and dropping' it. Just 'click' on the piece you want to move, and holding the mouse button down, 'drag' it where you want to move it. Because the computer knows exactly where the piece you are moving can move, you really don't have to drag it very far -- the computer will complete your move for you. (I realize that you are perfectly capable of counting the proper number of squares to move, but children may not be -- and Senet is a game for kids too). Actually, if you want to save time, you will find that simply clicking on the piece is enough to activate the 'drag and drop' logic and allow the computer to complete the move for you.

Senet knows which of your pieces can be move at any given time and will 'inactivate' (in other words, freeze in-place) any of your pieces that cannot be moved. So if you find yourself trying to move a piece, but the computer simply doesn't respond to your efforts, check out the situation. You'll invariably find that the piece you are trying to move cannot be moved according to Senet's rules. By the same token, Senet knows when you have no move available to you and in this case, according to the rules, the turn passes to your opponent (unless, of course you, have extra turns coming).

When a piece completes the 'House of Thirty' journey and is able to move off the board, you just 'drag' it off the board to the lower right part of the Senet form -- anyplace will do.

Remember that you cannot enter a piece on the board unless you've thrown a 4 or a 6. This means that getting your pieces on the board can be kind of frustrating. To eliminate this frustration, anytime there are no pieces on the board, Sent will 'Demon-Cast' until someone, Reels or Cones, is able to move a piece on the board. By Demon-Cast we mean an automated way (entirely fair, by the way) of determining the next mover (The term Demon Cast is taken from the term 'Demon'-Dialer, a tool hackers use to search quickly and automatically for access numbers into networks).

Also remember that you send your opponent's piece off the board if you are able to land on his square with a move -- you'll like this part (as long as you are the one doing the 'bumping' rather than the victim being 'bumped')

I suggest that you not leave your piece occupying the entry squares 4 and 6 too long as it blocks your other pieces from moving on the board and, of course, your piece is very vulnerable to being 'bumped' off the board by your opponent as he or she throws a 4 or a 6 respectively.

If you can occupy the 'Power and Life' square -- good! You cannot be 'bumped' from here. If you can reach the 'Good' square, you'll get an extra turn. And of course, avoid the water square like the plague -- land here and you are 'deep sixed' and have to take your piece off the board to start again.

Get all of your pieces through the 'House of Thirty' and off the board, before your opponent, and you are the winner! The average Senet game will only take 10 to 12 minutes, so it's not a long process at all.

Make sure you run the 'Tutorial' menu option if any of this confuses you. Don't be afraid to experiment -- Senet isn't breakable (at least its not supposed to be).

I hope you enjoy your electronic Senet game. It may not have the 'pizzazz' of a modern arcade game nor the intellectual challenge of a strategy game like 'Chess', BUT Senet WAS played and enjoyed for 3000 years by millions of Egyptians -- there must be something to it.

### What do the items on the menu do?

The menu items of Senet are very simple. The top-level menu consists of only three real menu items. See below::

Options Help Exit Go ahead and make your move Reels

'Options' allow you to control the game:

Help has three sub-menu options: 'Tutorial' lets you re-run the tutorial on Senet whenever you wish, 'How do you play' lets you access the help file you're reading now ,and 'About' lets you view the program copyright statements.

'Exit', of course, lets you leave the game. 'Exit' is the 'normal' method of leaving the game -- two others, the space bar and the 'Esc' key, act as Boss Keys for emergency shutdown of the game. The area on the menu to the right of the 'Exit' item is the game feedback area. This area offers instructions, comments, and advice as the game progresses.

The Options sub-menu items are as below:



The first section of this sub-menu allows you to control some basic options of the game -- do you want game sounds?, do you want background music?, and do you want MummyFacts, from time to time, to pop-up in the lower right of the screen. MummyFacts are interesting facts about ancient Egypt that will pop-up every couple of minutes or so if this option is checked.

The 2nd section of this sub-menu lets you play the game on manual mode (play a friend, or play against yourself) or, more commonly, against the computer. If 'Play the Mummy' is checked you are playing against the computer. The computer always takes the current turn and piece type if this option is checked during a game in progress. In other words, if it's Cone's turn to move at the time this option is checked, then the computer will play the Cones and vice versa (note: Upon New-Game, or startup, Cones have the first turn, but after a game has been won, the loser has the first turn). You can always click the 'SwitchSides' option anytime to turn the tables on the computer and play the other side -- of course the 'SwitchSides' option is only active when your playing against the mummy rather than yourself or a friend.

Clicking the 'New game?' sub-menu option immediately resets the board and starts a new game.

## The SENET.INI file.

Senet uses the information in the SENET.INI file in the Windows directory to record information for start-up. This is the only file that Senet creates automatically on your system. If you ever want to delete Senet from your system, you should also delete SENET.INI in addition to the files in your SENET directory.

Of course, I'd think a little before deleting a 3000 year old mummy's home from my hard disk while the mummy was still living in it and expecting to play Senet there. You just might have a 'little explaining to do' to an irate spirit . . . ; -)

# The 'Boss' Keys

I am sensitive to the fact that you might want to play Senet in private at times.

To that end if you hit the 'Space Bar' or the 'Esc' anytime during play, Senet will instantly end and clear itself from the screen.

# How to contact the author.

If you have comments or suggestions, you can contact me by:

Internet: 74212.1123@compuserve.com

or

CompuServe E-Mail: 74212,1123

or by letter to:

P. S. Neeley 248 W. 3325 N. North Ogden, UT 84414

# Credits (or where did all this stuff come from anyway?).



Senet was written in Microsoft's Visual Basic for Windows 3.0.

A very special thanks to Professor John Tait, the Edwards Professor of Egyptology at the Dept. of Egyptology, University College London, and the world's authority on Senet and other Egyptian games. Professor Tait, though very busy, kindly took the time to help a 'crazy American' produce an authentic and accurate game.

Thanks also to the many people who inhabit the Internet's archeaology.sci newsgroup who furnished much information -- especially to Karin Sowada, Martin Stower, and Heather Bleaney, who helped me 'get in touch' with Professor Tait. Heather was especially kind and helpful in acting as the messenger between Professor Tait and myself.

In addition much background information, the raw materials for the images, and all of the MummyFacts, came from the following sources (all 'mined' at the local Library):

"SENET -- Play Games with the Pharaohs" by William Bown, New Scientist, December 1990.

"Intelligence Games" by Franco Agostini and Nicola Alberto DeCarlo.

"The World of GAMES -- Their origin, How to play them, and How to make them" by Jack Botermans et al, Facts On File, New York.

"The Treasures of Tutankhamun" by I. E. S. Edwards, The Viking Press, New York.

"The Complete Tutankhamun" by Nicholas Reeves. Thames and Hudson 1990.

"Into the Mummy's Tomb" by Nicholas Reeves. Madison Press Books, 1992.

"Ramses II: The Pharaoh and His Time", Exhibition Catalog, Brigham Young University, 1986.

"Ancient Egyptians" by Pierre Miguel, Librairie Hachette, 1979.

"The Egyptians" by Anne Millard. Silver Burdett Company, 1985.

"Ancient Egypt" by Rosalie and Antony E. David. Warwick Press, 1984.

"Sacred Architecture" by A. T. Mann. Element Inc., 1993.

"All Color Book of Egyptian Mythology" by Richard Patrick. Octopus Books Ltd., 1972.

"Mummies -- Death and Life in Ancient Egypt" by James Hamilton-Paterson and Carol Andrews. Penguin Books, 1979.

"Fun with Hieroglyphs" by Catharine Roehrig, The Metropolitan Museum of Art, Viking, 1990.

"Mummies" by Susanne Lord, The Trumpet Club, 1991.

"Mummies, Tombs, and Treasure --- Secrets of Ancient Egypt" by Lila Perl, Clarion Books,

#### 1987.

In addition, Professor Tait noted that the following two references are very good and accessible to the general reader:

"The Tomb of Tutankhamen" by Howard Carter, Barrie and Jenkins, 1954 and later.

"Tutankhamen: Life and Death of a Pharaoh" by Christiane Desroche, Nobelcourt (numerous editions).

All these good people and books have been my 'teachers of things Egyptian' -- I have tried to learn well. Any errors, are of course my own, and I hope these authorities will forgive me the 'Mummy's curse' motif and prolog. Those late night horror shows -- Nightmare Movie on Friday nights especially -- of the Mummy and his curse really did scare my little brother Craig and me. This program is kind of my 'wacky' revenge.

Beauty and Art were breathed into this game through superlative tools -- my Microtek-II HR scanner, Adobe Photoshop 3.0, Kai Power Tools 2.0, Andromeda series II filters, and Paint Shop Pro v3.0. Some extremely smart people made these tools to empower the 'artistically challenged' of the world (like me) to create something worthwhile in spite of 'handicaps'.

All of the icons used here (some of which were subsequently converted to BMP files) were created using IconMaster -- an application furnished with Visual Basic.

This Help file was written with the aid of Craig Villalon's shareware help authoring system -- VB Automatic Help Author v.1.32 .

A number of the game sounds in this game are greatly shortened and modified versions of sound files found on Interactive's "1000 of the World's Greatest Sound Effects" CD-ROM. The rest of the sounds were recorded using the Microsoft Windows Sound Recorder Applet and my trusty Radio Shack microphone.

I was very lucky to have the help of Terry Cano, a talented muscian and educator specializing in ethnic music, who did a great job of creating a plausible piece of ancient Egyptian music (SENET.MID) using sounds as close as possible to the ancient musical instruments.

Brent J. Larsen, a good friend of mine, 'Beta' tested Senet -- Thanks Brent!

The knowledge and interest in Mathematics and programming is due to my father Pat's influence and the fine education I received from the many Math and Science teachers and professors who taught so very well (obligating a debt I can never repay).

The time to complete this programming project was largely 'stolen' during the late evening and wee morning hours when more normal people would be asleep. However, inevitably, some of the time was donated by my wife, Barbara and my children, Jon, Melissa, Christie, Patrick, Nick, and James.

Some day they may come to understand that while other fathers were tinkering with the family car, mowing the lawn, doing woodwork in the garage, etc. -- tending to normal business -- their father, high in the dark castle tower, and bathed in the soft glow of the electron's fire, was practicing modern-day sorcery. For he was building something that would never really grow old and decay, that could be copied exactly many times with almost no effort, that could be used and enjoyed by many, many people at the same time,

and that could be scattered on the electronic winds to the ends of the Earth. Yet, this something was made out of nothing but an idea, diagrams in the air, and glowing bits of phosphorus. Can there be anything more magic than that?

# Please consider registering . . .

Please consider registering. Senet is not freeware, it's shareware; even though it is not 'hobbled' in any way, nor are there pesky 'nag' screens to bother you.

If you want to continue to legally use this software, you must register this program after 21 days. To register, send \$10 to:

P. S. Neeley 248 W. 3325 N. North Ogden, UT 84414

The shareware version of Senet was meant to be distributed on the 'electronic winds' of the Internet, BBSs, on-line services, etc., and so it was important to keep the file sizes as small as possible. In a practical sense, you do this by cutting back on color depth (16 color images instead of 256 color images) and eliminating as many game sound files as possible (.WAV files are large and not very compressible). I hated to do this but it was the only way.

However, extra bytes add nothing to the weight of a diskette.

I will send registered users of Senet the 256 color, registered version in the mail. The 16 color images you see in this shareware version are good, but the 256 color images of the registered version are breathtakingly beautiful. The registered version also features lots more sounds, many more MummyFacts, and two more 'farewell' images.

If you enjoy Senet at all, or love things 'Egyptian', you'll want the registered version.

# The images -- what are they?

The images used in this game are mostly the real thing (I don't know about the Mummy though -- I'm almost afraid to say his image is not real -- "I do believe in Ghosts, I do believe in Ghosts, I do, I do").

Here's what they really are:



The 'S' in Senet on the 'Splash Screen' is a falcon-headed serpent symbol engraved in stone on the Temple of Sobek, Kom Ombo, Egypt. This serpent represents the power of time and space.



The silver engraving of the Senet game in progress on the 'Splash Screen' was created from a drawing of a tomb painting -- see "The Complete Tutankhamun" by Nicholas Reeves, p160. In the game, the nobleman Amenmose (on the right) plays against a spirit adversary, Fate (an invisible opponent), for the right to immortality. The figure on the left is making an offering to the deceased.



The Jackal over Nine Captives seal on the 'Splash Screen' is a replica of that found by Howard Carter on the doorway into Tutankhamun's tomb. This seal was placed only on the doorways of royal tombs.



The 'Its the Mummy, he's mad, and you are in real trouble!' screen's background is an interior shot of Queen Nefertiti's tomb, in the Valley of the Queens, Thebes, Egypt. The tomb dates from the 14th century B.C.



The Mummy himself was created from a 'GIF' file found on CompuServe, which was then re-colored, smudged, wrapped around a 3D cylinder, and made partially transparent.

Forgive me my Mummy -- I don't know any of the ancient mummy making techniques, lack even a bit of natron and resin, have no 'instruments', etc., . . . I did the best I could with my modern tools.

By the way, some of the words the Mummy utters in this sequence are significant. The phrase "Death comes on swift wings . ." was supposedly (in the newspapers of the time) part of the curse that was written on the door of Tutankhamun's tomb (of course, this was false, no curse was written there). In addition, the phrase "Life, Prosperity, and Health!" was a common Egyptian greeting -- beats "Hi, how ya doing" anytime in my book.

Note: Professor Tait wrote after seeing the Senet icon and Prolog:

"I am just a little uneasy that your presentation of the game somewhat mixes the Pyramids (which suggest the Memphite region and the Old Kingdom) and the Valley of the Kings in Western Thebes (New Kingdom and nothing, at least sizable, in the way of pyramids, royal or non-royal). I would be happier if your text (the prolog) were a bit less explicit here that the scene of action is \*within\* a pyramid."

Professor Tait is, of course, right. A setting more consistent with the other (Tutankhamun time-frame) images in this version of Senet would have been a rock-cut tomb in the Valley of the Kings. But, the pyramids are such a symbol of Egypt and things Egyptian that I felt more people could identify with the icon and prolog in a pyramid setting.



The beautiful 'tiled' King Tut death mask background of the game screen was created, naturally, from the gold death mask placed on Tutankhamun's mummy -- probably the most famous Egyptian image. The 'tiling' itself was done with Photoshop's gradient tool and Kai Power Tool's seamless welder.

The playing pieces, the board, the casting sticks are not 'real' -- I made them from as many royal materials as I could and as accurately as possible. The casting sticks do have the 'Tutankhaten' cartouche, from the right outer arm of Tutankhamun's Golden Throne, centered on them.

The hieroglyphs on the special cells of the board are real. The central one reads 'Power and Life'. Adjacent to it, and central to the last row, is the 'Good' cell. Next to it is the unlucky 'Water' cell. The whirlpool motif on this cell is not authentic, but the Egyptians would have loved it. The other two 'marked' cells read 'Three of a kind' and 'Two of a kind' -- representing the throw required to bear off a piece from each of these squares. These markings are those found on the most regal of Tutankhamun's four Senet boards. The 'Three of a kind' hieroglyph really reads 'baw', meaning spirits or divine wrath, and is written with three jaribu birds. Its meaning here, however, is 'Three of a kind'.



The winner's celebration screen shows Tutankhamun's death mask, trailing the setting sun in a sunset scene of the great pyramids at Giza. The Egyptian's believed that, upon death, the Pharaoh would become one with the sun-god 'Re' in his travels through the sky. They considered the west as the sun's home, and that souls, after death, could continue to live on in a place called 'the field of rushes' in the cosmic west. They also believed that

when the sun sank below the horizon, it continued on it's journey, beneath the earth, lighting the skies of the underworld, the realm of Osiris, on its overnight journey beneath the horizon. In addition, the Egyptian word of evening, 'mesut', means the 'time of birth', in reference to the re-birth of the stars as the sun sank below the horizon -- a truly magical time.

For all these reasons, and because Senet, although a game, was also a representation of the travels of the soul to it's final resting place in the afterlife, this scene is a fitting 'winning' celebration.



The 'farewell' image is one of the two Colossi of Memnon -- the only remains of the great temple of Amenhotep III on the west bank of the Nile at Thebes. The passage is from the poem 'Ozymandias of Egypt' by Shelly. The full text of the poem is below. I have often uttered these words ("Look on my works, ye Mighty, and despair!) in jest as I have finished some particularly grueling project. Somehow these brave words have celebrated my triumph and at the same time reminded me of how utterly fleeting are the works of man. In spite of this, through things like Senet, it is possible to reach across the abyss of time, to walk under ancient suns, and to feel kinship with people who, though long dead, were much like yourself.

# **Ozymandias of Egypt**

by Percy Bysshe Shelley (1792 - 1822)

I met a traveler from an antique land
Who said: Two vast and trunkless legs of
stone
Stand in the desert. Near them, on the sand,
Half sunk, a shattered visage lies, whose
frown
And wrinkled lip and sneer of cold command

Tell that its sculptor well those passions read
Which yet survive, stamped on these lifeless
things

The hand that mocked them and the heart that fed;

And on the pedestal these words appear:
"My name is Ozymandias, king of kings:
Look on my works, ye Mighty, and despair!"
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare,
The lone and level sands stretch far away.

### What are the rules?

No rules for Senet have survived on papyri or wall paintings. The situation is further complicated by the fact that Egyptian art showed people and objects only from their most typical view -- 'head-on' or profile -- this leaves few clues as to how the game was played in paintings of games in progress. At least four investigators have proposed rules -- The Swiss archaeologist Gustave Jequier, the egyptologist Edgar B. Pusch, R.C. Bell, and egyptologist John Tait. This version of Senet follows Professor John Tait's rules. Professor Tait is the Edwards Professor of Egyptology at the Dept. of Egyptology, University College London, and is a world authority on Senet and other Egyptian board games and equipment.

## To begin a game:

- 1. To begin a game, each player throws the casting sticks until one player scores a 4 or a
- 6. He or she then enters a piece on square 4 or 6 accordingly.

A player may enter any piece waiting to enter the board, but is not required to do so if another move is possible.

#### Moves:

- 2. Pieces move only forward, never backwards on the board.
- Throwing a 6 gives an extra throw.
- 4. If a person has a legal move, it must be made.
- 5. Only one piece may occupy a given square.

If a player moves a piece onto a square occupied by his opponent, then the opponent's piece is removed from the board, and must be re-entered the normal way.

- 6. There are three special squares on the board:
  - a. A piece that lands, and stays, on the central 'Power and Life' square cannot be thrown off the board. Once it leaves this 'special' square, though, it is no longer protected.
  - b. Landing on the 'good' square gives an extra throw.
  - c. Landing on the 'Water' square is a set-back; the piece is removed from the board and must be re-entered in the normal way. The player also forfeits any extra throws pending.

### **Bearing off:**

7. A piece, once borne off, may take no further part in the game.

When a player bears off a piece, he or she receives an extra throw. The exact throw is required to bear off a piece.

For example, a 1 would be required on the last square.

## Winning!:

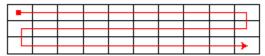
8. The winner is the first player to bear off all his or her pieces.

# The Equipment . . .

The equipment for Senet is very simple:



There are 5 cone shaped pieces and 5 reel shaped pieces. The Egyptian words for these was 'ibau' which means 'dancers'. The game is a race between the cones and the reels.



The board that these pieces race around has 30 squares and was often referred to on papyri and wall paintings as 'the house of thirty'. The 'dancers' race in an 'S' shaped fashion as at left --- entering in the top, left-most square, and exiting at the bottom, right-most square.

1	2	3	4	5	6	7	8	9	10
20	19	18	17	16	15	14	13	12	11
21	22	23	24	25	26	27	28	29	30

Squares 15, 26 and 27 have special meaning. Land on 15 and your piece is safe from attack. Land on 26 and you get an extra turn. But land on 27 and you 'drown' and must take your piece off the board to start again.

Four 'Casting Sticks' serve as 'dice'. You hold the sticks together (more likely roll the sticks nervously between your hands as you pray to lady luck), and drop them on the ground or table. Casting sticks had one side rounded and one side flat -- as if you had cut a straight section of tree branch down the middle long axis to make two half sticks. Each stick has a dark (dark brown) and a light (white ash) side (the dark side was the curved side, the light side the flat side). The number of whites that end up showing determine the number of squares you can move on the board. Thus you can have 1 through 4 whites allowing you to move 1 to 4 squares, respectively. But, If no whites show (in other words, all the sticks end-up dark side up) then you get to move 6 squares. The examples below show examples of each of the possibilities:



1 -- you can move one square.



2 -- you can move two squares.



3 -- you can move three squares



4 -- you can move four squares or enter a piece on the board at square 4 (you must throw a 4 or a 6 to enter a piece on the board)



6 -- you can move 6 squares or enter a piece on the board at square 6. You also get an extra turn -- Yeah!.

## MummyFacts? . . .

If the 'MummyFacts?' menu item is checked, every 2 or 3 minutes, interesting facts about ancient Egypt will appear at the lower right corner area of the game screen. All these 'facts' were mined from the references noted in the 'Credits' section of this help file. They only appear during a game, while waiting for someone to throw the casting sticks, and they will disappear as soon as the casting sticks are thrown. Stop and read them once in a while.

These facts are intended to educate as well as entertain -- few people know really much about ancient Egypt, beyond mummies and pyramids, even though the knowledge may be readily available at the local library. If you grow tired of this feature, simply un-check the 'MummyFacts?' menu item and they will no longer bother you.

### You control the Dice . . . !

You actually have full control over the Casting Sticks. But we had to provide that capability for you. Let me explain:

Senet uses a random number generator to obtain 'random' throws of the casting sticks. Random number generators use a 'seed' number to get them started and then a complicated algorithm to generate a sequence of random numbers. These are often called 'pseudo-random' numbers because given the seed number, the same sequence of 'random' numbers will always be generated. Also, the algorithm eventually loops back on itself so that you'll eventually start-over generating the same numbers in the same sequence again. This is called the 'period' of the random number generating algorithm . A typical period may be in the 40,000 range, so you have to go through a lot of random numbers before you loop back on yourself.

Okay, sorry about the dry, overly complicated explanation above, but here's why we went through it:

Senet uses a random seed number. In other words, each time you start up Senet, it uses a random seed number to 'seed' the algorithm, and thus you should never really notice the same sequence of throws -- unless you watch and correlate for a long, long time.

This means that the sequence of throws generated from Senet is as random as possible.

Now I personally believe that one random number is as good as the next, but you may not. You may be uncomfortable with just accepting the next 'random' throw that Senet generates as YOUR throw. After all, you are the thrower of the dice, right? Senet has been programmed so that if you hold the mouse button down over the dice, they 'roll' in your hands (you'll be able to hear them being rolled if you have a sound card) for as long as you hold the mouse button down. All during this 'rolling' process, Senet is going through the next, and the next, and the next, etc., random numbers at the clip of 150 per second or more (depending on your processor). When you release the mouse button, Senet uses the random number from wherever it stopped in the 'rolling' process as the throw amount.

Bottom line: You actually have as much control over the 'sticks' as you would in real life.

If you are blessed with ESP, or are just an extremely lucky person, you can really make a killing here because if you release at just the right millisecond you'll have the 6, or the 4, or whatever it was you wanted. So if you don't trust the Senet program, or don't want to just accept the next random number Senet happens upon, roll those 'sticks' before you throw.

# The SENET.MID Midi background music.

Terry Cano, a composer and educator who specializes in ethnic music, created SENET.MID especially for Senet. Terry faced the tough challenge of creating a plausibly authentic piece of music using sounds as near as possible to those of the ancient Egyptian instruments -- not an easy task.

Ancient Egyptian music used zithers, lutes, drums, 'clappers', harps, trumpets, and 'sistra' (ritualistic rattles). Tutankhamun's tomb contained, for instance, a pair of ivory clappers, two trumpets, and a pair of sistra.

Terry would enjoy your comments on the music. Please E-Mail Terry at:

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or

CompuServe E-Mail: 70302,1161

# Tips, Tricks, and Trouble Shooting . . .

# I don't want to go through the 'There's a Mummy and he's mad' prolog screen anymore . . .

If you click on the prolog screen when it first comes up (or anytime really) you will quit the prolog and go right to the game.

#### I don't want to wait 5 seconds for the 'farewell' screen to disappear . . .

Sheesh! Its only 5 seconds! Okay, Okay. If you click on the 'farewell' screen it will immediately disappear and you will be out -- finished as it were.

## I can't get the MummyFacts to show up . . .

First, make sure you have the MummyFacts menu option checked, otherwise you won't get any MummyFacts.

However, If you find that the MummyFacts menu option is 'grayed-out' then that's another matter. This means that Senet could not find the MUMFACT.TXT file that holds all of the MummmyFacts. The most likely cause of this is that MUMFACT.TXT is not in the working directory, and let me tell you from personal experience, it's very easy in Windows to get yourself mixed up as to what the working directory is. Here's how you make sure that Senet is never mixed up about it.

1st: Activate the Senet icon by clicking on it once from Program Manager (This will highlight its title).

2nd: Choose 'File|Properties' from the Program Manager menu and make sure the Properties box for the Senet icon reads:

Command Line: Senet.exe

Working Directory: C:\Senet (or whatever is your Senet directory)

3rd: Make sure that MUMFACT.TXT exists in the C:\SENET directory.

Do these three things, and everything should work fine.

#### I can't get any MIDI music to play . . .

You have to have a sound card to get the music to play. If you have a sound card, but no music then:

First, make sure you have the 'MIDI background music?' menu option checked, otherwise you won't get any MIDI music.

Next, make sure it isn't a simple volume problem. Turn-up the volume on the speakers and see it that helps at all.

Didn't help? Okay then maybe the relative sound volumes of the WAV and MIDI files is 'out of whack'. I've tried to set the relative volumes between the MIDI file and the WAV files at a good spot. Because of the maddening difference between the many sound cards out in the world, this might not be right for everyone. Look for and adjust your 'Mixer' application (it came with your sound card for sure), to adjust the relative volume of MIDI files upward a little to see if that helps.

Still not working? Dang! This calls for drastic measures. I hate to inform you of this, BUT, you are most likely suffering from what the MIDI people call 'The MIDI problem from Hell!' (their words, not mine). Not to worry though -- here's what to do:

Go to the Windows Control Panel, MIDI mapper section, and choose edit on your MIDI mapper. Then make sure all 16 Channels are active -- many times you'll find that only some of the channels are active. If a channel is not active that the MIDI file needs then essentially you are mapping your MIDI file, during play, into 'oblivion'.