The
Chessmaster
2000

INSTRUCTIONS

installation ...

Apple II series

a) Place The Chessmaster 2000 disk in the first disk drive.
b) Turn the computer on.
c) The Library of Classic Games is on the flip side of The Chessmaster 2000 program disk.

Commodore 64

a) Turn your computer, and the first disk drive on.
b) Place The Chessmaster 2000 in the drive.
c) Type LOAD "0:*",8,1
d) Function Key One (F1) is referred to as the Escape Key.
e) The Library of Classic Games is on side A of the Classic Games Disk.

Commodore 128

a) Turn the computer off, and the first disk drive on.
b) Place The Chessmaster 2000 disk in the first disk drive.
c) Turn the computer on.
d) Function Key One (F1) is referred to as the Escape Key.
e) The Library of Classic Games is on side A of the Classic Games Disk.

ATARI 800/ 800XL/ 1200XL/ 65XE/ 130XE

a) Turn your computer off, and disk drive 1 on.
b) Place The Chessmaster 2000 in disk drive 1.
c) Turn your computer on.
d) The Library of Classic Games is on side B of the Classic Games Disk.

After following these instructions, The Chessmaster 2000 will load.
All of The Chessmaster 2000's commands are available on-screen through a help window.

To learn about all the possible moves, and rules of chess, read Let's Play Chess by the U.S. Chess Federation, reprinted with permission in the accompanying booklet.

What You See ...

There are two types of display available. Menus, which include help screens, and chess boards.

To switch between these screens, press the Escape Key (ESC), (function key F1 for the Commodore.)

Using The Features ...

The Chessmaster 2000 has many powerful features, such as teaching, replaying games, and more. Program features are activated by holding the Control Key (CTRL) down, and then typing another key.

For example, to type a Control A:
Depress the CTRL key (just as you would the shift key) and then depress the A key (with the CTRL key still held down).

NOTE: Do not use the Control Key when using the features in the EXTRAS menu, SOLVE MATE, MATE LEVEL, PRINT GAME, etc.

CHOICES ...

In the upper left hand window of the screen is the CHOICES display. Every feature is available through one of the Choices in this window.

By pressing a Control-Keyed Letter, from the CHOICES display, a menu will appear in the lower left hand window.

Press the appropriate Control-Keyed Letter from the lower left hand window to use the desired feature.

CURRENTLY ...

Some menu selections display specific information about the program in progress.

This information is displayed under the CURRENTLY window in the lower right hand corner.

WHITE  BLACK ...

As the game progresses, the upper right hand window displays all the piece movement information. This is the "Move List".

Under each player's heading, the move list is displayed in the algebraic format: Square moved FROM - and square moved TO (XX-XX).
If the dash is replaced with an asterisk (*), then the moving piece has just captured the piece occupying the square where it has landed.

If a plus sign (+) appears to the right of a square, then the piece which occupies that square has placed his opponent's king in check.

The player whose turn it is, is displayed at the bottom of this window.

To Make A Move ...
The Chessmaster 2000 uses the standard algebraic notation method for piece movement. Type the letter and number of the square you wish to move from, followed by the letter and number of the square you wish to move to.

(When typing in the letters, for piece movement do not use the Control Key as The Chessmaster 2000 will activate the menus.)

With the 2D display active you will see numbers displayed along the sides of the board and letters along the top and bottom. Use these as a reference guide while making moves.

TAKING BACK MOVES ...
Press the Left Arrow Key, <-, and the last move made by either side will be taken back. This may be repeated until you reach the beginning of the game.

NOTE: The left arrow key, <-, on the Commodore 64/128 keyboard is located above the Control Key.

NEWCOMERS ...
To have The Chessmaster 2000 play its easiest game, select EASY MODE ON (Control Key E), and a PLAY LEVEL of 0 (Control Key D).

CASTLING ...
When legal, move your king to his destination square. The rook will move into place automatically.

EN PASSANT ...
When legal, capture an opposing pawn after it moves out 2 squares on its first play, by moving ahead and diagonally behind it. The Pawn will be captured "in passing."

PAWN PROMOTION ...
If you move a pawn to the eighth rank, The Chessmaster 2000 will wait for you to type a letter indicating to which piece you want the pawn promoted.

To indicate the level of promotion, type the following: Q for Queen, R for Rook, B for Bishop and N for Knight.
CHANGING SIDES...
You may change sides at any point in the game by pressing
RETURN when it is your turn to move. The Chessmaster 2000
will then take your move, and wait for you to make a move,
since you are now effectively playing black.

(Pressing RETURN at any point in the play cycle will force The
Chessmaster 2000 to make the next move. Therefore, pressing
return at the onset of the game creates a Chessmaster playing
the white pieces scenario.)

LEVEL OF PLAY...
The following is a list of how many moves - and how long,
approximately, The Chessmaster 2000 takes to make them, at
different levels of play. The higher the level, the longer
The Chessmaster 2000 has for its "thinking time," and the
stronger its play will be.

Level 0 makes 60 moves in 5 minutes. 1 move every 5 seconds.
Level 1 makes 40 moves in 5 minutes. 1 move every 7 seconds.
Level 2 makes 60 moves in 10 minutes. 1 move every 10 seconds.
Level 3 makes 60 moves in 30 minutes. 1 move every 30 seconds.
Level 4 makes 60 moves in 45 minutes. 1 move every 45 seconds.
Level 5 makes 60 moves in 60 minutes. 1 move every 1 minute.
Level 6 makes 30 moves in 45 minutes. 1 move every 1.5 minutes.
Level 7 makes 30 moves in 60 minutes. 1 move every 2 minutes.
Level 8 makes 40 moves in 90 minutes. 1 move every 2.25 minutes.
Level 9 makes 40 moves in 100 minutes. 1 move every 2.5 minutes.
Level 10 makes 40 moves in 2 hrs. 1 move every 3 minutes.
Level 11 makes 40 moves in 2.5 hrs. 1 move every 3.75 minutes.

Levels 12 through 14 take 3 times as long as levels 8 through 10.
Levels 15 through 18 take 10 times as long as levels 8 through 11.
Level 19, the indefinite level, will make no move until the RETURN key
is pressed or a checking sequence has been found.

CLASSIC GAMES...
The 100 classic games are contained on the games disk included
in the package (flip side of the program disk for Apple
users).

To replay these games, or any which you have stored, simply
load the game you desire, from disk, with the LOAD A GAME
feature (Control Y). Once loaded, you may select the REPLAY
feature. NOTE: In the Atari library of classic games, game
nos. 26, 36, 37, 59 and 60 are not available.

SAVING GAMES
To save games, you must first create a game diskette by using
your system's DOS to initialize the disk. When you insert the
disk to save a game, answer Yes to the FORMAT DIRECTORY Y/N
question.
F  WHO PLAYS

Pressing this Control Key will switch play between:

CHESSMASTER VS. CHESSMASTER
YOU VS. CHESSMASTER
PLAYER VS PLAYER (The Chessmaster referees the game.)

G  DISPLAY     (Help window under CHOICES)

Displays the menus for; THINKING, HINT, TEACHING, and SOUND.

I  SHOW THINKING

Select this to view the next move The Chessmaster 2000 is considering. As each best possibility is being analyzed, it will appear in The Chessmaster's move list, and finalized at the move. Book refers to The Chessmaster's consideration of selections from the opening library when it is applicable. Search level (SL) shows how deeply into the possibilities The Chessmaster 2000 is exploring at any given time.

J  SHOW HINT

Gives you a hint for your next move.

K  TEACHING

When a piece is selected to move, a mark appears on all squares to which that piece may legally move.

L  SOUND

This feature turns on or off the sounds (except for illegal moves) The Chessmaster 2000 creates to notify you of any move: Check, Checkmate, Stalemate, and a Draw.

N  CHESSBOARD    (Help window under CHOICES)

Displays the menus for; ROTATE BOARD, CHG DIMENSION, COLOR, and BORDER.

O  ROTATE BOARD

Select this to rotate the 2D display 180 degrees, or the 3D display 90 degrees.

P  CHG DIMENSION

Select this to switch back and forth between a 2 and 3 dimensional graphic display of the chessboard.
EASY REFERENCE GUIDE

The following, are a list of all of The Chessmaster 2000's features.

Many of these features "toggle" when selected. Choose the feature once, and it is active. Choose it again and it is off.

Remember, all features, and menus are activated with Control Keys.

After you become familiar with the many features of The Chessmaster 2000, you will want to use them directly from the chess display or standard menu screen, without first going through their related help window.

For example: If you are viewing the 2D display and wish to switch to 3D, type Control P, and the 3D screen will appear.

THE CHOICES

A  PLAYING  (Help window under CHOICES)

Displays the menus for; NEW GAME, COFFEE HOUSE, PLAY LEVEL, EASY MODE, and WHO PLAYS.

B  NEW GAME

Select this, and answer "y" to start a new game.

C  "COFFEEHOUSE"

When selected, The Chessmaster 2000 will play a more relaxed style of play, suitable for casual, as opposed to tournament style. The moves will be more random - and perhaps easier.

D  PLAY LEVEL

Selecting this feature allows you to type in a new play level for either a more difficult game or an easier one. This enhanced version of The Chessmaster 2000 has 19 levels of play. Levels are numbered 0 through 19 with 0 being the easiest. See also NEWCOMER.

E  EASY MODE

By selecting this feature, you alternately turn on, or off, the Chessmaster 2000's ability to "think ahead" while it is your turn. When on, you will notice EASY MODE ON displayed under CURRENTLY.
Once you have made the necessary changes, EXIT SET-UP (Control X) and continue playing chess.

The following are some hints on using SET-UP BOARD.

**ESCAPE KEY (F1 on Commodore)** Switch Screens
This key switches between the chess board display and the set-up board display.

**Control X EXIT SET-UP**
Returns to normal play, with the board set up, as it was last displayed.

**Control C CLEAR BOARD**
Removes all pieces from the board.

**Control D DELETE PIECE**
Deletes the piece at which the cursor is pointing, in the SET-UP BOARD menu screen.

**Control N NORMAL SET-UP**
Sets the board up for a normal game of play.

**RETURN Key**
Moves the cursor down to the next line in the SET-UP BOARD menu.

**LEFT ARROW Key**<-
Moves the cursor up to the next line in the SET-UP BOARD menu.

**NOTE:** The left arrow key, <-, on the Commodore 64/128 keyboard is located above the Control Key.

**RIGHT ARROW Key**->
Moves the cursor to the next word on a line. Once you have moved to a particular line and wish to type in, or change a piece or square, simply type that information in.

Use the following keys, as abbreviations of the full piece names.

\[
\begin{array}{cccc}
K & KING & Q & QUEEN \\
B & BISHOP & N & KNIGHT \\
W & WHITE & P & PAWN \\
R & ROOK & B & BLACK \\
\end{array}
\]

**NOTE:** Once you change a line, you need to retype all piece and square information, even if one part of the line remains the same.
COLOR

This selection switches between specifically designed chess pieces for color or monochrome monitors. Select which piece-set is appropriate for your system.

BORDER

Select this to switch between an alpha numeric border on the 2D display (denoting the algebraic notations of the squares), or a border.

REPLAY GAME (Program feature under CHOICES)

Once a game is underway, completed, or has been LOADED from a disk (see Control Y), it may be replayed from beginning to end, stopped at any point, and continued till checkmate.

A special REPLAY menu appears on the menu screen for this feature.

The Right Arrow Key, \( \rightarrow \), starts the game's replay. The Left Arrow Key, \( \leftarrow \), takes back moves, as usual.

CONTROL R START OVER
CONTROL S SET REPLAY SPEED
CONTROL X EXIT
ANY KEY TO STOP
RETURN FOR END

To finish a LOADED game, you may replay to any point, then EXIT REPLAY and continue playing, or, replay to the end, EXIT REPLAY, then take back moves and continue from that point.

Make sure to save any important games in progress to disk, before using this feature. (Use a formatted disk.)

NOTE: The left arrow key, \( \leftarrow \), on the Commodore 64/128 keyboard is located above the Control Key.

SET-UP BOARD (Program feature under CHOICES)

Use this feature to set pieces on the board in any legal fashion, such as the chess problems included in the accompanying Chessmaster 2000 booklet.

A separate menu screen appears to display the current chess board configuration. Simply move the cursor to the line you wish to change or delete. Type in a new piece, or square, and switch to the chess board display (Escape Key or F1.)
GAMES ON DISK (Help window under CHOICES)

Displays the menus for; CATALOG, SAVE A GAME, DELETE A GAME, and LOAD A GAME.

V CATALOG

Lists the games on your disk.

V LOAD A GAME

Loads previously saved games. Once LOADED, The Chessmaster 2000 automatically activates the REPLAY GAME feature. You may watch the game being replayed, or REPLAY it to a certain point and finish it yourself.

W SAVE GAME

Once a game is underway, or completed, use this feature to save it to disk.

Z EXTRAS (Help window under CHOICES)

Displays the menus for; MATE LEVEL, SOLVE MATE, and PRINT GAME.

NOTE: These features are activated by punctuation marks, not letters. Do not use the Control Key.

L MATE LEVEL

This allows adjustment of the number of moves ahead The Chessmaster 2000 looks for mate moves. when SOLVE MATE is active.

Type the number in at the prompt on the screen.

S SOLVE MATE

Select this to have The Chessmaster 2000 search ahead for possible mate moves.

If no mate moves are found, SOLVE MATE beeps and shuts off.

P PRINT GAME

Select this and answer "Y" to PRINTER READY, to print out the moves of a game in progress, or just played.

HAVE FUN!!!
The chess board is the world, the pieces are the phenomena of the universe, the rules of the game are what we call the laws of Nature. The player on the other side is hidden from us. We know that his play is always fair, just, and patient. But also we know, to our cost, that he never overlooks a mistake, or makes the smallest allowance for ignorance.

*Thomas Henry Huxley
1825–1895*
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Let's Play Chess

Chess is a game for two players, one with the "White" pieces and one with the "Black"—no matter what colors your set actually uses. At the beginning of the game, the pieces are set up as pictured at right. (See diagrams below to identify pieces.)

These hints will help you to remember this setup:
1. Opposing Kings and Queens go directly opposite each other.
2. The square in the lower right corner is a light one ("light on right").
3. The White Queen goes on a light square, the Black Queen on a dark square ("Queen on color").

The main goal of chess is to checkmate your opponent’s King. The King is not actually captured and removed from the board like other pieces. But if the King is attacked ("checked") and threatened with capture, it must get out of check immediately. If there is no way to get out of check, the position is a checkmate, and the side that is checkmated loses.

The Pieces and How They Move

White always moves first, and then the players take turns moving. Only one piece may be moved at each turn (except for casting," a special move that is explained later). The Knight is the only piece that can jump over other pieces. All other pieces move only along unblocked lines. You may not move a piece to a square already occupied by one of your own pieces. But you can capture an enemy piece that stands on a square where one of your pieces can move. Simply remove the enemy piece from the board and put your own piece in its place.

The King
The King is the most important piece. When he is trapped, his whole army loses.

The King can move one square in any direction—for example, to any of the squares with dots in this diagram. (An exception is casting, which is explained later.)

The King may never move into check—that is, onto a square attacked by an opponent’s piece.

The Queen
The Queen is the most powerful piece. She can move any number of squares in any direction—horizontal, vertical, or diagonal—if her path is not blocked. She can reach any of the squares with dots in this diagram.

The Rook
The Rook is the next most powerful piece.

The Rook can move any number of squares vertically or horizontally if its path is not blocked.

The Bishop
The Bishop can move any number of squares diagonally if its path is not blocked.

Note that this Bishop starts on a light square and can reach only other light squares. At the beginning of the game, you have one "dark-square" Bishop and one "light-square" Bishop.
Special Moves

En Passant
This French phrase is used for a special pawn capture. It means “in passing,” and it occurs when one player moves a pawn two squares forward to try to avoid capture by the opponent’s pawn. The capture is made exactly as if the player had moved the pawn only one square forward.

In the diagram above, the Black pawn moves up two squares to the square with the dot. On its turn the White pawn may capture the Black one on the square marked with the ♠. If the White player does not exercise this option immediately—before playing some other move—the Black pawn is safe from “en passant” capture for the rest of the game. But new opportunities arise with each other pawn in similar circumstances.

Castling
Each player may “castle” once during a game if certain conditions are met. Castling is a special move that lets a player move two pieces at once—his King and one Rook. In castling, the player moves his King two squares to its left or right toward one of his Rooks. At the same time, the Rook involved goes to the square beside the King and toward the center of the board (see illustrations below).

The diagrams below show what happens:

Before Kingside Castling

After Kingside Castling

Before Queenside Castling

After Queenside Castling
In order to castle, neither the King nor the Rook involved may have moved before. Also, the King may not castle out of check, into check, or through check. Further, there may not be pieces of either color between the King and the Rook involved in casting.

Castling is often a very important move because it allows you to place your King in a safe location and also allows the Rook to become more active.

When the move is legal, each player has the choice of castling Kingside or Queenside or not at all, no matter what the other player chooses.

More About Check and Checkmate

Now that you know how the pieces move, you can understand more about check and checkmate. Your opponent is trying to checkmate your King, and you must avoid this situation if possible.

You may not move into check—for example, move into a direct line with your opponent’s Rook if there are no other pieces between the Rook and your King. Otherwise, the Rook could “capture” the King, which is not allowed.

If you are in check, there are three ways of getting out:
1. Capturing the attacking piece;
2. Placing one of your own pieces between the attacker and your King (unless the attacker is a Knight);
3. Moving the King away from the attack.

If a checked player can do none of these, he is checkmated and loses the game.

If a King is not in check, but that player can make no legal move, the position is called a stalemate and the game is scored as a draw, or tie.

Some Hints to Get You Started

Some pieces are more valuable than others, because they are able to control more squares on the board. Obviously, for example, a Queen is more valuable than a pawn.

The question of value is important every time there is a possibility of capturing or exchanging pieces. Following is a guide to the value of the pieces other than the King:

Pawn, 1 point · Knight, 3 points · Bishop, 3 points · Rook, 5 points · Queen, 9 points

There are also some general principles that will help you to win games. After you practice for a few games, you will find that you are following these hints naturally, and that you do not have to work at remembering them.

• Try to capture more valuable pieces than your opponent does.
• The player with stronger pieces has better winning chances.
• Capture more valuable pieces with less valuable ones.
• Don’t try for a checkmate in the first few moves—it probably won’t work.

• Control the center. Pieces in the center have more mobility than pieces on the wings. (Look back at the Knight diagram and see how the White Knight has more possible moves than the Black one.) Move your center pawns early, but not the pawns on the side.
• Move your Knights and Bishops early.
• Castle early.
• Every time your opponent moves, stop and look carefully. Did he attack one of your pieces? Can you defend it or save it from capture? Did he make a move that allows you to capture something?
• Be alert. Your opponent has a plan, too!
• Get all your pieces into good positions and protect your King before trying to attack. It takes more than one piece to checkmate.

Getting Better
These basic rules and pointers are enough to get you started in chess. Now you are ready to find partners among the millions of chess lovers across the country and around the world.

Practice will make you better and better at the game and so will reading some of the countless books about chess. You can probably find some of these books at your local library or bookstore. They will tell you a lot about various winning strategies.

Another source for all your chess needs is the U.S. Chess Federation, a not-for-profit educational and instructional corporation and the official organizing body for chess in this country. U.S. Chess publishes the monthly magazine Chess Life, containing news, instruction, other articles about chess, and a monthly list of tournaments that even beginners may play in.

U.S. Chess also offers a national rating system, postal chess competitions, and a mail-order department with a large selection of chess books and equipment.

For more information about U.S. Chess and how to join, write to:
U.S. Chess Federation
186 Route 9W
New Windsor, NY 12550
Telephone: (914) 562-8350
The History of Chess

The invention of chess has been variously ascribed to the Persians, Babylonians, Castilians, Chinese, Egyptians, Greeks, Hindus, Irish, Jews, Persians, Romans, Scythians, and Welsh. Specific individuals have sometimes been credited (the Greeks claimed Aristotle invented chess), but no invention stories are known. We can make a few deductions, however, from what is known.

The oldest name for chess is *chaturanga*, a Hindu word referring to the four branches of the Indian army: elephants, horses, chariots, and foot soldiers, which were not in existence for the birth of Christ. Therefore, chess is at least 2,000 years old. Its exact age can’t be determined with any degree of accuracy, because it was originally played with dice and references to “skilled dice players” as long as 5,000 years ago may or may not refer to early forms of chess. The ambiguity is due at least to the Indian *ashopada*, the forerunner of the modern chessboard. It has been used for various games, most of which involved dice. The Hindus didn’t stop with two-player chess, either. They even developed a four-handed version, with and without dice, in which each player had eight pieces. The diceless four-handed version is still played in India. Indian rules varied greatly from place to place, and as the game spread eastward, its rules were altered to suit local fancies. The Burmese, for instance, start their game with the kingside pawns on the third rank and the queenside pawns on the fourth rank. Before any movement begins, the major pieces are located anywhere behind the pawns according to the tactical discretion of the individual player. The actual moves are identical to the original Hindu chess moves. The Chinese place their pieces on the intersections of the lines rather than on the squares and add a celestial river, akin to no-man’s-land, between the halves of the board. Their version has only five pawns to side, but adds two cannons ahead of the knights, and a counsellor on either side of the king. In China, the king is called the general because a Chinese emperor was so insulted at seeing a mere general in himself in a lowly game that he had the players executed. In order to play the game without undue risk of life and limb, Chinese players demoted the piece on the board—or so the story goes. Interestingly, the Japanese allow captured pieces to change sides and rejoin the game against their old enemy at any vacant place on the board.

The Persians learned chaturanga from the Indians, corrupting the name to *chaturang*, and codifying its rules. They spread a uniform game to the rest of the world, and the idea that the rules ought to be uniform. Since the Persians took up chess, there have been rules changes, but each change was adopted universally throughout the West. Chess spread very rapidly in the Persian Empire. The Persians never took to the four-handed game, and looked down on dice-chess. The latter did spread to Europe via the Moslems, where it persisted until the Fourteenth Century. The Moslems most likely learned dice-chess direct from the Hindus.

The Persian Empire fell to the Moslems in the Seventh Century, and chess became very popular in the Moslem world. At least, it did after their theorists decided that chess playing wasn’t contrary to the teachings of Mohammed. This decision took about one hundred years, and illustrates the curious power a simple game can have. Four generations of chess players weren’t quite sure that they were in good standing with their religion because of a pastime. After the official decision that there was no harm in chess, the Moslems created a greatly detailed literature about it.

Chess may have arrived in Russia as early as the Eighth Century, about a hundred years before it reached Western Europe. The Eighth Century Russians traded with the Arabs and the Russians are not in dispute, and people who traded with the Arabs around that time tended to learn chess. By A.D. 1000, Christianity was established in Russia, and the church there immediately made a concerted and unsuccessful effort to stamp out chess playing. Sixteenth Century travelers to Russia reported that people of all classes played chess there. In the rest of Europe, chess playing was confined to the nobility until the Eighteenth Century. When the Mongols invaded Russia, they brought their own form of chess with them. The Mongols had gotten chess via the Eastern route, so they had a number of their own variations. As a result, in certain parts of Russia, the modern rules did not take hold until the Twentieth Century.

It is through the Moslems that Europeans learned chess and most chess nomenclature. The Persian chaturang was rendered by the Moslems as *shahrān*. The Spanish names *axedrez* or *aje- drez* (ah-hey-dres), and Portuguese *xadrez* (sha-dres), obviously derive from shatranj. “Chess” in English conforms to the pattern throughout the rest of Europe: It is the vernacular corruption of *scac*, the Ninth Century Latin rendering of the Persian *shah*, or king. The king itself is always a direct translation of *shah*, and the pawn is invariably the equivalent of the Arabic *badaq*, or foot soldier. “Rook” is a direct corruption of *rukh*, or chariot. Interestingly enough, *rukh* was misinterpreted by the Bengalis as the Sanskrit *roca*, or boat. As a result, in certain parts of the East and Russia, this piece is in the shape of a boat. Our castle-shaped pieces come from the Farsi Indian pieces which represented the tower carried by an elephant. The knight was originally *faras* in Arabic, meaning horse, the usual shape of the piece. In Europe, the name of the horse evolved to the name of its rider: *knight* in English.

The bishop evolved from the Arabic *al-fāl*, or elephant. The Spanish still call this piece *alfil*, and the Italians are close with *altiere*, standard-bearer. In England, the split at the top of the piece, intended to represent the elephant’s tusks, was probably mistaken for a bishop’s mitre. The French took the same split as
a fool's hat, so in France, the piece is feu, or jester.

The present-day queen, so called throughout the West, started as the counselor, or farz, or iriz. The Spanish rendered this as iriz, or altherza, and the Italians as farza or farcia. The French made that into fierce, ferze, and vierge (virgin), which may be how the gender change got started.

Europe's introduction to chess probably came in the Ninth Century, first in Italy and Spain. From Italy it spread to southern Germany and Switzerland. From Spain it went to France. The English may or may not have known chess before the Norman Conquest. Early references are confusing due to the tendency of the chroniclers of the period to refer to any and all games as "chess."

By the late Middle Ages, Europeans and Moslems had started tinkering with the rules. In the Thirteenth Century, we find the first known instance of the chessboard with its now-familiar light and dark squares. Fifteenth Century Mohammedan documents note that the Great Mogul Timur played "Great Chess," a version which required a board measuring ten by eleven squares.

Meanwhile, Europeans were frustrated by the amount of time it took to complete a game, and typically, made some rules changes designed to speed things up. In shatranj, the Bishop could originally move only two squares diagonally, but he could leap over a piece blocking his path. The queen, or counselor at the time, was easily the weakest piece on the board, moving only one diagonal square per turn. When a pawn reached the eighth rank, it could only be promoted to counselor, the lowest promotion possible and the only way the former pawn could remain in the game.

When the counselor became today's queen, an upsetting dilemma arose in the mind of Fifteenth Century nobles: Aside from the mental gymnastics required by the pawn's sex-change, what if the player's original queen were still on the board? Would the king be a bigamist? When people took their royalty seriously this was a real problem. So for a while, a pawn could be promoted to a queen only if the original had been captured. Later, of course, this solicitude on behalf of the royal marital status was abandoned; the queen was too powerful a piece to be lost through fastidiousness. The players, however, did retain the option of promoting a pawn to any piece except a king.

Given the offensive might of the newly strengthened bishops and queens, something had to be done to help the defense. The king had become too easy to capture. The answer was casting. At first, the move allowed some flexibility. A king could jump two or three spaces, to N2 if he chose. This somewhat unsettled state of affairs finally became the modern casting move.

At about this time, pawns were first given the option of a two-square advance for their initial move. So that this new move could not be used to evade an obvious loss, the en passant capture was devised. With these rules changes, the modern game of chess emerged, and there have been no other alterations since the Sixteenth Century.

Interestingly, in the 20th century, when Jose Capablanca was world champion, he proposed the addition of two new pieces. The chancellor would move like a rook or a knight at the player's option, and the archbishop would move like a bishop or knight. These pieces would require two more pawns and a larger board, but odd enough had the effect of cutting playing time in half. Capablanca's suggestions were never acted upon.

World Champions And Their Play

When William Steinitz beat Adolf Anderssen in 1886, (see Classic Game number 14) Steinitz designated himself "World Champion." Since before that time no one had thought of calling himself that, Steinitz can, with some justification, be called the first world champion. However, most chess authorities have traced the world championship back at least to Francois Philidor, the French champion regarded in 1748 as the leading authority on chess. Certainly one can follow a more-or-less unbroken line of champions back to Philidor, but why not go back a little further? There are a few breaks in the record, but the first person to bestow upon himself the mantle of unquestioned master of the game of chess was the tenth century Arab Grande, al-Suli.

The extensive Arab chess literature records four of the earliest known chess masters, Ali-Adli, from the Byzantine Empire, was the first person reported to be able to beat anyone he played, although just before his death, the champion lost to a Persian known as al-Razi at the court of Caliph al-Mutawakkil in 847 A.D.

Al-Suli entered the picture about sixty years later in Baghdad. He established the first rating system for chess players. Grande is the highest position, which al-Suli bestowed posthumously on al-Adli and al-Razi, and which he claimed for himself. The next position was held by players able to beat a Grande in two out of ten games when given the advantage of a pawn. Below that were grades which were defined by the player's ability to beat a Grande with the advantage of a bishop, knight, and rook, respectively. Players who needed better odds than that were ranked "beneath contempt."

Al-Suli's writings on chess provide us with some interesting insights as to what champion-level play was like then. He noted, for instance, that a Grande could calculate ten moves ahead. Modern chess masters, relying on positional play, no longer need to make such extensive calculations. Al-Suli also felt the need to point out to his readers that while they position their men for attack in the first 12 to 19 moves, they would do well to pay attention to the disposition of their opponent's forces and perhaps respond accordingly.

Al-Suli's play and reputation were so overpowering they were honored through six centuries of Arab chess literature. One of his pupils, al-Lajal, another Grande, was the first to note that
Neuer moves a player needs to complete development of his pieces, the better off he is. Records from this period document the first instances of blindfold play.

The first Western book we have on chess comes from Spanish architecture. In 1497, Luis Ramirez de Lucena wrote Repeticion de des e Arte de Axedrez. Lucena was far from a master, he appears to have confused the new rules with some of the old, and some ideas on strategy worth of a Bobby Fischer. Lucena noted that positions the board so their opponent's pieces were in the sun, and to try and arrange games after their parent had eaten a large meal and had several drinks.

One of the first strong European players to emerge was the Flemish clergyman, Ruy Lopez, after whom a still-popular opening is named. Lopez wrote a very influential book on chess play, "De la Inversion Liberal y Arte del Juego del Axedrez," in 1561. It is known to have travelled extensively, playing chess wherever he went. His book remains valuable today.

Another Ruy Lopez, relatively few new chess books appeared for 170 years. Chess masters of this period, Giovanni Vardo and Paolo Boi, both of whom had defeated Lopez, and next generation of powerful Italian masters, Alessandro Salgello Polerio, and Giacchino Greco, had made a number of advances over Lopez's work. However, because they played for money, they were understandably reluctant to give away their secrets by publishing books. What we know of their work is the private manuscripts they wrote and sold.

Stamma, a Syrian, published his "Essay sur le Jeu des Echecs" in Paris in 1732, and a revised English version, "The Noble Art of Chess" in 1745, the first to feature algebraic notation. He was in London as Interpreter of Oriental Languages to the English government, Stamma customarily played at Slaughter's chess club, and it was there that he lost a famous match to his opponent, André Danican Philidor, a down-and-out French musician.

As a result of the notoriety he gained at Slaughter's, Philidor became one of the most influential players who ever lived. Philidor published his "Analyse du Jeu des Echecs" in 1748 after playing Slaughter. It was the first book to provide detailed notes on the play so that the reader could follow the master's moves. Philidor was a believer in strong pawn play, and contested his games with a distinct plan in mind. He formulated a rule that the result of the playing teasers is now the classic pattern of using pawns to flush out a led king. Another chess book, written in 1763 by the Italian Giambattista Lotti, presented a view more concerned with mobility, and therefore a more modern approach. It too, incurred extensive notes on the play. Philidor's style held sway over France and England, though, for a very mundane reason - he had created considerable interest in chess in France and England. The next champion, a domineering and arrogant war hero whose play consisted of nothing more than a sustained effort to checkmate his opponent's king, was Alexandre Deschapelles. He was interested neither in other lines of attack, nor in defense. Phrenologists, a pseudo-science in vogue at the time, attempted to explain all human behavior by the shape of the head. Phrenologists believed that Deschapelle's highly developed prowess at chess was due to cranial saber wounds he had suffered in battle. For whatever reasons, Deschapelles was overpowering. He gave a pawn-and-two-moves advantage to anyone who played him, and liked to brag that he had never been beaten in an even game. While true as far as it goes, his statement is misleading. When his pupil, Louis de la Bourdonnais, was finally able to beat him with the customary odds, Deschapelles gave up the game rather than risk losing at no odds.

The third in the line of French champions, de la Bourdonnais was one of those natural chess players whose moves come after only seconds of thought. He had the misfortune to have as his principal opponent Alexander McDonnell, an Irishman, champion of the British Isles, and an agonizingly slow player. De la Bourdonnais defeated McDonnell in the first championship match for which records of most of the play are still extant. (See Classic Game number 3.) They indicate that de la Bourdonnais was driven almost to distraction by the glacial pace of McDonnell's play. Neither man gave a thought to defense; attack was everything in their games. After a long and successful career in France as a composer of operas, de la Bourdonnais moved back to England and died there in 1840. He was buried near McDonald.

De la Bourdonnais's successor in France was Pierre de Saint-Amand, the last of the great French masters. McDonnell's was Howard Staunton. In 1843, Staunton, who had lost a first match to Saint-Amand by one point, won their second 11-6, with 4 draws. Taking his cue from Deschapelle, Saint-Amand gave up chess after this loss. Staunton declared himself champion, and although he later beat Daniel Harrwitz (see Classic Game number 4) and Bernhard Horwitz, (see Classic Game number 5) two of Europe's strongest players, he also began the now-familiar champion's practice of avoiding anyone appearing strong enough to beat him.

Staunton was a formidable figure in 19th Century chess, though less for his play, which was not particularly aggressive, than for his other activities. His 1849 design for chess pieces has been in use ever since for matches and tournaments. He is one of the most familiar today, and the one you will see on screen in your Chessmaster 2000. He wrote a very influential column on chess for the Illustrated London News, founded a magazine, The Chess Player's Chronicle, and, inspired by the first world's fair in London in 1851, organized the Great Exhibition of London for chess players that same year. Each entrant had to pay his own way there and put up a five pound entry fee, but there was a 183 pound purse for the winner. Staunton himself was unex-
pectedly knocked out in the third round by Adolph Andersen, a high school math teacher from Breslau. (See Classic Game numbers 7 and 8 for examples of Andersen’s play.) In writing about his loss to Andersen, Staunton blamed the demands of organizing the affair and poor health, thereby setting another precedent, that of a champion blaming a loss on anything but the superior abilities of his opponent. Another of Staunton’s excuses, physical exhaustion, did have at least a grain of truth in it. There was no time limit in effect then, and some games in the exhibition lasted longer than ten hours. However, Staunton’s comments on anyone’s play but his own were unSportsmanlike to say the least. One of his best-known and least deserving targets was the American, Paul Morphy.

Chess had been popularized in North America by Benjamin Franklin, who founded the Philadelphia Chess Society, and wrote an influential essay, *Morals of Chess* in 1779. Morphy was raised in New Orleans, which had an active chess club. At age 13, Morphy played two games with the expatriate Hungarian master, Johann Lowenthal, winning one game and drawing the second. Lowenthal wrote about the event complimenting Morphy and predicting a great future in chess for him. In 1857 at age 20, Morphy walked away with the First American Chess Congress, held in New York.

Morphy’s game was a combination of modern positional play and wild, romantic combinations, although he would delay attack until his knights and bishops were in place. His style had a great effect on many later players who would sometimes ignore an easy advantage in favor of Morphyesque manoeuvring. Unlike most players of his time, Morphy did not neglect defense. He made his moves quite rapidly and preferred very clear, uncomplicated lines of attack. (See Classic Game numbers 9, 10, 11, 12 and 13, for examples of Morphy’s style of play.)

Shortly after Morphy won the New York Tournament, the New Orleans Chess Club offered to pay Howard Staunton’s expenses to come to America if he would play Morphy in a winner-take-all match with stakes of $5,000 a side. Staunton was his usual insulting self in refusing the offer, citing the amount of time a trip to the United States would take, the exhaustion the trip would entail, and his own recent lack of play. Not only did he decline for himself, he also turned down the club on behalf of all of Europe. Stung by Staunton’s belittling of his abilities, and especially by an implication that he played chess professionally, Morphy sailed for England.

Although Staunton kept saying he looked forward to a match with Morphy, in fact, he found excuse after excuse for not playing him. Morphy played Lowenthal again, (see Classic Game number 12) while in England, this time beating him 9–3, with 2 ties. Morphy finally tired of waiting for Staunton and travelled to Paris. There, in a highly publicized match, he beat Daniel Harrwitz, a great German champion who was very unpopular in France. The public was delighted by Morphy, who used the prize money from the Harrwitz match to pay Andersen’s fare from Breslau. While he waited for Andersen to arrive, Morphy received a letter from Staunton. Essentially an admission that he couldn’t beat the American, Staunton’s letter was never made public. In fact, in his columns Staunton continued to claim that he was anxious to play Morphy, and that Morphy was avoiding him. When Andersen arrived in Paris, Morphy beat him 7–2, with 1 draw. Andersen actually complimented Morphy’s abilities. (See Classic Game number 13.) Staunton’s notes on the match, played for no stakes, are incredibly boorish. After a grand farewell banquet in London, which Staunton missed, Morphy returned to New Orleans and gave up chess.

Because Morphy hadn’t claimed the championship, Andersen remained the man to beat. A great romantic player, Andersen was particularly adept at spotting his opponent’s weaknesses and then using a sacrifice to win. He successfully defended his championship two more times (his 1851 defense was the first to feature time limits on the moves), before losing to William Steinitz 8–6 in 1866.

Steinitz, a native of Prague living in London, lost no time in claiming to be world champion. He emigrated to the United States in 1893, and two years later founded *International Chess Magazine*, which lasted until 1891. In his highly entertaining book, *Grandmasters of Chess*, Harold Schonberg calls Steinitz “the most unpopular chess player who ever lived,” which is quite an accomplishment considering Staunton’s record.

Steinitz richly deserved the description, however. In addition to writing excellent commentaries on games, Steinitz used his magazine to indulge in the most vile mud-slinging imaginable against other masters, readers who had the misfortune to write to him, and anyone else who managed to upset him. His repellent disposition aside, Steinitz, who had begun playing in the romantic style, made several important theoretical advances. He borrowed what we now regard as the most modern aspects of Philidor and Morphy, and created a new style of play based on position and positional logic. Trained originally as an engineer, Steinitz realized that without positional advantage, combinations meant nothing. He was particularly adept at divining the intent of his opponent’s developing combination to lure him into futile attacks. He also developed the theory of strong and weak squares. While unbeatable in match play, his style was not particularly well suited to tournaments, and his record in them is undistinguished. (See Classic Game numbers 16 and 18.)

Emmanuel Lasker, a native of Germany who had moved to the United States in 1890, finally defeated Steinitz in 1894. (See Classic Game numbers 16, 17 and 20.) The match was played in New York for $2,000 a side, the winner being the first to take ten games. Lasker surprised everyone by winning 10–5, with 4 draws. Steinitz wanted a rematch at once, but Lasker made him wait two years. When they met again in Moscow, Lasker won decisively 10–2, with 5 draws. During Lasker’s 27 year tenure as champion, he was continually criticized for his infrequent title defenses, but in all fairness to Lasker, it should be pointed
that if the war years of 1914–1918 are omitted, he did de-

sign "Fédération Internationale des Échecs". This na-

tional body governing tournament chess play regular-

ly require a title defense once every three years.

Lasker was the first champion to demand what were regard-

ed the time as astronomical stakes for a title match. Again.

Lasker did it when he played Frank Marshall in 1907. (See Thia

c. number 25) halving his demand for $2,000 when Marshall

able to raise it. Lasker won easily, beating Marshall 8–0.

7 draws.

like Steinitz, Lasker was also a formidable player in tour-

ments, finishing below third place only once at the beginning

time at the end of his career. He played a particularly psy-

chological game, often ignoring the best objective move to

the one most disturbing to his opponent. His attack fea-

ured incredible complications which most players found im-

possible to comprehend.

The Capablanca of Cuba, long the fair-haired boy of chess

been trying to get a match with Lasker for years, and in

Lasker knew he had to give in. Dreading the humiliation of

publicly, Lasker considered resigning the championship

Capablanca's favor, but Capablanca had raised such high

that Lasker couldn't turn him down. They played in Ha-

and after Capablanca had won 4 games lost none, and

10, Lasker resigned the match. (See Classic Game num-

33, 36 and 37.) In his notes, Lasker reported that he had

fatigued by the climate, but was gracious enough to admit

Capablanca probably could have beaten him no matter

they played.

Capablanca had long deserved the match; he had been un-

for years. (See Classic Game number 44 for a further

e pull of stellar Capablanca play.) When he lost a game to

Rets of Vienna in a New York tournament in 1924 it was

object of a New York Times headline. An employee of the

foreign ministry, Capablanca had the advantage of being

ed to any city in which he had to play a game. Like

by, he was a fast and intuitive player, fond of simple,

direct attack.

Capablanca, too, was accused of avoiding matches, and when

ally did defend his crown in Buenos Aires against Alex-

Alekhine in 1927, the match took several months. Capa-

finally lost 6–3, with 25 draws. Alekhine had studied

Capablanca's play, and decided to engage in very complex at-

which he believed the Cuban player would not analyze

sufficiently... Alekhine never risked a match with Capa-

although he frequently hinted that one was about to

place. (For examples of Alekhine's play, see Classic Game

ners 38, 43, 48, 50 and 55.)

The son of a Russian noble, and a French citizen since 1925,

made his first title defense in 1929 when he beat a

Russian named Bogolyubov, knowing that Bogolyubov would be

easy to beat. A rematch with Capablanca was announced, but

the prospect of beating Bogolyubov again proved to be too al-

uring, and Alekhine trounced him in a rematch in 1934. In 1935,

Alekhine played Dr. Max Euwe of the Netherlands and in unex-

edly lost the championship.

Dr. Euwe, obviously unaware of how a champion behaves, of-

ered Alekhine an immediate rematch. It took place in 1937, and

Alekhine got the crown back. Unaware of how an ex-champion

behaves, Dr. Euwe failed to blame his loss on poor health. For

his part, Alekhine began negotiations again with Capablanca,

who was still waiting for a rematch when he died in 1942.

Alekhine retained the crown until his death in 1946.

In 1944, FIDE took over the administration of championship

play, and set up a match tournament to decide the new chess

king. Mikhail Botvinnik of the USSR won, and save for one nota-

ble interruption, the Soviets have dominated international

c chess ever since. (Chess is officially encouraged and controlled

by the government in the Soviet Union, having been declared a

political instrument at the Third All Union Congress in 1924.)

After winning the championship, Botvinnik played little chess

for the next three years, although his preparation for a title de-

fense was always quite intense and included the minute study

of his opponent's style. (See Classic Game numbers 54 and 82.)

It was not until 1957, when another Soviet, Vasily Smyslov,

beat Botvinnik in their second match. (See Classic Game num-

bers 56 and 58 for examples of Smyslov's play.) At the time,

FIDE rules permitted an ex-champion to demand a rematch

after only one year, so Botvinnik was able to get his crown back

in 1958.

In 1960, the Latvian Mikhail Tal, who is another very rapid

player in a modern-romantic style, easily took Botvinnik's

championship away. Soviet chess authorities were quite upset

by this turn of events, because Tal plays a very unorthodox

game by Soviet standards. (See Classic Game numbers 64, 65,

67, 87 and 89 for examples of Tal's play.) The Soviets were able
to relax the next year when Botvinnik took the championship

back.

Botvinnik's next challenger was another countryman, Tigran

Petrosian, whose game consists mostly of waiting for his oppo-
nent to do something. (See Classic Game number 68.) Botvinnik

have must done something wrong, for Petrosian beat him in

1963, winning 5–2, with 15 draws. By this time, FIDE had aban-
doned its 1 year rematch rule, and rather than have to wait
three years to get another shot at the championship, Botvinnik

retired. In his first defense, Petrosian sat back and allowed Bo-

ris Spassky to make the mistakes. Spassky made enough for Pe-

trovian to win 4–3, with 17 draws. Spassky apparently learned

something from the experience, because in 1969 he beat Petro-
vian 6–4, with 13 draws. (See Classic Game numbers 66, 69, 70,

71, 72 and 85 for examples of Spassky's play.)

For his first title defense, Spassky had to face Bobby Fischer,
whose bizarre behavior managed to alienate everyone associated with the match. While Emanuel Lasker might make a move designed to upset his opponent, Fischer would apparently say or do absolutely anything in an effort to throw the opposition off balance. Fischer's style might be considered the ultimate extension of Lucena's advice about making sure your opponent's eyes are in the sun. Fischer's antics made him beating Spassky in 1972 the most publicized chess match in history, and for the first time since the death of Alekhine, someone outside the Soviet bloc was chess champion. (See Classic Game numbers 57, 62, 63, 75, 77, 80, 84 and 96 for examples of Fischer's style of play.)

Although he stated that he would defend his crown frequently, Fischer played no one, and when he refused to abide by FIDE rules for a match in 1975, he lost his crown by default to Anatoli Karpov of the USSR. (See Classic Game numbers 90 and 91.) Karpov defended his championship successfully until November of 1985, when he lost it to Gary Kasparov, also of the Soviet Union. Something of an outsider in Soviet chess circles, Kasparov appears to be embroiled in a dispute with FIDE over the championship, although nothing will be known with any certainty until the time of the next defense. (See Classic Game numbers 97 and 98, for Kasparov vs. Karpov, and Classic Game numbers 92, 93, 94 and 95, for Kasparov against other opponents.)

**Chess and Machines**

"Even if we could teach a computer to play chess merely as well as—to use Norbert Wiener's simile—the vast majority of the human race (no offense meant), we would be furnishing definite proof that a machine can solve problems of sufficient complexity to defy the reasoning ability of millions of people throughout their lives."


In 1769, a Viennese expert in hydraulics and acoustics, Wolfgang von Kempelen exhibited an interesting conjurer's trick to the Imperial Court of King Joseph II. It was a life-sized figure dressed as a Turk seated behind a chessboard on top of a chest. The chest appeared to be filled with cogs and gears, which von Kempelen would demonstrate in the course of a game of chess against a human challenger. The Turk would invariably win, and its entertainment value was the same as any magic act. How did he do that? It was obvious to all that no machine could possibly play chess.

After von Kempelen's death, the Turk was bought by a Bavarian musician and showman, Johann Maelzel. Maelzel had already built and exhibited mechanical devices of his own: a mechanical trumpet player, and the Panharmonicon, which played a variety of orchestral instruments. (Beethoven composed pieces specifically for both devices.) Maelzel took the Turk, and was successful far beyond anything he could have imagined, making huge amounts of money. Never claiming the device actually played chess itself, he made it part of a show to demonstrate the impossibility of hiding a human in the Turk.

Even today we are not sure how the Turk actually operated: we know there was a man hidden inside the device, and he used a pantograph to make the Turk's arm move his pieces but beyond that we have only guesses. We will never know for certain, because the Turk was destroyed by a fire in 1854.

Another device, called Ajeeb and dressed as an Egyptian mummy, was built in 1868 and had a similar career. Ajeeb also became a sideshow attraction, and at one time the "inside man" was the American Harry Pillsbury. Ajeeb, too, was destroyed in a fire on Conch Island in 1928.

However, in the late 19th century, something much more interesting and directly related to computer chess happened at the Escuela Tecnica Superior de Ingenieros Caminos (The School of Road Works) at Spain's Polytechnic University. Leonardo Torres y Quevedo had devised a pressure sensor connected to a rudder which would keep it pointed in the correct direction. Quevedo wondered if there might be more things a device might be "taught" to do. So, in 1890 he built a prototype which would play the chess endgame of the king against a human with the black king. Not only did the device win, he also said "check" and "mate." A final version was exhibited at the Paris World Fair in 1914, but the World War precluded any further work.

In 1939, the British Foreign Office established the Deport Communications at Bletchley, 50 miles north of London. Their purpose was to build a device which would crack encoded messages no matter how the ingenious German device known as "Enigma" was set. In order to accomplish this task, the Foreign Office had to go beyond crytanalytic tools. They also employed mathematicians, electronic engineers, linguists, crossword puzzle buffs, and chess players. The most responsible for the success of the project was Alan Turing, a prominent and eccentric mathematician, and a chess player. Earlier, Turing had proposed a "universal machine" which would simulate the operation of any other machine, and Bletchley it was built. Known as "the bomb" or "Ultra," the machine worked so well that Allied leaders frequently human messages decrypted and translated before their intercepted messages got them.

Turing's universal machine was not a computer, however. After the war, Turing got a large grant from the British g.
ment to build a general purpose electronic computer. Although he had established the mathematical concept for such a machine in 1936, building a working model was not easy. Turing talked to reporters about it in 1946, calling it an "automatic computing engine," and in the same interview discussed the possibilities of computer chess. He was quoted as saying "That is a question we may be able to settle experimentally in about 100 years time."

But Turing had worked out the formulas necessary for a chess program, and in 1951 or 1952 he used it in an actual game. Working his program from notes on paper, Turing played Alick Glennie, who was an admittedly weak player. Glennie reported that Turing had trouble operating his own program because it often chose moves that Turing knew were wrong. The game took about 2 or 3 hours, and ended when Turing's program lost its queen. Turing was quoted as saying the program had resigned "on the advice of his trainer." In his spare time, Turing began programming the Manchester University computer to play chess, but died before he could complete his work.

In the United States, Dr. Claude E. Shannon of Bell Labs described in March of 1949 how an electronic computer could be programmed to play chess. Shannon was interested in computer chess only because most people felt that chess required "thought." If a computer could be programmed to play chess, Shannon felt, that would hold great theoretical implications for the future of computers. Two of Shannon's proposals are still of interest. He defined the two schools of chess programs, brute force vs. heuristic programming (the school of knowledge). Shannon favored brute force because that approach takes advantage of the computer's obvious strengths. He also suggested that machines be programmed to learn directly from their mistakes, a refinement that in the main has thus far eluded programmers.

In Los Alamos, New Mexico in 1956, Ulam and Stein actually programmed a computer to play a simplified version of chess on a 6 x 6 square board (leaving out the bishops, limiting pawns to a one square advance on opening, and omitting castling). They wanted to know whether a computer could make reasonable moves solely on the basis of material gain and increased mobility. The computer played itself first, revealing an inordinate fear of being in check. After a few improvements, the program, MANIAC I, became the first computer program to beat a human in a game—an unnamed volunteer who had learned the game only a week before. Capable of 11,000 operations per second, MANIAC I used exhaustive search to examine 4 plies in 12 minutes per move.

In an article in the June 1958 *Scientific American*, Alex Bernstein, a mathematician and a very strong chess player, and Michael Roberts described how they, Timothy Arbuckle and M. A. Belsky had programmed an IBM 704 to play chess. Their program ran on 8,000 punch cards, and required that its opponent punch his moves into a card and then feed it into a reader. The machine conducted a 4 ply search like the Los Alamos program, but also added two new considerations, king defense and area control. Bernstein's program also used a ratio to consider material evaluation, which was an advance over the simple point system used previously. Running at about 42,000 operations per second, this program was able to play a fair amateur game at the rate of a move every 8 minutes.

The next year, Herbert Simon, Allen Newell, and Clifford Shaw of the Rand Corporation and the Carnegie Institute of Technology came up with a very complex program that could play at the medium amateur level. It took about an hour per move, but because it represented such a huge leap in computer chess technology, it led Herbert Simon to predict that within 10 years a computer would be the world chess champion.

In 1965, Professor Hubert L. Dreyfus evaluated the play of MANIAC II (an improved MANIAC which played on a full 8 x 8 board), Bernstein's program for the IBM 704, and a program of his own, and announced, "Still no chess program can play even amateur chess." By December of that year, Dr. Dreyfus had lost a game to MAC HACK, developed by Richard Greenblatt and Donald Eastlake of M.I.T. MAC HACK was another breakthrough, able to defeat about 80% of non-tournament level players. Greenblatt and Eastlake were good programmers with a very fast computer for the time, the PDP-6. Their "plausible move generator," with 50 considerations for a move, cut down on the number of moves the machine had to consider. And there was another important factor: Most opponents resigned too soon. Believing that MAC HACK's strong opening and middle game represented its end game, few humans got as far as MAC HACK's dreadful endgame. By 1968, when MAC HACK VI was demonstrated at the International Federation of Information Processing (IFIPS) meeting in Edinburgh, its rating was 1500 elo.

After this, things began happening very quickly. Between 1967 and 1970, 8 new programs appeared in the United States alone, and in 1970 the first U.S. Computer Chess Championship took place. CHESS 3.0, created by David Slate, Larry Atkin, and Keith Gorlen of Northwestern University swept the tournament, winning all three of its games. The CHESS program as 3.5 in 1971 and 3.6 in 1972 also won all its games in the next two U.S. championships. The 1972 contest featured notes on the games by Samuel Reshevsky, a master player and ex-U.S. champion.

In 1974, CHESS 4.0 appeared, a completely new version which marked a switch from selective search to full-width search, in keeping with Dr. Shannon's predictions of the greater suitability of the brute-force approach. Unfortunately, this was the version that lost the first World Computer Chess Championship in Stockholm. It placed second to KAISSE from the Soviet Union, a program on which Mikhail Botvinnik, the ex-World Champion had worked. In all fairness, it should be pointed out that CHESS did not play KAISSE in the tournament, and in an unofficial game played after the event, the outcome was adjudicated a draw after the 65th move. In the second World Computer Cham-
pionship, held in Toronto in 1977, CHESS 4.6 won in a clean sweep, although again, it did not meet KAIISSA during the match. This time, however, when they played afterwards, CHESS beat KAIISSA in 44 moves.

In 1978, it was time to play the Levy challenge. Ten years earlier, the International Master David Levy had bet two computer scientists $500 that no computer chess program would be able to beat him in ten years' time. When the match came around, the bets had increased to 1250 points, and Levy played a series of matches against CHESS 4.4, KAIISSA, MAC HACK VI, and CHESS 4.7. Levy won every match, and only CHESS 4.7 was able to score a point against him. While disappointing to its programmers, its one win against Levy represented the first time a computer had won a game against an International Master.

Omni Magazine then offered $4,000 to the first program to beat Levy. Levy increased the stake to $5,000, and in 1983, he was challenged by the creators of CRAY BLITZ, the winner of the 1983 World Computer Chess Championship. Levy played CRAY BLITZ in April of 1984, and although he did not lose a game, Levy did compliment the programmers by studying CRAY BLITZ's games in detail.

CRAY BLITZ was also beaten as North American Computer Champion in October of 1985 by HITECH, designed by Hans Berliner, Carl Ebeling, and Murray Campbell of Carnegie-Mellon University. Berliner designed a unique processor he called the searcher which employs 64 chips, one for each square on the board. Each chip examines the entire board for moves and determines the best one. The searcher then ranks the 64 choices, and the game tree is searched as deep as 14 plies based on the searcher's ranking. So far, HITECH has had an easy time playing computer opponents.

Earlier, we quoted from Edward Lasker's *The Adventure of Chess*. Lasker stated that if a computer could play chess *merely as well* as the vast majority of the human race, "we would be furnishing definite proof that a machine can solve problems of sufficient complexity to defy the reasoning ability of millions of people throughout their lives." Your Chessmaster 2000 far exceeds Lasker's requirement. The creators of The Chessmaster 2000 gratefully acknowledge the pioneering efforts of those programmers whose earlier chess programs paved the way for this state of the art program you have purchased.

The Chessmaster's Library of Classic Games:

1. **Greco, 1629**
   Greco plays for mate right from the start as he sacrifices pawns after piece.

2. **Legal—St. Brie, 1700+**
   This game, played sometime in the eighteenth hundreds, is the only known game we have from the great French player Legal. The final position, known as Legal's Mate, shows the folly of making too many Pawn moves in the opening and not developing the Kingside pieces.

3. **De la Bourdonnais—McDonnell, Match, 1834**
   A wild attacking game where both sides play for mate. This game has an incredible and amusing finish.

4. **Harrwitz—Staunton, London, 1846**
   Staunton's pieces force Harrwitz to weaken his Kingside Pawns until his last move, 25 f6-d5 creates a decisive threat. (Qh8 checkmate and N×e7 winning the Queen).

5. **Horwitz—Staunton, London 1846**
   Horwitz makes a decisive tactical mistake overlooking Staunton's family Knight fork.

6. **Schulten—Horwitz, London, 1846**
   This game features a wonderful Queen sacrifice in order to deliver a deadly "double discovered check" 165-d6+ (by 17 Rook and Bishop).

7. **Anderssen—Kieseritsky, 1851**
   Anderssen sacrifices a Bishop for a handful of tempos (move that gain time for one player while the other player is forced retreat a piece or weaken his position in some way) and attacks Black's Queen. Later he sacrifices both Rooks to continue his assault on the Black King. Finally, Anderssen parts with his Queen for a pretty mate with his two Knights and Bishop. Hence, the "Immortal Game."

8. **Anderssen—Dufresen, 1852**
   Andersson's other name game, The Evergreen, played one year later in 1852. Black appears to have defended, and even created a winning counter attack, when Anderssen surprises his opponent with a beautiful Queen sacrifice leading to an unusually pretty checkmate.

9. **Lichtenheim—Morphy, 1857**
   Morphy again shows the virtues of rapid development as he whips up a strong attack with his Queen and two Bishops.
1. Morphy—Amateur, New Orleans, 1858

Morphy, the master of attack, plays a brilliant Pawn sacrifice to keep the opponent’s King in the center of the board. Showing better technique, Morphy finishes off his opponent as effectively as any world-class grandmaster of today.


Morphy develops his pieces quickly and effectively while his opponent’s development is hindered by his own pieces. Morphy rewarded for his better development by a beautiful attack, crowned with a Queen sacrifice and a pretty checkmate.


Morphy, the master of attack, plays a brilliant Pawn sacrifice to keep the opponent’s King in the center of the board. Showing better technique, Morphy finishes off his opponent as effectively as any world-class grandmaster of today.

4. Anderssen—Steinitz, London, 1866

Anderssen attacks and Steinitz defends and pushes his passed Pawn down the board. Finally Steinitz counter attacks and wins.

5. Schiffers—Harmonist, Frankfort, 1887

Schiffers attacks and Steinitz defends and pushes his passed Pawn down the board. Finally Steinitz counter attacks and wins.

6. Steinitz—Lasker, Montreal, 1894

Steinitz, trying to defend his World Championship against Lasker, gives us a marvelous example of the power of connected Pawns in the endgame. Lasker won the match with 10 wins, 5 losses and 4 draws.

7. Lasker—Steinitz, Philadelphia, 1894

Lasker wins because of his better Pawn structure. Notice that Steinitz has three distinct Pawn islands while Lasker has only one. A nice endgame win by Lasker.

8. Steinitz—von Bardeleben, Hastings, 1895

Steinitz takes advantage of his lead in development and his opponent’s King being stuck in the center by playing one of most remarkable Rook sacrifices of all time.

9. Pillsbury—Tarrasch, Hastings, 1895

Pillsbury, a virtual unknown, comes to Hastings, England in 1895 and wins one of the strongest tournaments of all time. Here he shows that the Queen’s Gambit Declined opening can lead to a strong attacking position. Note Pillsbury's beautiful 44th and 45th moves.

10. Lasker—Steinitz, Moscow, 1896

In 1896 Lasker defended his World Championship title against Steinitz even more convincingly with 10 wins, 2 losses and 4 draws. Here he draws Steinitz into a mating net in the middle of the board!


Janowski gives us a marvelous example of a line blocking sacrifice with 12.e4-d5! This move defends the White Rook, attacks the Black Queen and allows White to continue his attack on the Pawn at c6.

12. Lasker—Napier, Cambridge Springs, 1904

Napier plays his best game of chess against Lasker, but loses in this truly remarkable game.


Marshall, one of the original five Grandmasters of chess, shows his high level of tactical mastery in this game. It appears his Knight is lost, but Marshall defends it with clever tactics.

14. Dus-Chotimirski—Rubenstein, Lodz, 1907

This game has been called Rubenstein’s “Immortal Game.” Rubenstein gives up his Queen and a Rook to capture the best defender of White’s King (i.e. the Bishop at e4). Mate soon follows as White’s Kingside is fatally weakened.

15. Lasker—Marshall, World Championship;—Memphis, 1907

Marshall attempts an attack without first completing his development. The attack fizzes while Lasker’s counter attack comes to full steam.

16. Rubenstein—Lasker, St. Petersburg, 1909

Rubenstein defends against Lasker’s threats with a beautiful counter attack! He hangs onto his extra Pawn and neatly wins the endgame.

17. Capablanca—Marshall, Match, 1909

Capablanca outplays his opponent in the opening, establishes his Knight in front of Marshall’s backward Pawn at c5, and wins a Pawn. Marshall then tries to muddy the waters with some tricky tactical play, but Capablanca outplays him tactically too.
28. Teichmann—Schlechter, Carlsbad, 1911
This game is a beautiful example of the power of the White Bishop on the a2-g8 diagonal. The Bishop applies pressure on the f7 square and is finally sacrificed there to bring up two more attacking pieces with gain of time. The Queen and Knight attacking the undefended Kingside waste little time in finishing the game. White uses his Rook at e1 for the deciding blow.

29. Rubenstein—Capablanca, San Sebastian, 1911
Rubenstein comes up with a remarkable middle game combination 13.c3×d5 and 17.d1×c1!! and then plays a nearly flawless endgame to win this masterpiece from one of the world’s strongest chess players.

30. Capablanca—Bernstein, San Sebastian, 1911
The first encounter between Capablanca, the future World Champion from Cuba, and an established European master. Capablanca calmly uses play to develop a Kingside attack. 28.f5×g7 breaks up Black’s defense. If 28...e4, then 29.h5×f6+ and White captures the Bishop at d7, and the attack on the exposed Black King would be both swift and deadly.

During this game, Marshall captured a piece, offering a Queen for a sacrifice, his opponent muttered, “Swindle.” Marshall plays a series of beautiful moves taking advantage of his opponent not getting castled.

32. Lewitzky—Marshall, Breslau, 1912
This is Grandmaster Marshall’s most famous game. Marshall’s 23rd move is truly amazing. Marshall was showered with gold pieces after the game. Any capture of the Queen quickly loses. If you’re not sure how, take the Queen and let the Chessmaster 2000 continue the play.

33. Lasker—Capablanca, St. Petersburg, 1914
World Champion Lasker plays a beautiful game. Lasker shows us a wonderful Pawn sacrifice at move 35.e4×e5 in order to free the f4 square for his Knight, which leaps in with devastating effect.

34. Lasker—Alekhine, St. Petersburg, 1914
Who’s attacking whom? Both sides develop attacks against the other King, but White has a better attack, and a better defense due to his Bishop at g2.

35. Adams—Torre, New Orleans, 1920
This game is a beautiful example of an overworked defending piece. White attacks the Black Queen, which is tied down to defending the Rook at e8. If the Black Queen leaves the defense of the Rook then White will checkmate the Black King in two moves beginning with e2×e8+. With 18.d4×g4 White begins one of the most incredible series of moves in chess.

36. Capablanca—Lasker, Havana, 1921
Lasker parts with the exchange to develop an attack, but Capablanca is able to hold on and counter attacks to win.

37. Lasker—Capablanca, Havana, 1921
Capablanca didn’t lose a single game to Lasker in their World Championship match of 1921. Lasker, behind the exchange, creates active play for his Rook and two Knights, but Capablanca’s accurate defense snuffs out all resistance and any hope of a winning attack.

Alekhine demonstrates how to win a chess game with crystal clear strategy and an extraordinary final combination. After move 11.f7×h7+! Alekhine considers Black’s game strategically lost. Black creates a permanent weakness at e6; since once White establishes a Knight there, Black can never drive it away with a Pawn. Alekhine takes control of the only open file with his Rooks, penetrates with them to the seventh rank and is able to double his Rooks on the seventh. Having control of the opponent’s seventh rank, Alekhine marches up his King for the final assault on Black’s position.

39. Rubenstein—Hromadka, Mahrisch-Ostrau, 1923
White offers up a startling Queen sacrifice which cannot be accepted. The game ends four moves later when White wins a piece.

40. Reti—Bogoljubow, New York, 1924
Reti wins the brilliancy prize in one of the strongest tournaments of all time: New York 1924. He concludes the game with a beautiful line blocking sacrifice, 25.f7×e8 when checkmate is unavoidable. Ex: if 25...c8×f8 26.f5×g8+ e8×f8 27.f7×h7 mate; or 25...h7×h6 26.f5×g8+ b8×h7 27.g6×e8+ h7×g6 28.h8×g8 mate.

41. Torre—Lasker, Moscow, 1925
Lasker is upset by Torre in what has become a classic example of a “see-saw” check. With 25.Bg5×f6 White gives up his Queen, but by a series of force checks he is able to get Lasker’s Queen and more, obtaining a won endgame.

42. Yates—Rubinstein, Budapest, 1926
White makes short work of one of the best players in the world. Black overlooks the power of 11.c1×g5. He should have responded 11...h7×h6 right away. 12...h7×h6 is no longer any good because White would win the exchange with 13.g4×f6 (attacking both Queen and Rook). Notice the Pawn at f7 is pinned to the Black King. In the final position Black could respond f7×e6, but after e5×g6+ he could choose to get checkmated or after e8×g6 lose his Queen to the move f5×e7+. He therefore resigned.
Alekhine—Tartakower, Kecshkemet, 1927
Alekhine sacrifices two pieces in order to break up Black's side. He gives up a Rook, Bishop and Knight for the opponent's Queen, which would be too much material for a Queen. He is able to win another piece due to an attack on Black's defended Rook at a8.

Capablanca—Spielmann, New York, 1927
Capablanca won the brilliancy prize for this nice piece sacrifice. Capablanca gets more than enough compensation in three, one being a strong passed Pawn which rolls down the board to victory.

Colle—Johnner, Carlbad, 1929
Colle neutralizes any ideas of a White Kingside attack by playing a stonewall defense (i.e., Pawns at d5, e6 and f5). With the pawns stabilized and having castled on opponent's wings, Black needs his Queenside attack. White is finally able to get some lines in the center but it proves too late, as Black rooks through on the Queenside.

Canal—Johnner, Carlbad, 1929
Canal comes up with a surprising Knight move 20.d4-e6 which runs a line to the Black King. White's attack picks up steam as his Rook doubles on the King Bishop file and presses with decisive effect by 27.f5-f6 which threatens d3-g6. If e6xe6 then 28.h1xf6 g7xf6 29.d3-g6 + e6xe5 30.g6xf5

Mattison—Nimzowitsch, Carlbad, 1929
Wonderful game by Nimzowitsch from his greatest tournament victory. The position is somewhat closed, which means Knights will be stronger than Bishops. Black trades Queens soon his Knights penetrate White's position with decisive effect.

Alekhine—Nimzowitsch, San Remo, 1930
Alekhine uses pins with good effect in this game, especially on e-file. His opponent finally runs out of moves, as every move he can make will lose material. This is called Zugzwang.

Lasker—Thomas, c.1930
Lasker shows us what a King hunt is all about. After a beautiful Queen sacrifice, the Black King is forced to march straight on White's territory. The final blow is that checkmate is delivered when White moves his King, allowing a discovered check of the Rook at a1.

Alekhine—Nimzowitsch, Bled, 1931
Alekhine completely dominated the tournament at Bled, 1931. A game is an example of his dynamic play.

51. Keres—Winter, Warsaw, 1935
Keres allows his greedy opponent to win three Pawns. In exchange for the Pawns, Keres gets a giant lead in development, which turns into an overwhelming attack.

52. Landau—Kemeri, 1937
Landau uses the "Colle System" to great effect. A dazzling Kingside attack follows, and after most of the pieces come off the board. White ends up two Pawns ahead. Black resigns rather than play out a hopelessly lost endgame. White's first nine moves comprise a system of play called the "Colle System." White develops his pieces in preparation to play e4-e5 and if Black allows him, then e4-e5 with a strong Kingside attack.

53. Keres—Reshevsky, Stockholm, 1937
Keres, probably the strongest player never to become World champion, wins a game from the great American Grandmaster Reshevsky. This game was named the "Jewel of the Stockholm Olympiad of 1937."

54. Botvinnik—Capablanca, Holland, 1938
This is one of Botvinnik's most famous games. He plays a wonderful deflection sacrifice 30.b2-a3!! and a Knight sacrifice to advance his passed Pawn. The game ends when Capablanca runs out of checks.

55. Alekhine—Book, Margate, 1938
Alekhine sacifies an entire Rook for a deadly pin on the a4-e8 diagonal, and the threat of Qe2-h5+. The Black King is stuck in the center of the board and White uses all of his pieces to their full effect. Notice 17d7xe5 would lose to c1-g5+, winning the Black Queen.

56. Smyslov—Rudakovsky, Moscow, 1945
White places his Knight in a magnificent outpost at d5 where it dominates the game. White carefully eliminates all defenders of d5 and Black has no Pawn that can drive it away. Once his Knight is established and the center closed, he finishes off his opponent with a Kingside attack. A very instructive game.

57. Byrne—Fischer, U.S. Championship, 1951
One of many famous Fischer games. This one against Robert Byrne. the brother of Donald Byrne. Fischer comes up with a surprising Knight sacrifice to break up the White Kingside. Then he gets rid of White's best defending piece and his attack comes quickly on White's unguarded light squares. Two grandmasters who were commenting on the game to spectators in another room believed that Byrne was winning, at the very moment he resigned. Fischer would have won after 22.d2-d3 d7-h3 + 23h1-g1 e8-e1 = 24.d1xe1 g7xd4 when mate follows at g2.
58. Keres—Smyslov, Zurich, 1953
A remarkable game! Keres attacks on the Kingside and offers up a whole Rook for Smyslov to capture. Smyslov, unable to calculate all of the variations, plays a move based on his intuition and opens up the center. White continues his attack on the King Rook file, which looks overwhelming, but accurate defense saves the day, followed by a strong counter attack.

59. Taimanov—Najdorf, Zurich, 1953
The Kingside attack is most effective when you control the center of the board, or when it is closed. In this game, White attacks on the Queenside and Black attacks on the Kingside. Najdorf breaks through in brilliant style, sacrificing a Pawn to open up lines of attack.

60. Averbakh—Kotov, Zurich, 1953
Kotov makes a spectacular and intuitive Queen sacrifice to drive the opponent’s King where there is no support. There is no forced mate in sight, but Kotov figured that he must be winning. And this game made chess history.

61. Keres—Fuderer, Gothenburg, 1955
Keres, playing against what has since been known as the “Poisoned Pawn” variation of the Sicilian defense, plays havoc with his opponent’s inaccurate defense. In the final position White threatens e4-c5 + forking the Black King and Queen.

62. Byrne—Fischer, New York, 1956
This game was dubbed the “Game of the Century.” Thirteen year old Bobby Fischer, playing against international master Donald Byrne, plays a beautiful combination beginning with 11Nf6+gxf6 but really uncorks the shocker with 17g4-e6+ giving up his Queen but getting an overwhelming attack.

63. Fischer—Larsen, Portoroz, 1958
Fischer slays Larsen’s “Dragon Sicilian” defense with a nice exchange sacrifice on the King Rook file.

64. Tal—Geller, Riga, 1958
Future World champion Tal startles his opponent with a beautiful offer of the exchange (Rook for Bishop or Knight). The move gives Tal a Rook on the seventh rank and changes his weak Pawn at d5 into a strong one. Geller later plays a weak move 25g7×f6 and loses the game.

65. Nikitin—Tal, Tbilisi, 1959
A spectacular game in which both sides have strong attacks against the opposing Kings. After the fireworks subside, an endgame ensues where Black’s central Pawn mass decides the game.

66. Spassky—Bronstein, Leningrad, 1960
This famous game was named “The Bluebird,” for its beauty. It even appeared in the James Bond film, From Russia With Love. Spassky and Bronstein take a time trip back 100 years and play the romantic King’s Gambit opening. The King’s Gambit is still played every now and then in tournament play today, but not by such top strength grandmasters. Bronstein considers his position lost after 9.e3-e4. The attack that Spassky plays is simply beautiful to watch. Hence the name, “The Bluebird.”

67. Nezhmetdinov—Tal, USSR Championship, 1961
Tal, the supreme master of tactics, is given a taste of his own medicine. His King gets stuck in the middle of the board, and is unable to weather the storm.

68. Petrosian—Pachman, Bled, 1961
Petrosian, always known as a great defensive player, surprises his opponent with a wonderful Queen sacrifice, drawing Pachman’s King into a mating net.

69. Spassky—Zinn, Lasne, 1962
Spassky creates a strong Kingside attack and sacrifices lots of material to expose the Black King. Spassky is able to gobble up material while driving the Black King across the board. Black finally realizes he is in a hopelessly lost endgame and resigns.

70. Liptai—Spassky, Lasne, 1962
White sacrifices a Knight, and then the exchange, for a Kingside attack, but accurate defense by Spassky leaves him a Rook behind.

71. Spassky—Ciric, Lasne, 1962
Spassky walks into prepared analysis, but comes up with a beautiful defensive move (17.f1-f4!), which was overlooked by the Yugoslavians in their home analysis.

72. Spassky—Evans, Varna, 1962
Spassky demonstrates how open lines can lead to a strong attack against then U.S. Champion Larry Evans. Spassky sacrifices two pawns against the King’s Indian Defense and the investment pays off with a beautiful attack.

73. Averbach—Estrin, Moscow, 1964
White plays a very sharp opening, the Vienna variation of the Queen’s Gambit declined. Black grabs a Pawn 10...f6×e4! and underestimates the power of White’s reply. Both Kings come under attack but all of the White pieces participate, and there’s the difference.
82. Botvinnik—Portisch, Monaco, 1968
Botvinnik, not know for sharp tactical play, must have surprised
Portisch with the combination beginning with 16.c2×c7! The fi-
nal assault is very pretty as the Black King is surrounded with
the White pieces.

83. Bilek—Gheorghiu, Bucharest, 1968
White plays a pretty exchange sacrifice in order to get a quick
attack on the Black King. White has no way to defend his Pawn
at h7 after 10c8×a5? 11.f1×f5! White’s attack follows quite
naturally.

84. Nikolic—Fischer, Vinkovic, 1968
With the center closed, Fischer mounts an attack on the Kings-
side. He gives up a piece just to open the King Rook file and the
attack proves fatal.

85. Spassky—Petrosian, Moscow, 1971
Spassky defeats World Champion Petrosian during their match
for the World Championship. He sacrifices a Pawn to open the
lines to Petrosian’s King, and then throws everything but the
kitchen sink at him in this quick victory.

86. Fischer—Rubinetti, Palma de Mallorca, 1970
Fischer, in fine form, sacrifices a piece for a Pawn and a strong
attack, and his opponent is quickly swept off the board.

87. Tal—Uhlmann, Moscow, 1971
Tal plays against Uhlmann, probably the world’s leading author-
ity on the French Defense. Uhlmann wins a Pawn but is shocked
by Tal’s 12th move, d4-e5! and spends almost two hours trying
to find the right response. After his long think, Uhlmann de-
cides to capture the Knight, but he is quickly dispatched by
Tal’s sharp play.

88. Velimirovic—Ljubojevic, Yugoslavia, 1972
Velimirovic, a fierce attacking player, dismantles Ljubojevic’s
Sicilian defense with a Rook sacrifice at e6. Black survives the
attack by giving back some material, but the endgame is hope-
less due to White’s strongly placed Knight and passed Pawns.

89. Spassky—Tal, Tallinn, 1973
Tal, one of the most brilliant attacking players of all time, has
suffered with poor health for many years. Here he is feeling fine
and demonstrates his skill on former World Champion Spassky.
This game shows the power of the Queen and two Bishops to
attack an exposed King.
90. Karpov—Korchnoi, Moscow, 1974
Karpov defeats his bitter rival Korchnoi with a nice Kingside attack against the Dragon Sicilian. The fight ensues around Black’s lone defender of his King, the Knight at f6. Once the Knight is eliminated the attack comes in with full force down the King Rook file.

91. Karpov—Unzicker, Nice, 1974
Karpov slowly squeezes his opponent like a boa constrictor in this game. While running out of moves, Black weakens his Kingside. Karpov penetrates the weakened light squares with his Queen and Knight and the game ends.

92. Kasparov—Ligterink, Malta, 1980
Kasparov comes up with a beautiful Knight move 22.b6-c8 which his opponent probably overlooked. The Knight is defended by a threat. If Black had played e8×c8 then White would play f4-f5 attacking the Rook at c8 and threatening mate in two with 23.Qf5×h7 + g8×h8 24.Qh7×b8 mate.

93. Kasparov—Marjanovic, Malta, 1980
The 17 year old Kasparov plays a line first played by Polugayevsky in his match against Korchnoi. Marjanovic’s pieces congregate on the Queenside and Kasparov sends his to the Kingside. Marjanovic’s Kingside Pawns are no match for all of the pieces sent against them.

Kasparov demolishes one of the strongest players of today. Black errs at move 5.16×e4? and never recovers. By move 23.a1-d1 all of White’s pieces poised for the attack, while the Black pieces are badly misplaced and are unable to cooperate. The final combination is both swift and beautiful.

95. Kasparov—Petrosian, Bugojno, 1982
Kasparov manages to outplay Petrosian at his own game, i.e., positional chess. In the final position after 24...e7×c5 25.d1×d8 + c5×d8 26.d3×d8 + 27.c1×c7 Black quickly runs out of moves.

96. Portisch—Pinter, Magyarorszag, 1984
Pinter surprises many time Hungarian champion Portisch with a theoretical novelty on move 13...c8-b7. Then he sacrifices a Knight to keep Portisch’s King in the center of the board, then beautifully finishes up the game with a mating attack using his Bishop, Rook, Pawn and King!

97. Kasparov—Karpov, World Championship, 1985
Even World Champions are human. Former World Champion Karpov blunders with 23.c8×d8?? Kasparov quickly finds the winning combination 23...g4×d7. If Black had continued the game with 25...g7×g6, 26.d1×d7 wins a piece because after b7-a6 27.e4×c6 the Black Queen couldn’t recapture because 28.d7×f7 checkmate.

98. Kasparov—Kasparov, World Championship, 1985
The final game of the 1985 World Championship finds Kasparov attacking on the Kingside. Kasparov plays accurate defense after counter attacks in the center. Kasparov’s position proves to be full of holes and Kasparov’s counter attack finally breaks through to victory!

This and the following game were played between Sargon III and an early version of CHESSMASTER 2000, both running on IBM PC computers at level 2. In this game, Sargon goes Pawn grabbing while his King is in the center and is quickly punished by CHESSMASTER’s sharp attack.

100. Chessmaster 2000—Sargon III, Los Angeles, 1995
CHESSMASTER develops a better position out of the opening. SARGON creates a fatal weakness at move 18...g7×g5? White opens up lines of attack with 19.f2×f4 and makes short work of Black’s Kingside defense.
The Chessmaster’s Problems

1. Legal’s Mate (See Classic Game #2)
   Position After Move #5
   White to move and checkmate in two moves.

2. Position from the Vienna opening
   Black to move and checkmate in four moves.

3. Philidor’s Legacy
   White to move and checkmate in five moves.

4. Charles Badley’s Twist
   Black to move and mate in three.

5. Reti Domination Theme
   White to play and win.

6. Endgame
   White to play and win.
Solutions

Problem One:
1. c4 × f7 + e8 - e7
2. c3 - d5 mate

Problem Two:
1. d8 - h4 + f3 × h4
2. c5 - f2 + e1 - e2
3. c6 - d4 + e2 - d3
4. e4 - c5 Mate

Problem Three:
1. h3 - e6 + g8 - h8
2. g5 - f7 + h8 - g8
3. f7 - h6 (Double discovered check) g8 - h8
4. e6 - g8 + c8 × g8
5. h6 - f7 mate

Problem Four:
1. f3 - e1 + h1 - g1
2. a8 - h1 + g1 × h1
3. f7 - f1 mate

Problem Five: (The White Knight completely dominates the Black Bishop, so that wherever it moves, the White Knight will win it by checking (forking) the Black King and the Bishop at the same time.)
1. c2 - d4 + c6 - Cc
2. g2 - h1!... and Black loses after his next move if ... c5 × d4
3. a5 - a6... and White will make a Queen. A Bishop move to c1 or d2 allows d4 - b3 + or any move to f4, g5, g7 or f8 allows d4 - e6 +

Problem Six:
1. b5 - b6 Creates a passed Pawn and wins...
   Example... c7 × b6
2. a5 - a6 b7 × a6
3. c5 - c6 and White will make a Queen in two moves!

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