

**TOTAL CHESS**

Also by John Herron...

## Totally Puzzled

Hard & Easy, Rich & Rare, Old & New Puzzles

## About the Author...

John Herron is a retired computer programmer/analyst who now works part-time teaching chess to children. He has taught thousands of children to play chess with his 1-2-3 approach. His interests include artificial intelligence, backgammon, chess, go, poker, scrabble, bicycling, sailing, tennis, table tennis, volleyball and wallyball.

# **TOTAL CHESS**

**Learn, Teach and Play  
the Easy 1-2-3 Way**

**JOHN HERRON**

HairBall Publishing  
Farmington Hills, Michigan

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## Dedication...

To my father, who taught me to play chess when I was five; and to my son, who I taught to play chess when he was five.

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## Introduction

*Total Chess* is your complete guide to chess. It covers rules, strategies, openings, midgames, endgames, tactics and checkmates. If you are new to chess, you will learn how to play and enjoy the game. If you already play chess, you will improve your game with simple strategies and tactics. If you are an advanced player, you will organize your thoughts and your approach to the game. In addition, if you teach chess, you will find lessons that are easy to present and explain to students of all ages and levels. *Total Chess* is truly a total guide to chess.

Everything in chess can be learned and remembered in threes. The game is divided into three phases: the opening, midgame and endgame. Three simple strategies are presented for each of these phases. Tactics are organized into related groups of three: direct, dynamic, discovered, double, decoy, deflection, defensive and delay. This new approach to tactics will benefit even the most advanced player. Checkmates are presented at three different levels to help you visualize and remember each checkmate pattern. Even the rules of chess are organized into sets of three. *Everything in chess comes in threes.*

Chess is perhaps the greatest game of strategy ever invented. It exercises the mind in ways that few other games can. It combines past knowledge and experience with present thought and decisions to create future action and results. And it does it all while playing a game and having fun! Children who play chess learn to think – to think for themselves, to think before they act, and to think about others. They learn how to focus their attention, and they learn that there are logical consequences for their actions. Chess has been shown to improve math and reading scores in schools, and to strengthen social skills. *Children who play chess become better people.*

*Total Chess* is your complete guide to chess. It is ideal for children and adults of all levels. Whether your goal is to learn chess, play better chess, or teach chess to others, this is the book for you!

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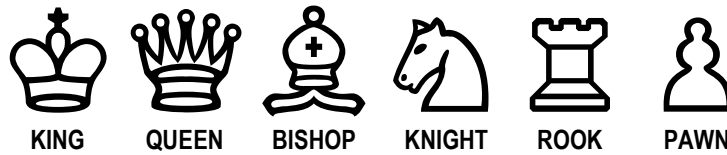
## 1. Rules

Chess is a board game for two players. It is played all over the world, but nobody knows exactly where or when it began. The word *chess* comes from the Persian word *shah* meaning *king*.

### 1.1. Setup, Moves, Values

A chess board has 64 light and dark color squares arranged in 8 rows and 8 columns. The rows go left and right, and are called ranks. The columns go up and down, and are called files. The squares alternate colors on the ranks and files, and the squares are the same color on the diagonals.

Each player starts the game with 16 pieces, either white or black. There is one king and one queen. The king has a crown with a cross on top, and the queen has a crown with four or five points. There are two bishops with helmets that come to a point at the top. There are two knights, which look like horses, but they are called knights. There are two rooks, which look like castles or towers, but they are called rooks. The word castle means something different in chess. There are also eight pawns.

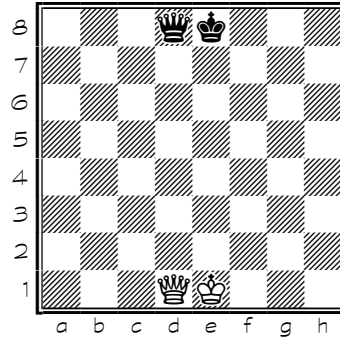
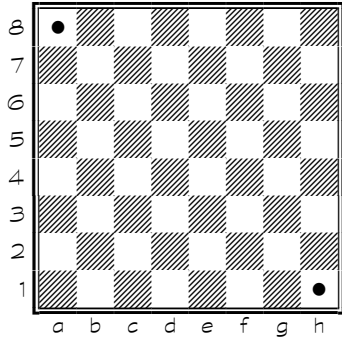


White moves first, then players take turns moving. To choose color in a game, a player takes a white pawn and a black pawn and hides one in each hand behind their back. Then the other player picks a hand. Whatever hand they pick, that is the color they get. After each game, players should switch colors.

When playing a friendly game, your move is not over until you take your hand off your piece. If you are still touching your piece and you change your mind, you can take back your move and make a different move. Be careful, though, to put your piece back on the same square from which it came. In a chess tournament, you are not allowed to take back your move, and if you touch a piece, you must move it.

**SETUP OF THE BOARD**

**Right is light:** The bottom right square is always a light square.  
**Queen on her color:** In the middle; the king next to the queen.  
**Tallest to smallest:** The tallest pieces in the middle, down to the smallest pieces in the corners; the pawns in front of the pieces.

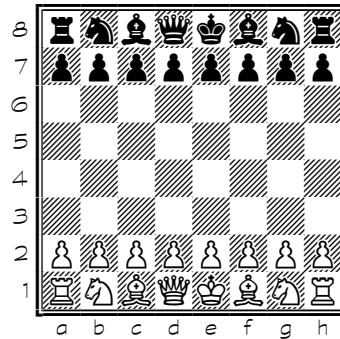
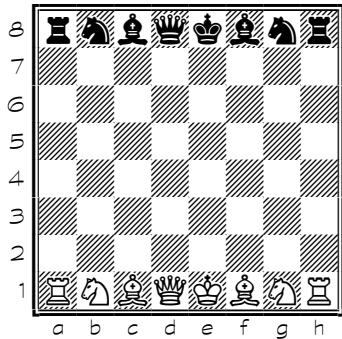


**Right is light**

The bottom right square is always a light square. This is true from both sides of the chess board.

**Queen on her color**

White's queen goes on a light square, black's queen goes on a dark square. The king goes next to the queen.



**Tallest to smallest**

The tallest pieces in the middle, down to the smallest pieces in the corners.

The pawns go on the row in front of all the other pieces, and the chess board is setup and ready for a new game.

When you put away your chess set, always count the pieces so you do not lose any. There are 16 white pieces and 16 black pieces. Some chess sets also have an extra queen of each color.

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### MOVING THE PIECES

Each piece has its own way of moving and capturing. Every piece, except the pawn, captures the same way as it moves. A piece moves when it goes to an empty square. A piece captures when it goes to a square occupied by one of the opponent's pieces, and then that piece comes off the board. A piece can never go to a square occupied by one of its own pieces.

**King:** The king moves *one square* in any direction. It can move forward, backward, left, right and diagonally.

**Queen:** The queen moves *one or more squares* in any direction. It can move in lines forward, backward, left, right and diagonally.

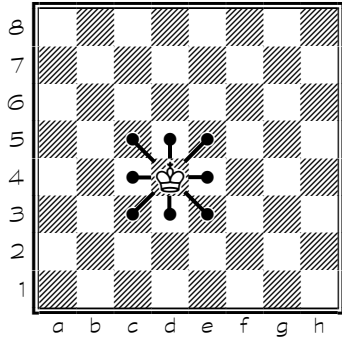
**Rook:** The rook moves one or more squares in *straight lines*. It can move in lines forward, backward, left and right, but not diagonally.

**Bishop:** The bishop moves one or more squares in *diagonal lines*. It can move in all four diagonal directions, but not in straight lines. When the bishop moves, it always stays on the same color squares. Each player starts the game with one bishop on light squares and one bishop on dark squares.

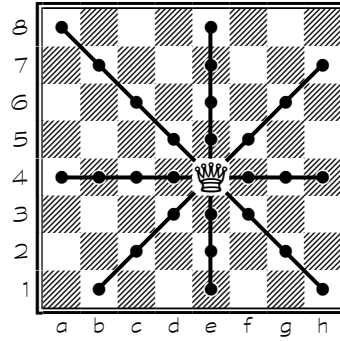
**Knight:** The knight moves in an *'L'-shape*, two squares in one direction and one square sideways. When the knight moves, it always changes color of squares. The knight can also jump over other pieces. It can jump over its own pieces or the opponent's pieces. However, the knight does not capture pieces when it jumps over them. It only captures pieces when it lands on them.

**Pawn:** The pawn moves *forward only*, one square, or two squares on its first move. The pawn can never move sideways or backward, and it can only move to an empty square. If there is a piece on the square in front of the pawn, either your own piece or the opponent's piece, then the pawn is blocked and it cannot move.

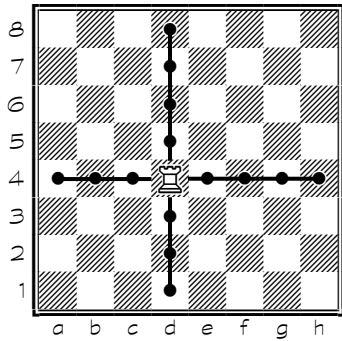
The pawn captures differently than it moves. The pawn captures *diagonally forward*, one square, but only if there is one of the opponent's pieces on that square. The pawn cannot move diagonally forward unless it is capturing.



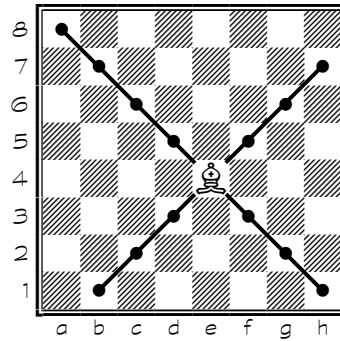
**King:** One square.



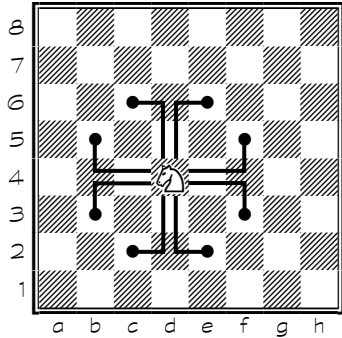
**Queen:** One or more squares.



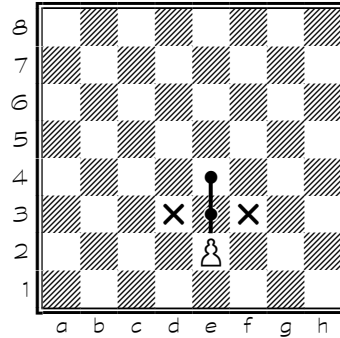
**Rook:** Straight lines.



**Bishop:** Diagonal lines.



**Knight:** 'L'-shape, and it can jump over other pieces (either your own pieces or the opponent's pieces).



**Pawn:** Forward only (one square, or two its first move), captures diagonally forward, cannot move when blocked.

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### VALUE OF THE PIECES

Each piece has a point value based on what it can do. The greater the range and capabilities of the piece, the greater its point value. You use the point values to decide if you are getting a good deal or not when you trade pieces. If you gain points, then you are getting a good deal. If you lose points, then you are getting a bad deal. If the points are equal, then you are getting an even deal, a fair trade. The values of the pieces are:

**PAWN = 1 point**  
**KNIGHT = 3 points**  
**BISHOP = 3 points**  
**ROOK = 5 points**  
**QUEEN = 9 points**

What about the value of the king? The king is priceless. You can think of the king as being worth a hundred or a thousand points. It really does not matter. The king can never be traded or captured. You only lose the king when you get checkmated. When counting points, the king is given a value of zero.

Sometimes the king is used to attack and defend like the other chess pieces. If you were to give it a value as an attacker and a defender, it would be worth about 2½ points. It is a little less valuable than a knight, but it is much more valuable than a pawn.

An easy way to remember the values of the pieces is they are all *odd* numbers. Starting with the number one and skipping the number seven, the values of the pieces are:

**1 = PAWN**  
**3 = KNIGHT, BISHOP**  
**5 = ROOK**  
**9 = QUEEN**

The pieces are sometimes grouped into major pieces and minor pieces. The major pieces are the queens and the rooks. The minor pieces are the bishops and the knights. If you lose one of your rooks for one of the opponent's bishops or knights, this is called losing the exchange. You have traded a piece for a piece, but you have lost points in the deal. The pawns, while valuable and important, are usually called pawns and not pieces.



## 1.2. Documentation

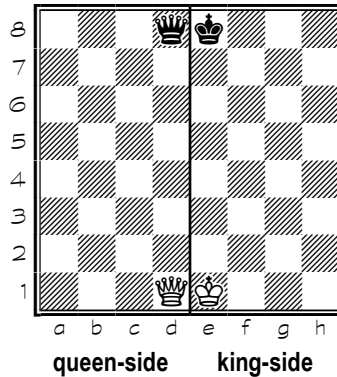
In order to read, write and talk about chess, you use chess documentation. Chess documentation makes it quick and easy to share chess information. The board, pieces, moves and positions are all documented in a simple and easy way.

### 1.2.1. Chess Notation

Chess notation is a code for talking about chess moves. The most common type of chess notation is called algebraic notation. In algebraic notation, the files are named with letters and the ranks are named with numbers. The letters [a, b, c, d, e, f, g, h] and the numbers [1, 2, 3, 4, 5, 6, 7, 8] meet at each square to form a name for that square. The name is always given with the letter first, followed by the number, for example: a1, b2, c3, etc.

The board is divided into two sides, called the king-side and the queen-side. The two queens start on the d-file, so the queen-side is files a, b, c and d. The two kings start on the e-file, so the king-side is files e, f, g and h. White always starts on ranks 1 and 2, and black always starts on ranks 7 and 8.

Chess board with algebraic notation.



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When you talk about a move in chess notation, you say *what piece moves to which square*, for example: *pawn to e4*. You do not say which square it comes from. There is usually only one piece of each type that can move to that square. If there are two pieces of the same type that can move to that square, then you say the name of the file it comes from, for example: *knight on b-file to d2*. If there are two pieces of the same type and on the same file that can move to that square, then you say the name of the rank it comes from, for example: *knight on third rank to d2*.

When you talk about a capture in chess notation, you say *what piece captures on which square*, for example: *bishop takes rook on a8*. If there are two pieces of the same type that can capture on the same square, then you say the name of the rank or file it comes from. Written chess notation for capturing is the letter 'x'.

An older type of chess notation is called descriptive notation. In descriptive notation, the files are named for the piece starting on the back row of that file, for example: *rook file*, *knight file*, *bishop file*, etc. The ranks are numbered from both the top and bottom of the board, depending on which player is moving, for example: *first rank*, *second rank*, *third rank*, etc. The pawns are named for the piece behind them on each file, for example: *king pawn*, *queen pawn*, *bishop pawn*, etc. Since there are two knights, two bishops and two rooks, you need to say which one you are talking about in descriptive notation. You use the king-side and queen-side for this. For example: *king knight*, *queen bishop*, *king rook*, etc. The pawns are also named this way, for example: *king knight pawn*, *queen bishop pawn*, *king rook pawn*, etc.

When you talk about a move in descriptive notation, you again say *what piece moves to which square*, but this time the squares are named with descriptive notation, for example: *pawn to king four*, *knight to king bishop three*, *queen rook to queen one*, etc. Since each player's move is given from their own side of the board, black's move may sound the same as white's move. For example, in descriptive notation: *bishop to king three*, would be in algebraic notation: *bishop to e3* for white and *bishop to e6* for black. This is a bit confusing, which is probably why descriptive notation is seldom used any more. However, ranks, files and pieces are still referred to in this way, so you will know what it means to say *king file*, *seventh rank*, *rook pawn*, etc.

## 1.2.2. Scorekeeping

Scorekeeping is a way of reading and writing chess moves. It is used to make a written record of a chess game, so that it can be replayed later. Scorekeeping is also used throughout this book.

There is a symbol for each chess piece, taken from the first capital letter of its name. Since the king and the knight both start with the letter 'K', the second letter 'N' is used for the knight. There are symbols for all the moves in chess, and for comments about the game. You will learn more about the moves later.

PIECES:	MOVES:	COMMENTS:
K - king	x - captures	! - good move
Q - queen	+ - check	? - bad move
B - bishop	# - checkmate (or ++)	!! - great move
N - knight	\$ - stalemate	?? - awful move
R - rook	= - promotes	!?! - tricky move
P - pawn*	~ - en passant (or ep)	?! - risky move
	OO - castles king-side	1-0 - white wins
	OOO - castles queen-side	0-1 - black wins
	... - white move omitted	½-½ - draw game

\* To save space, 'P' is omitted for pawn moves.

Numbers are used to count moves in a chess game. After each move number, white's move is given first, followed by black's move. Sometimes, comments or annotations are given to explain something or to show other possible moves. Here is a sample game using scorekeeping and annotations:

1	e4	e5	'P' is omitted for pawn moves.
2	Bc4	Nf6	Both players bring out a piece.
3	d3	Be7?	The bishop should come out farther.
4	f4	exf4	Black captures white's pawn.
5	e5	Ng8	Black retreats to save his knight.
6	Nc3	d6	Black attacks white's pawn.
7	Bxf4	dxe5	Black attacks white's bishop.
8	Qh5!	g6	8 ... exf4 9 Qxf7+ white wins.
9	Qxe5	Nf6	To block the attack on his rook.
10	Nd5!	Nbd7	Black's knight on b8 moves to d7.
11	Nxc7+	Kf8	11 ... Qxc7 12 Qxc7 wins a queen.
12	Bh6+	Kg8	White puts black in check '+'.
13	Bxf7+	Kxf7	Black captures to get out of check.
14	Qe6#	1-0	White puts black in checkmate.

### 1.2.3. Diagramming

Sometimes, you might like to remember a position on the chess board so you can study it or review it later. A simple way to do this is to use chess notation. You write 'W' for white and 'B' for black, followed by the symbol for each piece and what square it is on. For example, the starting chess position is written like this:

W:Ke1,Qd1,Bc1,Bf1,Nb1,Ng1,Ra1,Rh1,a2,b2,c2,d2,e2,f2,g2,h2  
 B:Ke8,Qd8,Bc8,Bf8,Nb8,Ng8,Ra8,Rh8,a7,b7,c7,d7,e7,f7,g7,h7

You also need to write whose turn it is to move. This is done by:

WTM = White To Move  
 BTM = Black To Move

While chess notation is a good way of recording a chess position, it is easy to make a mistake, and it is not easy to see the position from what is written. You might have to setup all of the pieces again to recognize it.

A better way of recording and viewing a chess position is to draw the whole chess board, and use simple stick figures for each piece. This is easily done by hand with a little practice, and is called chess diagramming.

To start, draw a chess board with  $8 \times 8$  squares. The best way to do this is to follow these four steps:

1. Draw a large square, big enough for the entire board.
2. Draw two lines crossing the middle of the large square.
3. Draw four lines crossing the middle of these squares.
4. Draw eight lines crossing the middle of these squares.

