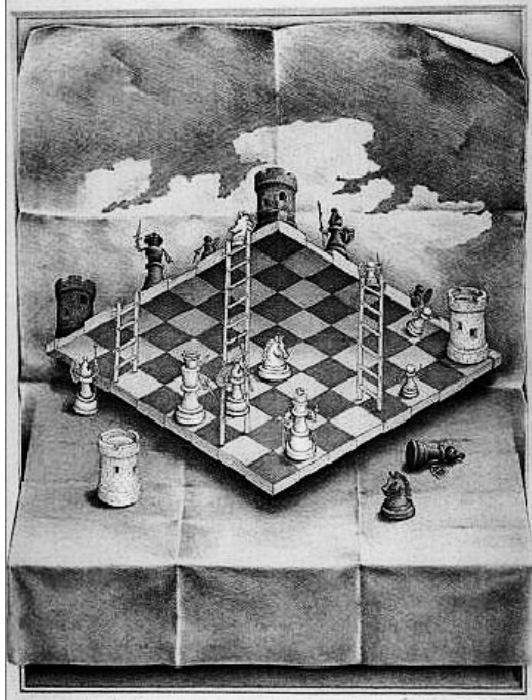


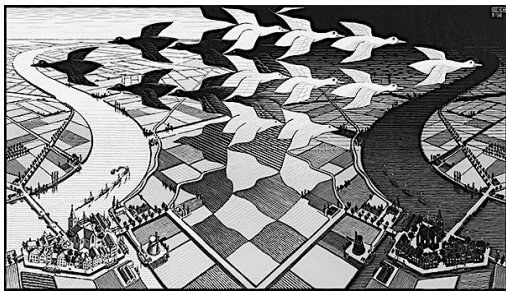
# CHESS



*The Warped Chessboard*, Sandro Del Prete, 1983.

The chessboard above seems to warp in the middle and the ladders seem to twist in space. All lines, however, are drawn dead straight and parallel. The curvature of the board is created solely in our imagination with a logic our brains default to when confronted with forms that are surreal. In the case of Del Prete's drawing, the eye is also fooled by the slight double perspective (suggested by the corner edges of the board).

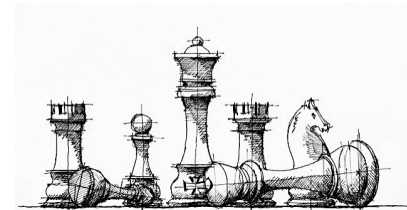
Below, a chessboard fragments into the air and is transformed into birds. Escher, a Dutch graphic artist, is most famous for his "impossible constructions".



*Day and Night*, M.C. Escher, 1938.



...including a poem,  
the rules of the game,  
chess notation,  
a Persian fable,  
the history of chess and the evolution of pieces,  
*The Morals of Chess*,  
29 chess puzzles,  
including the one in *Through the Looking Glass*,  
the 'Immortal Game',  
and  
the biography of an Afro-Swedish chess player.



## Chess

In their solemn corner, the players move  
The slow pieces. The board detains them  
Until the dawn in its severe world  
In which two colors hate each other.

Within the forms irradiate magic  
Strictness: Homeric rook, swift  
Knight, armed queen, hindermost king,  
Oblique bishop and aggressor pawns.

Once the players have finally left,  
Once time has devoured them,  
Surely the ritual will not have ended.

In the orient this very war flared up  
Whose amphitheater today is the earth entire.  
Like the other, this game is infinite.

-----

Tenuous king, slanting bishop, relentless  
Queen, direct rook and cunning pawn  
Seek and wage their armed battle  
Across the black and white of the field.

They know not that the player's notorious  
Hand governs their destiny,  
They know not that a rigor adamantine  
Subjects their will and rules their day.

The player, too, is captive of caprice  
(The saying is Omar's) of another board  
Crisscrossed with black nights & white days.

God moves the player, and he in turn, the piece.  
But what god beyond God begets the round  
Of dust and time and dream and agonies?

-----

Jorge Luis Borges, circa 1950

Omar of the poem is Omar Khayyam, a 12<sup>th</sup> century Persian mathematician, astronomer, and poet. Borges (1899-1986) was an Argentinian poet, short-story writer, essayist, and translator. On the front cover, detail of *A Game of Chess* by Lucas van Leiden, circa 1518.

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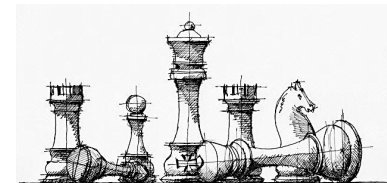


## SOLUTIONS TO DIRECTMATES

- A. Ne7#,
- B. ... Qd3#
- C. Qxh5#
- D. ... Na2#
- E. 1.Qxf7+ Rxf7, 2.Re8#
- F. 1... Qxd1+, 2.Nxd1 Re1#
- G. 1.Qxh6+ gxf6 2.Be5#
- H. 1.Ng6+ hxf6 2.Rh4#
- I. 1.Nxf6+ Qxf6, 2.Qf8#
- J. 1.Qxf6+ gxf 2.Bxf6#
- K. 1.Rh8+ Kxh8 2.Qh5+ Kg8 3.Qh7#
- L. 1... Ne2+ 2.Kh1 Qxh2+ 3.Kxh2 Rh5#
- M. 1.g7+ Ke7 2.Qe5+ Kf7 3.gxh8=N!#
- N. 1.Qh6+ Kxh6 2.Rh4++ Kg7 3.Bh6#
- O. 1.Be6+ Kxe6 2. Qe8+ Any 3 d5#
- P. 1... Qh1+ 2.Kxh1 Ng3++ 3. Kg1 Rh1#
- Q. 1.Nxf7+ Kd7 2.Bf5+ Kc6 3.Nd8+ Kd6 4.Bf4#
- R. 1... Rxh2 2.Kxh2 Ng4+ 3.Kg1 Qh6 4.Any Qh1#
- S. 1.Qb3+ d5 2.exd6+ Be6 3.Qxe6+ Kf8 4 Qf7#
- T. 1.Qd5 Rh7 2.Qg8+ Bf8 3.Ng6+ Any 4.Qxf8#
- U. 1.Qxf8+ Kxf8 2.Rxf7+ Kg8 3.Rg7+ Any 4.Rg8#
- V. 1... Bf3 2.Ne3 Bxe3 3.g3 Qxg3+ 4.hxf3 Rh1#
- W. 1.Rxh7+ Kg8 2.Qh5 Bxf2+ 3.Kf1 Kf8 4.Rh8+ Bg8 5.Rxg8#
- X. 1.Qd4 Bxf2+ 2.Kxf2 Qc2+ 3.Kg1 Qg6 4.Bxg6+ Any 5.Qxg7#
- Y. 1... Bf3 2.gxf3 gxf3 3.Kg1 Qh8 4.Bh4 Rxh4 5.Any Rh1#
- Z. 1.gxf7+ Rxf7 2.Bxf7+ Kf8 3.Rh8+ Ke7. 4.Nd5+ Kd6. 5.Nc4#
- Aa. 1.Qh6+ Kxh6 2.Nhf5+ Bxf5 3.Nxf5+ Kh5 4.g4+ Kxg4 5.Rg3+ Kh5 6.Be2#
- Bb. 1... Rg2+ 2.Kf1 Rxd2+ 3.Kg1 Rg2+ 4.Kf1 Ra2+ 5.Kg1 Rxa1+ 6.Bc1 Rxc1#

## THROUGH THE LOOKING GLASS FINAL MOVES

- 21. Nxf7+ Kd8
- 22. Qf6+ White draws the knight away from the defense of the e7square.
- 22... Nxf6
- 23. Be7# White has sacrificed the queen, both rooks, and a bishop to obtain a checkmate with minor pieces.



**space.** The squares controlled by each player. A player controlling more squares than the other is said to have a spatial advantage.

**stalemate.** A position in which the player whose turn it is to move has no legal move and their king is not in check. A stalemate results in a draw.

**strategy.** The basis of a player's moves. The evaluation of positions and ways to achieve goals. Strategy is often contrasted with tactics, which are the calculations of more immediate plans and combinations.

**swindle or cheapo.** A ruse or trick played from a position that is inferior.

**tactics.** One or two moves (including decoys, deflections, pins, sacrifices and skewers) that give the player an advantage in pieces or position.

**tempo.** A unit of time considered as one move. If a piece can reach a useful square in one move, but takes two moves to get there, it has lost a tempo. If a piece moves to a square that forces the opponent to make a move he or she could not ordinarily make, she or he has gained a tempo.

**threefold repetition.** This type of draw occurs when all the pieces of both players have been in the same position three times during the game.

**time control.** The allowed time to play a game, usually measured by a chess clock. A time control can require either a certain number of moves be made per time period (e.g. 40 moves in 2½ hours) or it can limit the length of the entire game (e.g. 5 minutes per game for blitz).

**touch-move rule.** The rule that requires a player who touches a piece to move that piece unless the piece has no legal moves. If a player places a piece on a square, and removes his or her fingers, that piece must remain if the move is legal. If a player touches an opponent's piece, that piece must be captured if the move is legal.

**trap.** Luring an opponent into making a bad move.

**undermining.** A tactic (also known as removal of the guard) in which a defensive piece is captured, leaving one of the opponent's pieces undefended or under-defended.

**unpinning.** The act of breaking a pin by interposing a second piece between the attacker and the target. This allows the piece that was formerly pinned to move.

**weakness.** A pawn or square that is easily attacked and hard to defend.

**wood.** Slang for pieces. "A lot of wood came off the board," conveys that several piece exchanges occurred.

**woodpusher.** A weak chess player, also referred to as a patzer or duffer. Colloquial, typically derogatory.

**zugzwang.** [from German, "compulsion to move"] A situation in which a player has no good moves, but is forced to make a move that weakens his or her position.

**zwischenzug.** [from German, "in-between move"] An "in-between" move, or an intermezzo, played before an expected reply. Often, but not always, this involves responding to a threat by posing an even greater threat, forcing the opponent to respond to the threat first.

## The Basic Rules of Chess

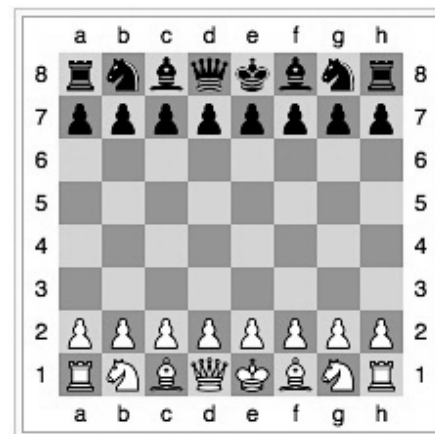
**Chess** is a two-player board game played on a chessboard, a square board divided into 64 squares (8 x 8) of alternating color. Each player has control of sixteen chess pieces of six types. Each type of piece moves in a distinct way. The goal of the game is to checkmate, i.e., to threaten with

inescapable capture, the opponent's king. Play continues until a king is checkmated, a player resigns, or a draw is declared, as explained below.

### Set up:

At the beginning of the game, the board is orientated with the white corner square on the right. Each player places all 8 pawns on his or her second horizontal row or 'rank'. The remaining pieces are placed on each player's first rank as follows:

The rooks are placed on the corner squares. Next to them come the knights, and then the bishops. On the two remaining squares of the first rank, each player places his or her king and queen. The White queen goes on the white square, the king on the black square. The Black queen goes on a black square and the king goes on a white square. Thus the two kings face each other across the board in the same vertical columns or 'files' and the same is true of the queens. (More on chess notation follows.)



### Gameplay:

The player controlling the white pieces is named "White"; the player controlling the black pieces is named "Black". White always moves first, and players alternate turns. Players can only move one piece at a time, except when castling (explained below). Making a move is required; it is not legal to skip a move, even when having to move is detrimental.

In non-competitive play, who plays white is generally determined by mutual agreement or some kind of random method.

Again, the objective of the game is to threaten your opponent's king with inescapable capture—meaning that you've forced him into a position where he cannot make a legal move to escape capture. The likelihood of checkmating your opponent is improved by removing your opponent's valuable pieces. This happens by capturing.

### **Capturing:**

When you capture in chess, you remove the enemy piece from the board and replace it on the same square with your own capturing piece. A move known as "en passant" (explained below) is the only exception. If more than one capture is possible, only one of them can be made per turn. All the pieces except the pawns capture the same way they move.

### **Basic moves:**

Each type of chess piece has its own method of movement. A piece moves to a vacant square except when capturing an opponent's piece. Players cannot take or move through their own pieces.

- **Kings** can move in any direction, one square at a time. A special move with the king known as castling is allowed only once per player, per game (explained below).
- **Rooks** move in a continuous line either forwards, backwards or side-to-side. It also is moved when castling.
- **Bishops** can move in a continuous diagonal line in any direction.
- **Queens** can move in a continuous horizontal, vertical, or diagonal line.
- **Knights** can move to the nearest square not on the same rank, file, or diagonal. This can be thought of as moving two squares forward, backward or side-to-side and one space at a right or left turn, i.e., in an "L" pattern. The knight is not blocked by other pieces: it jumps to the new location.
- **A pawn** can move to the square directly in front of itself, if that square is clear. A pawn on its starting rank can move one or two spaces forward; every subsequent move can only be one space forward; pawns cannot move backwards.

Pawns are the only pieces that capture differently from how they move. A pawn can capture an enemy piece on either of the two squares diagonally in front of the pawn (but cannot move to those squares if they are vacant). The pawn is also involved in the two special moves promotion and en passant (both explained below).

**overextended.** An overextended position results when a player has advanced pawns too far into his opponent's side without sufficient support.

**overloaded.** A piece that has too many defensive duties. An overloaded piece can sometimes be deflected, or required to abandon one of its defensive duties.

**passed pawn.** A pawn that has no pawn of the opposite color on its file or on any adjacent files on its way to queening.

**pawn chain.** Three or more pawns of the same color diagonally linked.

**pawn structure.** The placement of the pawns during the course of a game. As pawns are the least mobile of the pieces and the only pieces unable to move backwards, the position of the pawns greatly influences the character of the game.

**pin.** See absolute pin and relative pin.

**poisoned pawn/piece.** An unprotected pawn that if captured causes disadvantages (positional problems or material loss) for the player who captured the piece.

**promotion.** Advancing a pawn to the eighth rank, converting it to a queen, rook, bishop or knight. Promotion to a piece other than a queen is called under-promotion.

**queenside.** The half of the chessboard that includes the a, b, c, and d files.

**quiet move.** A move that does not capture or threaten an enemy piece.

**rank.** A row of the chessboard.

**rating.** A number used in sanctioned tournaments representing a chess player's ability. To be rated in the U.S., you must be a member of the Chess Federation.

**relative pin.** When a piece is attacked and *can* legally move out of the line of attack, but such a move would expose a more valuable piece (or an unprotected piece) to capture.

**rook lift.** A maneuver that places a rook in front of its own pawns, often on the third or fourth rank. This can allow the rook to then be moved to the left or right to any open square along that rank.

**round.** When one player plays another player in a tournament. A chess tournament has a series of rounds (usually 4 to 7).

**sacrifice.** Voluntarily giving up pieces for an advantage such as space, development, or force.

**simplifying.** A strategy of trying to gain an advantage by exchanging pieces to reduce the number of pieces on the board.

**shouldering.** Using your king to keep the opponent's king out of the action.

**skewer.** An attack upon two pieces of the same color both caught in the same line of attack along a diagonal, rank, or file. The attacking piece forces the first and more valuable piece to move out of the way, which allows the second piece to be captured. (It's similar to a pin; the difference being that in a pin the more valuable piece is behind the piece of lesser value).

**x-ray.** When the power of a piece, either to attack or to defend, seems to pass through an intervening enemy piece.



Stamps issued by Mali, Croatia, and Russia

**isolated pawn.** A pawn with no pawn of the same color on an adjacent file.  
**kibitz.** As a spectator, making comments on a chess game that can be heard by the players. Kibitzing on a serious game while it is in progress (rather than during a post-mortem) is a serious breach of chess etiquette.

**kingside.** The half of the chessboard made up by the e., f, g, and h files.  
**luft.** [from German, "air"] Space made for a castled king to give it a flight square to prevent a back-rank mate. Usually luft is made by moving a pawn on the second rank in front of the king.

**major pieces.** A queen or rook, also known as a heavy piece.  
**maneuver.** Any series of quite moves aimed at placing one or more pieces on better squares.

**material.** All of a player's pieces and pawns on the board. The player with pieces and pawns of greater value is said to have a "material advantage".

**mating net.** A forced series of combinations that cut off king escape squares in preparation for checkmate.

**middle game.** The phase of a chess game between the opening and the endgame.

**minor pieces.** Bishops and knights.

**move.** A full move is a turn by both players, White and Black. A turn by either White or Black is a half-move.

**notation.** The recording of each move by players in a chess game.

**open file.** A file that is free of pawns.

**opening.** The beginning of a chess game when the goals are to develop pieces quickly and to control as much of the center of the chessboard as possible.

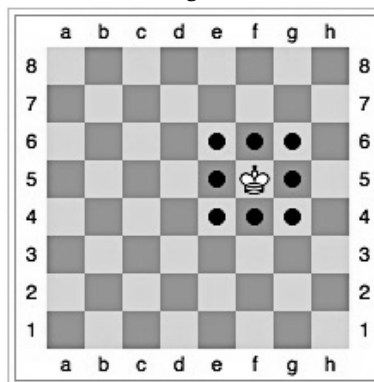
**occupation.** Occupation of a rank or file means a rook or queen controls it; occupation of a square means a piece or pawn sits on it.

**octopus.** A strongly positioned knight in enemy territory. A knight on e6 reaches out in eight directions, like the eight tentacles of an octopus.

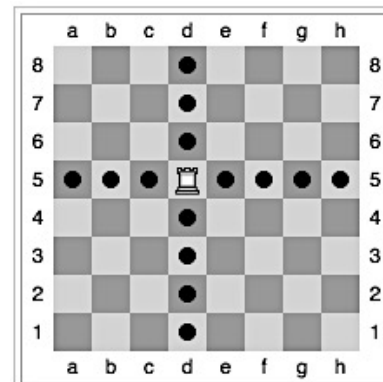
**odds.** This refers to the stronger player giving the weaker player some sort of advantage in order to make the game more competitive. It may be an advantage in material, in extra moves, in time on the clock, or some combination of those elements.

**opening.** The beginning phase of the game, roughly the first dozen moves, but it can extend much farther. In the opening players set up their pawn structures, develop their pieces, and usually castle.

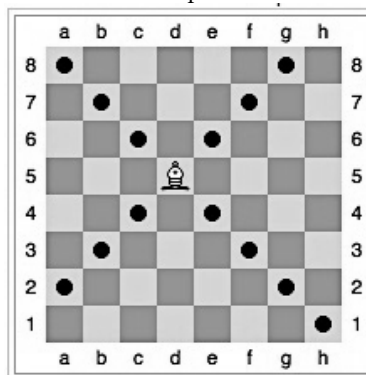
Moves of the king



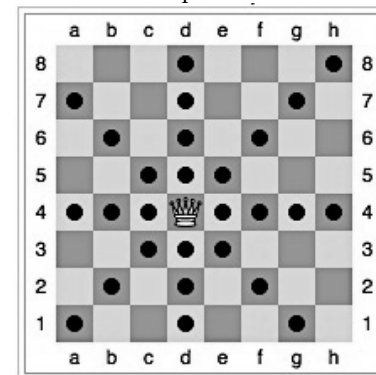
Moves of a rook



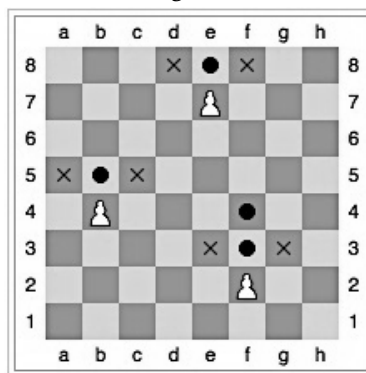
Moves of a bishop



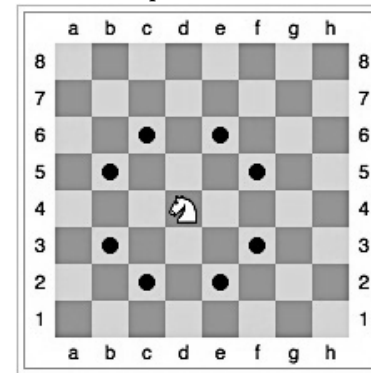
Moves of the queen



Moves of a knight



Moves of a pawn

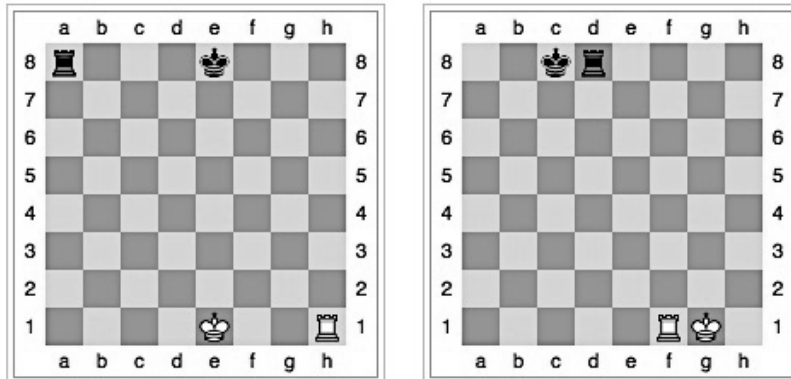


## Castling:

Castling is the only move that allows two pieces to move during the same turn. Castling consists of moving the king two squares towards a rook, then placing the rook on the other side of the king, adjacent to it. (In tournaments, when you castle, you must move the king first.)

Castling is only permissible if all of the following conditions hold:

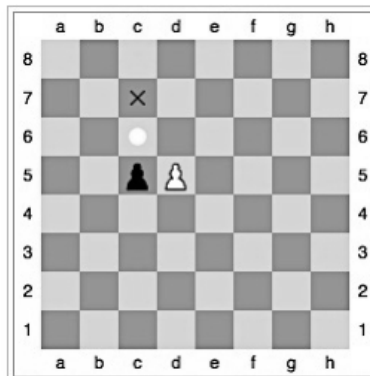
- The king and rook involved in castling must be on the same rank and must not have previously moved.
- There must be no pieces between the king and the rook.
- The king cannot be in check or move through or into check.



Above, the position of pieces before castling is shown on the left and after castling, on the right.

## En Passant:

[from French, "in the act of passing"] En passant is a special movement for pawns attacking pawns. When a pawn advances two squares from its original square and ends the turn adjacent to a pawn of the opponent's, it may be captured by that pawn of the opponent's (as if it had moved only one square forward). This move is only legal if the capture is made immediately following the first pawn's advance.



Assuming the black pawn has just moved from c7 to c5, the white pawn can capture it by moving to c6.

**discovered attack.** An attack made by a queen, rook or bishop when another piece moves out of its way (to expose the attacker).

**double attack.** Two attacks made with one move: these attacks may be made by the same piece (in which case it is a fork); or by different pieces, e.g., in a discovered attack when the moved piece also makes a threat.

**doubled pawns.** Two pawns of the same color on the same file; generally considered a weakness due to their inability to defend each other.

**draw.** A game that ends without victory for either player. Both players score  $\frac{1}{2}$  point.

**endgame.** The third and final phase of the game, when there are few pieces left on the board.

**en passant.** [from French, "in the act of passing"] The rule that allows a pawn that has just advanced two squares to be captured by an enemy pawn that is on the same rank and adjacent file. The pawn can be taken as if it had advanced only one square. Capturing en passant is possible only on the next move.

**en prise.** [from French, "in a position to be taken"] When a piece or a pawn is under direct attack and is left unprotected, it is said to be en prise (or in slang: 'hanging'). For instance, 1.e4 Nf6 2.Nf3? leaves White's e-pawn en prise.

**exchange.** To swap or trade pieces by capture. Trading a piece of pawn for an opponent's piece of greater value is called "winning the exchange".

**fifty-move rule.** A draw may be claimed if no capture or pawn move has occurred in the last fifty moves by either side.

**file.** A column of the chessboard.

**flank (or wing).** The queenside a-, b-, and c-files; or the kingside f-, g-, and h-files. Distinguished from the center d-file and e-file.

**flight (or escape) square.** A square to which a piece can move, that allows it to escape attack.

**force.** The player who has more material (pieces and pawns) has an advantage in force over his or her opponent.

**forced move.** A move that is the only one that does not result in a serious disadvantage for the moving player.

**fork.** A simultaneous attack by a single piece on two (or more) of the opponent's pieces. (Knights are prized for their forking ability.)

**gambit.** A sacrifice, usually of a pawn, used to gain an early advantage in space or time in the opening.

**grandmaster.** The highest title a chess player can attain (besides World Champion). Awarded by FIDE, it cannot be taken away. Abbr. GM.

**half-open file.** A file on which only one player has no pawns.

**hanging.** Unprotected and exposed to capture.

**illegal move.** A move that is not permitted by the rules of chess. An illegal move discovered during the course of a game must be corrected.

**interpose.** To move a rooks, bishops, or queens between an attacking piece and its target, blocking the line or diagonal of attack.

## Glossary of Chess Terms

**absolute pin.** A piece that is immobilized because moving it would place the King in check (which is illegal).

**adjust.** Adjust the position of a piece on its square without being required to move it. A player may only do this on their turn, and they must first say "I adjust", or the French equivalent *J'adoube*.

**advantage.** A better position in the odds of the game. Evaluation factors can include space, time, material, and threats.

**algebraic notation.** A system of chess notation, now standard, that uses abbreviations for the pieces and alphanumeric coordinates to identify the squares.

**backward pawn.** A pawn that has no pawns of its own color on adjacent files to protect it from attack.

**bad bishop.** A bishop that is blocked in by its own pawns which rest on the bishop's own color.

**blockade.** The placement of a piece directly in front of an enemy pawn, where it obstructs that pawn's advance, and hinders the movements of the other enemy pieces.

**blunder.** A bad move that results in a damaged position, loss of material, or loss of the game.

**brilliancy.** A game that contains a spectacular, deep and beautiful strategic idea, combination, or original plan.

**castling.** A move in which the king and a rook are moved at the same time. It moves the king from the center to a flank where it usually is safer, and it develops the rook.

**check.** A direct threat of capture of the opponent's king.

**checkmate.** A position in which a player's king is in check and the player has no legal move. A player whose king is checkmated loses the game.

**classical.** A style of chess wherein each opponent attempts to control the four center squares and develops his/her pieces quickly.

**clearance.** Removal of piece from a square, rank, file or diagonal so that another piece may use it. It often involves sacrificing the piece that unblocked the position.

**closed file.** A file on which White and Black each have a pawn.

**counterplay.** The defending side's own aggressive action.

**decoy.** A tactic used to lure a piece to a particular square.

**defense.** A move or plan to meet the opponent's attack.

**deflect.** A tactic that lures the opponent's main defending piece away from what is being defended.

**development.** The movement of non-pawn pieces from their original squares to squares where they can be more active.

**diagonal.** A line of squares of the same color touching corner to corner, along which a queen or bishop can move.

### Promotion:

If a pawn reaches the opposite side of the board, it is promoted to any higher piece of the player's choice except king. Usually a queen is chosen since she is the most powerful piece on the board. The advance of the pawn to the eighth rank and the substitution of the promoted piece are considered one move, but you cannot move the promoted piece until it is your turn once again. There is no limit to how many pawns can be promoted.

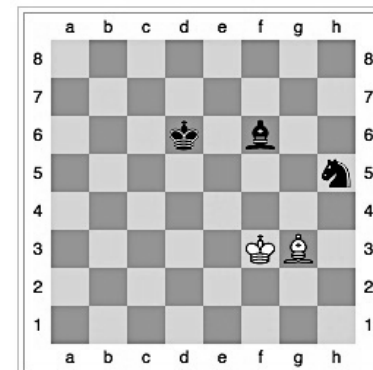
### Check:

It is illegal to make a move that places or leaves one's king in check. A king is in check when an opponent's piece is in a position that can attack the king.

The possible ways to get out of check are:

- Move the king to a square where it's not in check.
- Capture the checking piece (possibly with the king).
- Block the check by placing a piece between the king and the opponent's threatening piece.

If it is not possible to get out of check, the king is checkmated and the game is over.



Above, Black's king is in check. It can get out of check by moving to an unthreatened square. Black can also parry the check by moving the bishop to e5 or the knight to f4 to block the check, or by capturing the white bishop with the knight.

In informal games, it is customary to announce "check" when making a move that puts the opponent's king in check. (In formal competitions check is rarely announced.)



On the left, the chess set that belonged to "The bird-man of Alcatraz", Robert Stroud. He drew the chessboard on a copy of the *Atlas of Avian Anatomy*, 1945. The estimated value of the set is around \$5000.

## Games end in either the following ways:

### Checkmate:

If a player's king is placed in check and there is no legal move that player can make to escape, then the king is said to be checkmated, the game ends, and that player loses.

In the game on the right, the white king is threatened by the black queen; the square to which the king could move is also threatened; it cannot capture the queen, because it would then be in check by the rook. White is therefore checkmated and Black wins.



### Resignation:

Either player may resign, conceding the game to the opponent. It is usually considered poor etiquette to play on in a truly hopeless position, (and for this reason high-level games rarely end in checkmate).

### Draw:

A game is automatically considered a draw when there is no possibility of checkmate for either side with any series of legal moves. This is often due to insufficient pieces, including the endgames king against king; king against king and bishop; king against king and knight; king and bishop against king and bishop, with both bishops on squares of the same color.



Chess prodigy Samuel Reshevsky, aged 8, defeating several chess masters in France, 1920.

## Gustav Fredrik Albert Badin, né Couchi



Badin playing chess, Gustaf Lundberg, 1775.

Gustav Badin (1750 – 1822) was born either in Africa or in the Danish island Saint Croix; he himself said that the only thing he remembered about his past was his parents' house burning. He was taken to Europe, probably on a Danish East Indies ship, where the captain sold him to a statesman, who gave him as a present to the Queen of Sweden, Louisa Ulrika of Prussia in 1757.

Queen Louisa Ulrika reigned during Sweden's Age of Liberty (1718-1772), a period of political and scientific enlightenment. Arrogant and politically conservative, Queen Louisa nonetheless was interested in culture and science. She founded both the Royal Swedish Academy of Letters, History and Antiquities and the Swedish Academy of Science, the latter of which studied provocative thinkers of this era. Carl Linnaeus, the father of modern taxonomy, and Jean Jacques

Rousseau, the major Western political and educational philosopher of the era, both captured the Queen's attention. Some say that Badin was her experiment in that she wished to prove Rousseau's theories of educational development—including the then radical idea that children learned best by experiencing consequences rather than by coercion or punishment.

Badin was treated as a sibling of the Queen's four children, allowed to roam freely in the royal palaces, and was mentored and trained to become as highly educated as any European aristocrat of that period. He learned and spoke German, French, and Latin fluently, became a formidable chess player and so fond of the game he posed with a chess set for his portrait (by Gustaf Lundberg, then, the leading portrait painter of French and Swedish royalty).

In 1768 at the age of 21, Badin was baptized; thereafter he accompanied the Queen on diplomatic missions and became a roving ambassador for the Swedish court. He managed three royal palaces, was given several titles, such as court secretary, chamberlain, and assessor (a judge's or magistrate's assistant), but preferred to identify himself as a farmer—he was the owner of two. Badin was married twice but died childless; the rumors that he was the father of the alleged secret daughter of Sophia Albertina have never been confirmed.

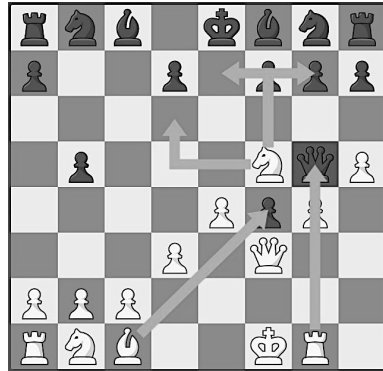
During his life, Badin collected an extensive library consisting of some 900 volumes, mostly in French. It was sold in Stockholm in the year of his death 1822 with a printed catalogue, making him one of the first recorded book collectors of African origin. Baden's extensive journals, written in French, are now archived in the library of Uppsala University.

In 1782, upon Queen Ulrika's death, Badin served three successive Swedish monarchs beginning with his childhood friend, King Gustav III who was murdered in 1792, Gustav IV (1792-1809), and Karl XIII (1809-1818). Despite his respect and devotion to Swedish royalty, Badin was rarely mentioned in Swedish history texts. He died in 1822 in Stockholm at the age of 75.



7... Nh5 Ignoring the rule knights on the rim are grim. Black is threatening Ng3+ winning the exchange.  
 8. Nh4 Og5  
 9. Nf5 c6  
 10. g4 Nf6  
 11.Rg1 Sacrificing the bishop to gain the initiative, and to take advantage of the placement of black queen.

11... cxb5  
 12. h4 Qg6  
 13. h5 Qg5  
 14. Qf3 Ng8 Black is walking on ice - the knight retreat was necessary to avoid getting the black queen trapped.  
 15. Bxf4 Qf6 All of the black pieces have returned home except the queen - while white is getting fully developed and getting ready to attack.  
 16. Nc3 Bc5  
 17. Nd5 Both white knights are well posted and the pieces are starting to swarm around the black king



Position after 14...Ng8. White is ready for the attack.

17... Qxb2  
 18. Bd6! Offering up the a1 rook as bait - with check! White is weaving a mating net.  
 18... Qxa1+ White ignores all of Black's threats, and starts to surround the Black king.  
 19. Ke2 Bxg1  
 20. e5 This is a crafty move. White has no intention of allowing the black queen to take part in the defense of Black's king. The pawn is moved to cut the coordination of the black queen from the black position.  
 20... Na6

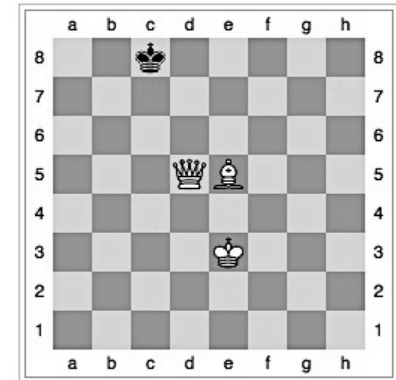


Position of pieces after 20... Na6.

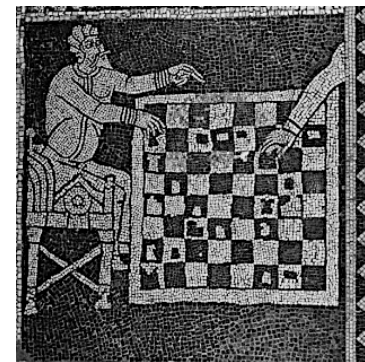
*White now has a forced checkmate in 3 moves. Can you find it?*  
 (Solution on page 36.)

**Other ways a game can end in a draw include:**

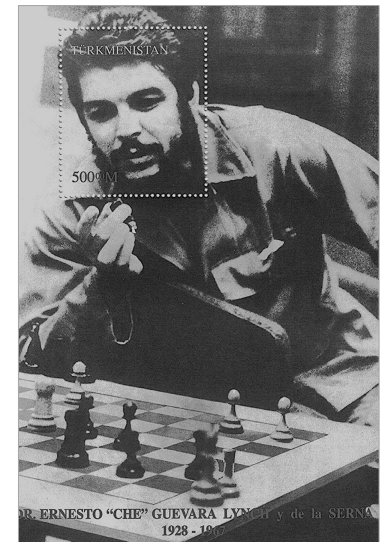
- Draw by mutual agreement.
- Stalemate: the player whose turn it is to move is not in check but has no legal move.
- Threefold repetition: a player claim a draw if the same board position has occurred three times with the same player. The idea behind the rule is that when neither side is able to avoid repeating moves without incurring a disadvantage, no progress is being made.
- Fifty-move rule: a player can claim a draw if there has been no capture or pawn moved in the last fifty moves by each player.



Black is not in check but has no legal move. The result is stalemate.



A mosaic on the floor of the church of San Savino, Piacenza, Italy, 11<sup>th</sup> – 12<sup>th</sup> century.



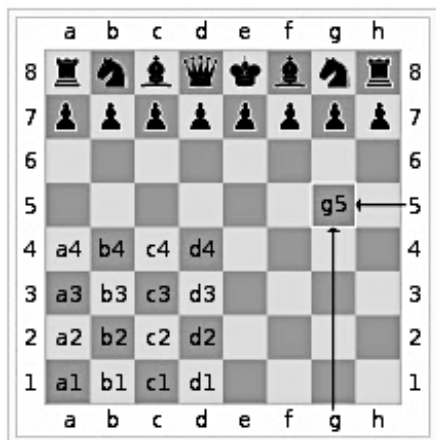
Che Guevara, Camagüey, Cuba, c. 1962. Postage stamp issued by Turkmenistan.

## Chess Notation:

There are a number of ways to record chess moves, but 'algebraic notation', is now standard among all chess organizations, books, and tournaments.

In algebraic notation:

- Each square of the chess-board is identified by a unique coordinate pair—a file letter and rank number. The files are labeled **a** through **h** from White's left to White's right. Similarly, the horizontal ranks are numbered from **1** to **8**, starting from White's side of the board. The White queen, for example, starts the game on d1. The Black knight on b8 can move to a6 or c6.



- Each piece type (other than pawns) is identified by an uppercase letter. English-speaking players use the letters K for king, Q for queen, R for rook, B for bishop, and N for knight (since K is already used). Pawns are not identified by uppercase letters, but rather by the absence of one.

- Each move is indicated by the piece's uppercase letter, plus the coordinate of the destination square. For example, if a bishop was moved to e5, the move is notated as Be5; if a Knight is moved to f3, it's recorded as Nf3. For pawn moves, only the destination square is given. For example, c5 means a pawn was moved to c5.

In a situation where two rooks, bishops or other identical pieces are able to move to the same square, to make it clear which piece has moved, the file or rank number of departure is added to the notation as an identifier. For example, if there are knights on g1 and d2 either of them could move to f3. If the knight on g1 makes the move, it is recorded as Ngf3; if the knight on d2 has moved, it would be recorded as Ndf3. With two knights on g5 and g1, the move is recorded as N5f3 or N1f3, as appropriate.

When a piece makes a capture an "x" is inserted immediately before the destination square. For example, Bxe5 means 'bishop captured the piece on e5'. When a pawn makes a capture, the file from which the pawn departed is used to identify the pawn. For example, exd5 means 'pawn on the e-file captures the piece on d5'.

## The Immortal Game

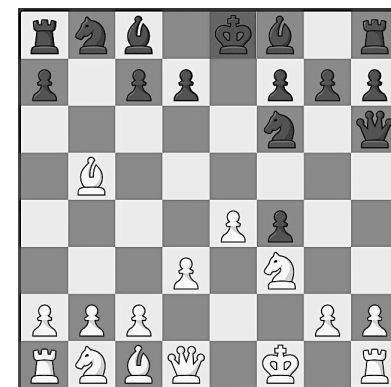
Adolf Anderssen vs. Lionel Kieseritzky, London, 1851.

Adolf Anderssen, a Prussian chess master and mathematics teacher, was one of the strongest players of his time and was considered to be world champion after winning the 1851 London tournament. Lionel Kieseritzky, a Baltic German chess master (who, like Anderssen taught mathematics) lived in France for most much of his life where he became a chess professional, giving lessons or playing games for five francs an hour at the Café de la Regence in Paris.

The immortal game was an informal one played by the two men during a break in an international tournament in London. The bold sacrifices made by Anderssen to secure victory have made it one of the most famous chess games of all time. Anderssen gave up both rooks and a bishop, then his queen, to checkmate Kieseritzky with his three remaining minor pieces. The game was reported in newspapers around the world. One International Master of chess called the game an achievement "perhaps unparalleled in chess literature". Another called it "The Immortal Game" believing it would always be among the greatest chess games ever played.

The notations for the game, with some annotations about the strategy are below. (To learn chess notation see pages 8-9.)

1. e4 e5
2. f4 Whites' second move leads up to a pawn sacrifice known as the King's Gambit. White's idea is to sacrifice a side pawn to gain a majority of center pawns, potential open files for his rooks, and a lead developing pieces.
- 2... Exf4 Accepting the gambit pawn.
3. Bc4 Qh4+ At first, this move looks a bit strange, but the idea is to distract the bishop away from eyeing the vulnerable f7 square.
5. Bxb5 Nf6
6. Nf3 Both sides are hurrying to mobilize their pieces for the attack. Here, White develops his knight to attack the Black queen.
- 6... Qh6
7. d3 White defends the e4 pawn and frees the bishop on c1.

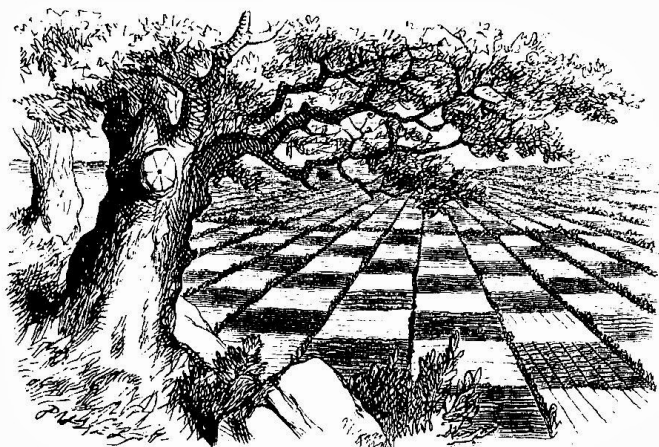


Above, the board after 7.d3 - a very original position for both sides.



Alice and the White Knight  
*Through the Looking Glass* by Lewis Carroll,  
 illustrated by Sir John Tenniel, 1871.

In response to concerns and criticisms, Carroll admitted that "the alternation of Red and White is perhaps not so strictly observed as it might be, and the 'castling' of the three Queens is merely a way of saying that they entered the palace; but the 'check' of the White King at move 6, the capture of the Red Knight at move 7, and the final 'checkmate' of the Red King, will be found...to be strictly in accordance with the laws of the game.'



The chessboard landscape in *Through the Looking Glass*, written by Lewis Carroll,  
 illustrated by Sir John Tenniel, 1871.

En passant captures are indicated by specifying the capturing pawn's file of departure, the "x", the destination square (not the square of the captured pawn), and optionally, the suffix "e.p." indicating the capture was en passant. For example, exd6e.p.

When a pawn moves to the last rank and promotes, e.g., to a Queen, it is noted as e8Q or e8=Q. Castling is indicated as 0-0 for kingside castling and 0-0-0 queenside castling.

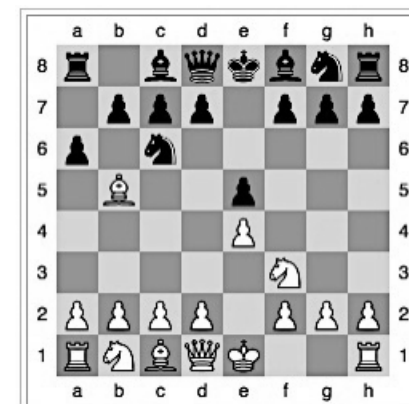
A move that places the opponent's king in check usually has the symbol "+" added to the notation such as Be6+. Checkmate is represented by the symbol "#". If White checkmates, the notation at the completion of the game is 1-0. If Black won, the correct notation is 0-1; ½-½ indicates a draw.

Though not technically a part of algebraic notation, the following symbols are frequently used by annotators to give evaluative comment on a move:

- ! an excellent move
- !! a particularly good (and usually surprising) move
- ? a bad move; a mistake
- ?? a blunder
- !? an interesting move that may not be best
- ?! a dubious move or move that may turn out to be bad
- ⊖ a better move than the one played
- the only reasonable move, or the only move available
- TN (or N) a theoretical novelty

When recording a game, the move by White is always listed first. When White and Black have each moved, it is considered as one complete move in the game. Notations for a game or series of moves are generally written in one of two ways:

- In two columns, as White and Black pairs, preceded by the move number and a period:
  1. e4 e5
  2. Nf3 Nc6
  3. Bb5 a6
- Horizontally:
  1. e4 e5, 2. Nf3 Nc6, 3. Bb5 a6



The board on the above shows the position of the pieces after the 3 moves listed at left.

**Basic Strategy:**

Chess is an incredibly complex strategic game; its range of tactics, feints, and actions is immense. However, we can provide the new player with a few suggestions about what to pay attention to:

**Piece Value:**

Obviously you want to protect your pieces from capture, but it helps to know which pieces are the strongest so you can decide who to save if you must choose between two.

	Pawn - 1
	Knight - 3
	Bishop - 3
	King - 4
	Rook - 5
	Queen - 9

The table on the right shows a common assignment of the relative point value or strength of pieces in average positions; this largely reflects the degree of mobility of the pieces. The relative value of any piece also depends on the peculiarities of the position the piece occupies, e.g. in most positions a bishop is actually worth a bit more than a knight. Thus, the values help determine how valuable a piece is strategically. The king, whose value is typically undefined, here is assigned a value of 4; this reflects the relative power the king has only in the endgame stage of the game.

Various combinations of pieces are assigned point values as such: A rook and a knight = 7.5 points; a rook and a bishop = 8 points; and a pair of rooks = 10.

**Pawn Promotion:**

Pawns become more valuable as they near promotion. Although a pawn can be promoted to a variety of pieces, the strongest choice is almost always to promote to queen.

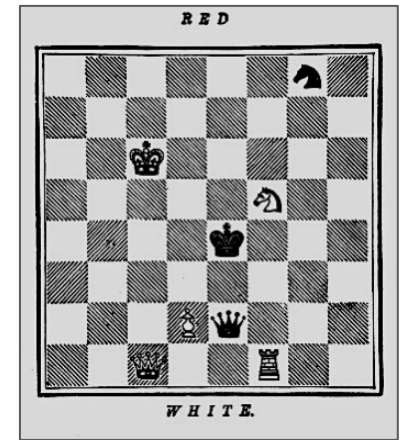
**Board Control:**

When building defenses, remember to look at the board and gauge how strong you are in certain areas of the board. Try and keep power distributed fairly evenly, and bring pieces over to add strength if you see an attack coming.

When attacking, it's a bad idea to let any of your pieces become cut off from your main force. Have a support piece in mind when making an attack. Using pieces in tandem almost always yields a better result than using one piece alone.

**Through the Looking Glass**

One of the most famous games of chess in literature was the surreal one in Lewis Carroll's *Through the Looking Glass* (1871), the sequel to *Alice in Wonderland*. Whereas in the first story, Alice encountered a kingdom of playing cards after falling down a rabbit hole, in the sequel, she steps through a mirror to find herself scripted as the White Pawn in the middle of a full-sized game of chess. That the book was designed around a chess game was made explicit from the very beginning, when the reader is confronted with the diagram of a chess problem (above at left) and the following note: "White Pawn (Alice) to play, and win in eleven moves".



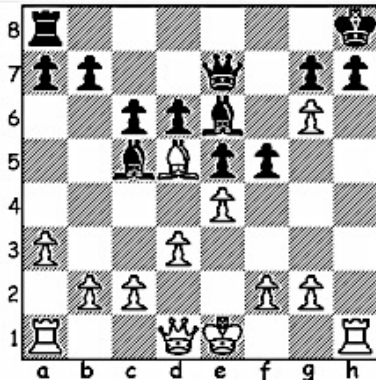
The chess problem is: White: Kc6, Qc1, Rf1, Nf5, d2, Black: Ke4, Qe2, Ng8. Lewis Carol's solution:

**White Pawn (Alice) to play, and win in eleven moves.**

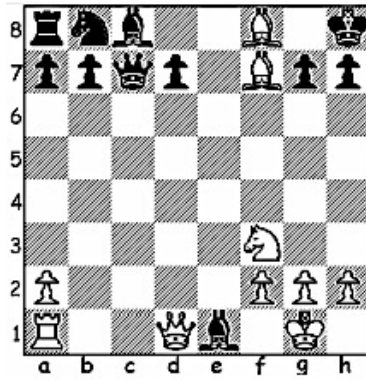
	PAGE	
1. Alice meets R. Q. ....	140	1. R. Q. to K. R.'s 4th .....
2. Alice through Q.'s 3rd (by railway) ..	147	2. W. Q. to Q. B.'s 4th (after shawl) ...
to Q.'s 4th (Tweedledum		3. W. Q. to Q. B.'s 5th (becomes sheep)
and Tweedledee) .....	149	4. W. Q. to K. B.'s 8th (leaves egg on
3. Alice meets W. Q. (with shawl) ....	168	shelf) .....
4. Alice to Q.'s 5th (shop, river, shop) .	173	5. W. Q. to Q. B.'s 8th (flying from R.
5. Alice to Q.'s 6th (Humpty Dumpty) .	179	Kt.) .....
6. Alice to Q.'s 7th (forest) .....	200	6. R. Kt. to K.'s 2nd (ch.) .....
7. W. Kt. takes R. Kt .....	202	7. W. Kt. to K. B.'s 5th .....
8. Alice to Q.'s 8th (coronation) .....	213	8. R. Q. to K.'s sq. (examination) .....
9. Alice becomes Queen .....	220	9. Queens castle .....
10. Alice castles (feast) .....	223	10. W. Q. to Q. R.'s 6th (soup) .....
11. Alice takes R.Q. & wins .....	230	

Although many of the moves listed in the introductory problem make no sense if taken on their own, when they are considered in the context of the story, a strange logic emerges based not on the rules of chess, but on Carroll's surreal narrative. The White Queen, who famously believed in "six impossible things before breakfast," also experiences time in reverse, which, from the perspective of a game piece, would surely result in unpredictable movement and a curious perception of the board.

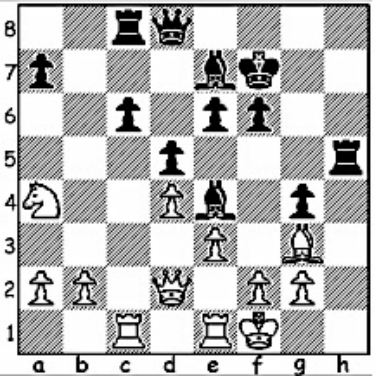
W. Mate in 5 moves; White to move:



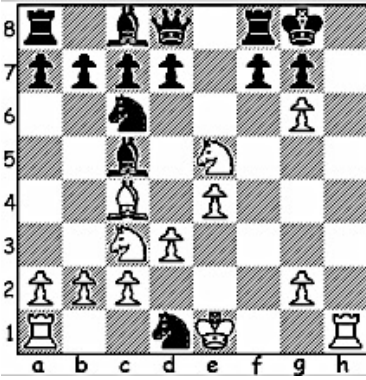
X. Mate in 5 moves; White to move:



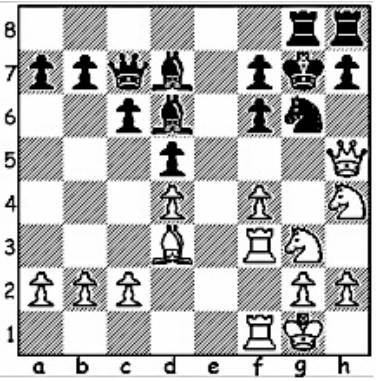
Y. Mate in 5 moves; Black to move:



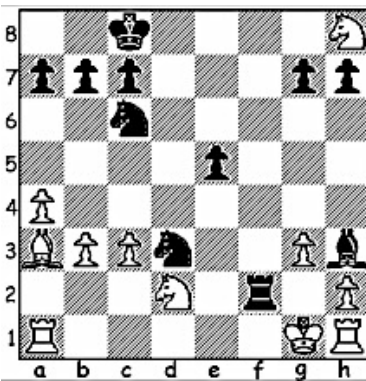
Z. Mate in 5 moves; White to move:



AA. Mate in 6; White to move:



BB. Mate in 6; Black to move:



### Common questions and answers:

*What is the minimum amount of pieces needed to force a checkmate?*

Checkmate can be forced with the following pieces:

- King and queen against king.
- King and rook against king.
- King and two bishops against king.
- King and bishop and knight against king.

The following are inadequate to force checkmate:

- King and bishop against king.
- King and knight against king.
- King and two knights against king.

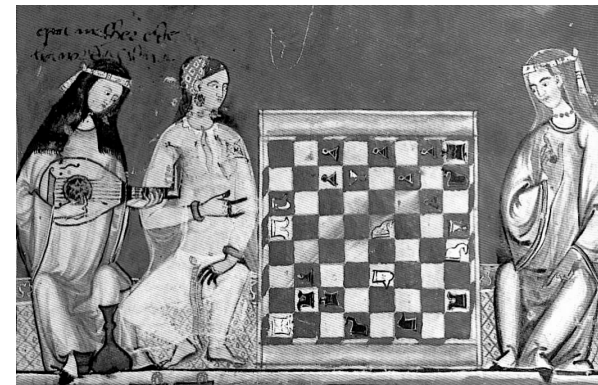
*What is the opening?*

The opening, as the term implies, is the beginning stage of the game, roughly the first dozen moves, but it can extend much farther. In the opening, players set up their pawn structures, develop their pieces for attacking and defensive purposes, and sometimes castle.

There are many traditional scripted openings and whole books devoted to this topic as there are to other stages of the game. Historic sequences of moves are widely studied by serious players because the great masters have applied them successfully.

Most players specialize in certain openings where they know how to move into a position they favor for strategic reasons. The set of openings a player has specialized in is called an 'opening repertoire'.

A very narrow repertoire allows for deeper specialization but also makes a player less flexible to vary against different opponents. In addition, opponents may find it easier to prepare against a player with a narrow repertoire.



Miniature from *El Libro de Juegos*, Alfonso X El Sabio, 1283.

**What is the middle-game?**

The middle-game begins after the opening; there's no clear-cut distinction between the two stages (but it is usually roughly moves 20 through 40.) The middle-game is regarded as the most complicated part of a game of chess—the part where the serious fighting takes place.

**What is the endgame?**

The final stage of the game, i.e., the 'endgame', is a simplified, but not necessarily simple stage. By this time, most of the pieces—and almost always the Queen—have been removed by capture, but despite the relatively few pieces on the board, there is a great deal of subtle maneuvering and judicious finesse that makes all the difference between victory and defeat. Many endgames center on the struggle to make a material advantage decisive. Often, this takes the form of trying to queen a pawn.

**How far do you have to see ahead in a game of chess?**

There is a widespread and harmful notion that it is necessary to see far ahead in a game of chess. To the limited extent that this is true, it applies only to the games of the great masters. In games between ordinary players, it is much more important to see what is immediately available—a capture, a threat, a double attack. By cultivating the habit of finding the strongest move that immediately achieves something, you can enormously increase your playing strength. On the other hand, if you dissipate your energies and diffuse your attention over a great many nebulous possibilities, it is likely that you will overlook the direct, tangible, practical possibilities that are right in your grasp.

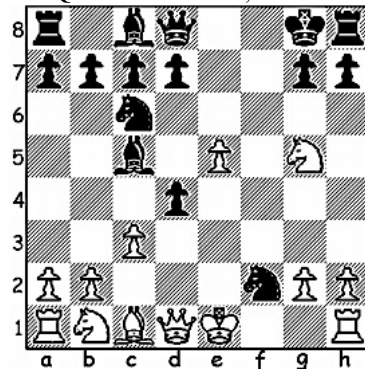
**Do you have to move a piece if you touch it?**

In serious play, if you execute a legal move completely and take your hand of the piece, the move must stand as made. If you just touch one of your pieces and then leave it on the square it was, you must move the piece, but you have a choice of where to move it. If a player touches one of the opponent's pieces then the player must capture that piece if it is legal to do so. If none of the touched pieces can be moved or captured there is no penalty.

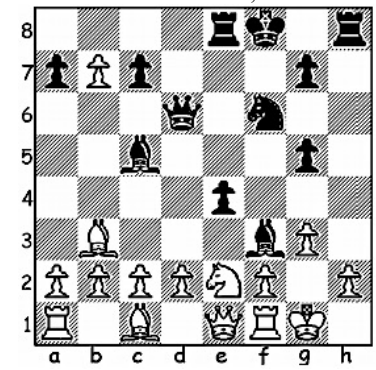


Game of Chess with Peacock and Dog. Detail, Flemish 1338-44.

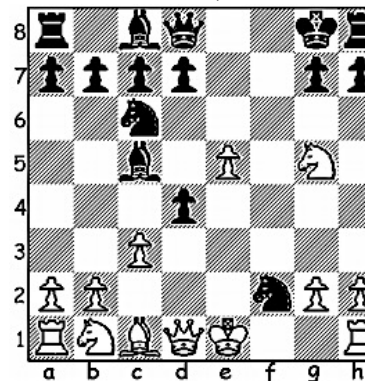
**Q. Mate in 4 moves; White to move:**



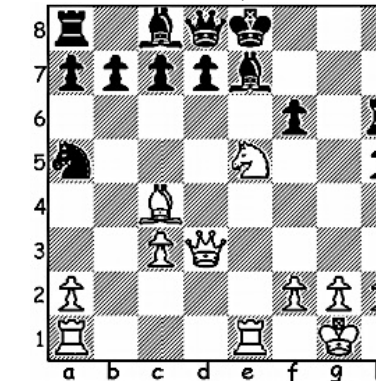
**R. Mate in 4 moves, Black to move:**



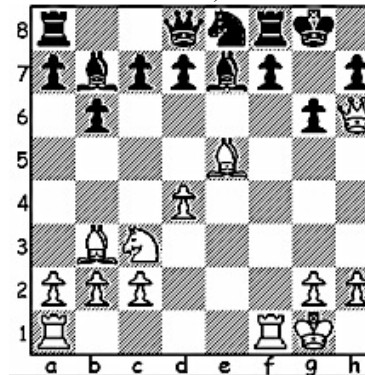
**S. Mate in 4 moves; White to move:**



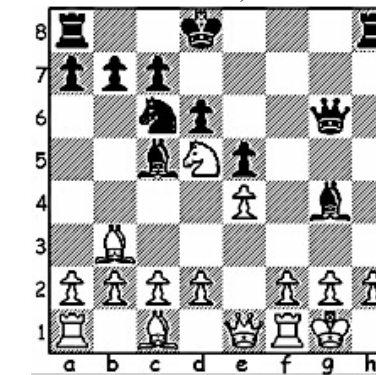
**T. Mate in 4 moves; White to move:**



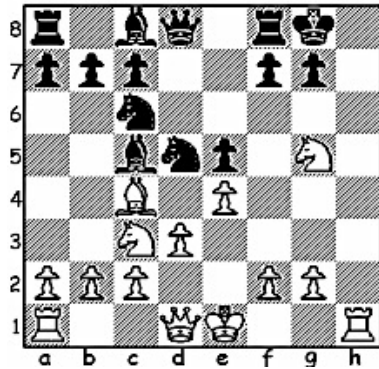
**U. Mate in 4 moves; White to move:**



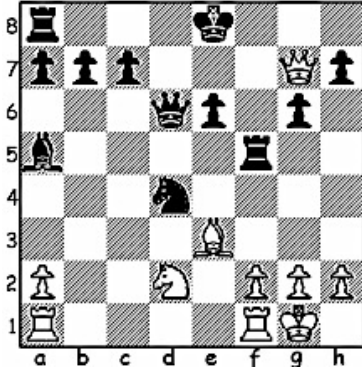
**V. Mate in 4 moves; Black to move:**



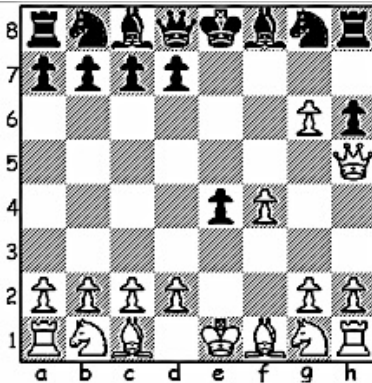
K. Mate in 3 moves; White to move:



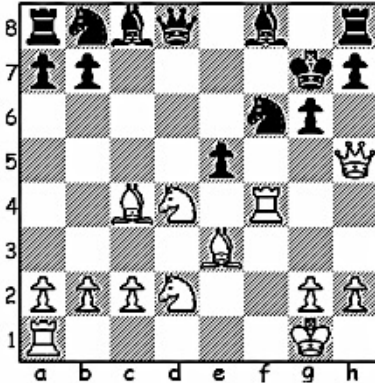
L. Mate in 3 moves; Black to move:



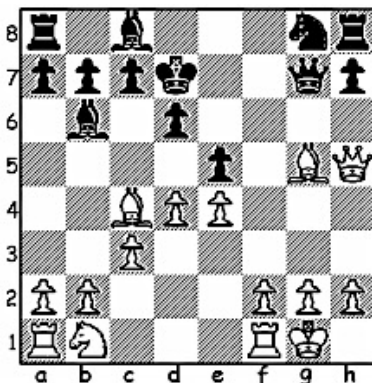
M. Mate in 3 moves; White to move:



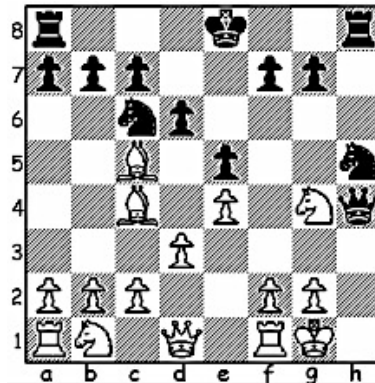
N. Mate in 3 moves; White to move:



O. Mate in 3 moves; White to move:



P. Mate in 3 moves; Black to move:



## A Persian Chess Fable

According to a Persian fable, the Shah promised to reward anyone who could beat him at chess with a prize of their own choosing. A day arrived when a sage accepted the Shah's challenge. The reward the sage asked for should he win the game was that he be rewarded with grains of wheat to be distributed on the chessboard as follows: one grain of wheat in the first square, two grains in the second, four in the third, eight in the fourth and so on, doubling the quantity for each successive square on the board.

Although puzzled that the sage had not chosen richer rewards from his kingdom, the Shah accepted the sage's request. The game was played, and the Shah was defeated.



Chess players, *El Libro de Juegos* by Alfonso X El Sabio, Andalusia, 1283.

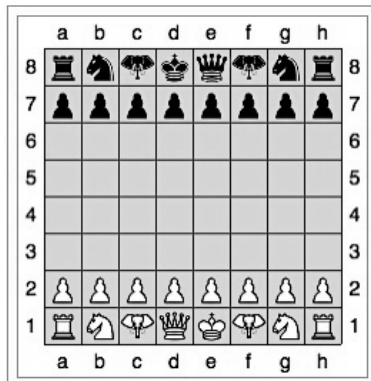
A man of his word, the Shah ordered a bag of wheat to be delivered from the royal granary. As the grains of wheat were distributed on the chessboard, the Shah soon realized the true nature of the sage's demands. By the 20th square, the number had reached one million grains of wheat, and the Shah realized that even if he provided the sage with all the wheat in his kingdom and adjacent kingdoms, he would never be able to fulfill the promised reward. On the 64th square of the chessboard alone he'd have to supply nine quintillion, two hundred twenty-three quadrillion, three hundred seventy-two trillion, thirty-six billion, eight hundred fifty-four million, seven hundred seventy-five thousand, eight hundred eight grains, and the total number of grains placed on each of the 64 squares would be double that—in cardinal numbers: 18,446,744,073,709,551,615 grains, an amount of wheat more than 1,000 times the current world's annual production.

As to the end of the story, versions differ as to whether the sage becomes a high-ranking advisor to the Shah or is executed.

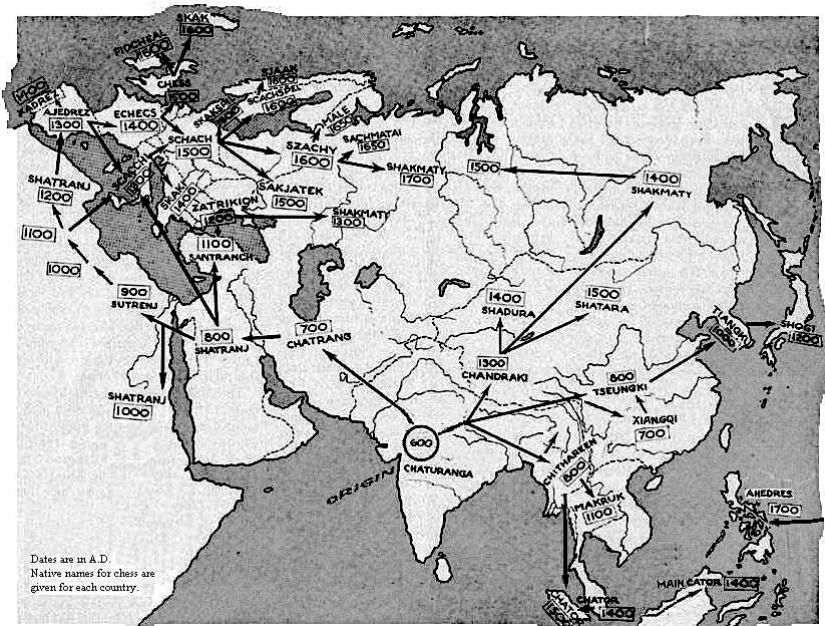
# The Origins and March of Chess

Chess is believed to have originated in eastern India, where its early form in the 6th century was known as chaturanga. The name comes from a battle formation mentioned in the Indian epic Mahabharata, referring to four divisions of an army, namely infantry, cavalry elephantry, and chariotry—pieces represented in the modern game as pawns, knights, bishops and rooks.

The exact rules of chaturanga are unknown, and there is uncertainty about the movement of pieces, but the game was played on an 8 x 8 board with pieces that are the ancestors of our own.

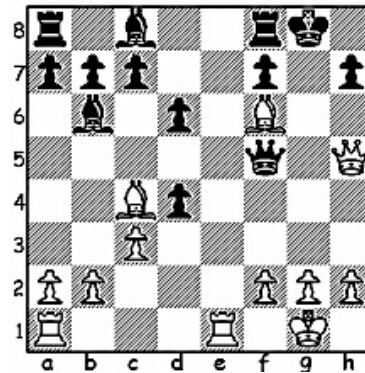


Chaturanga starting setup. The Rajas do not face each other.

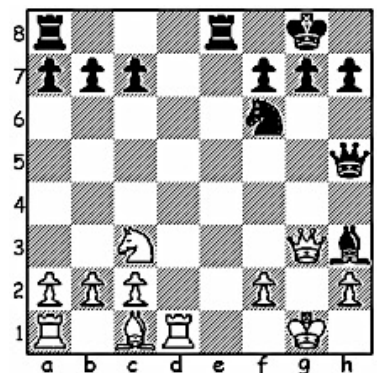


The March of Chess Map by Jose A. Fadul from A Short History of Chess (1949) by H. A. Davidson, shows the routes both to the east and west travelled by the game, the local names for the game and the approximate dates when it reached various parts of the world (as understood at the time).

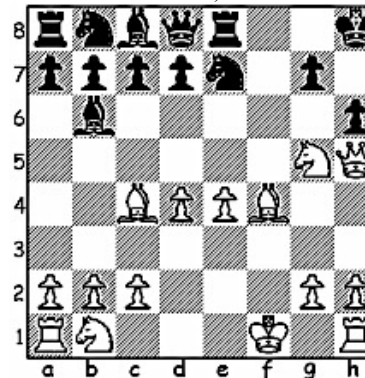
E. Mate in 2 moves; White to move:



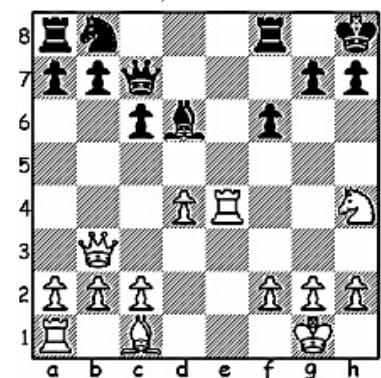
F. Mate in 2; Black to move:



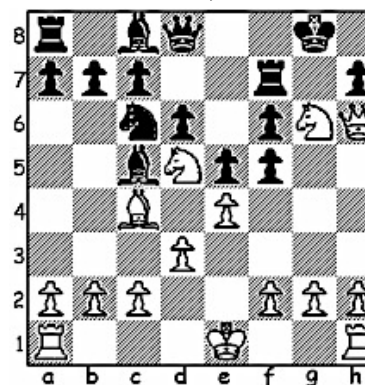
G. Mate in 2 moves; White to move:



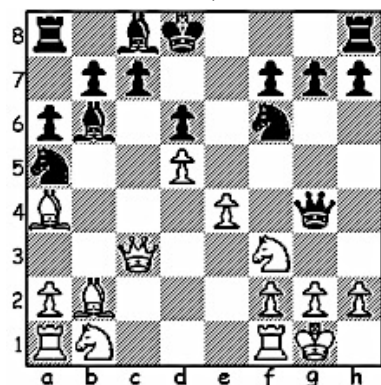
H. Mate in 2; White to move:



I. Mate in 2 moves; White to move:



J. Mate in 2 moves; White to move:



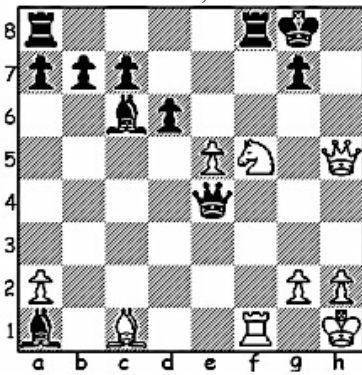


## Chess Problems

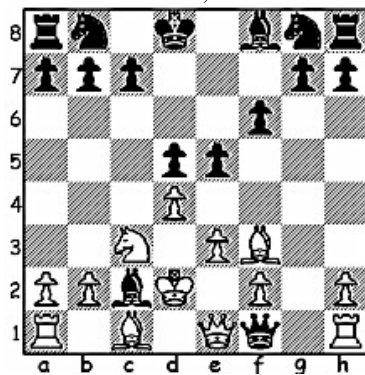
A chess problem is a puzzle set by someone on a chessboard that presents to the problem-solver a particular task to be achieved. The most straightforward puzzles are known as 'directmates'. These puzzles provide a diagram of a board and challenge the player to checkmate, against any possible defense, the opponent in a certain number of moves. The next few pages include directmates of increasing levels of difficulty. Answers on page 37.

Record your answers in algebraic notation. To learn chess notation see pages 8-9.

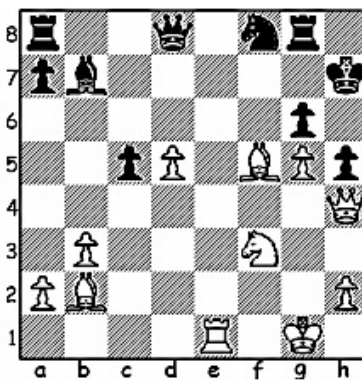
A. Mate in 1 move; White to move



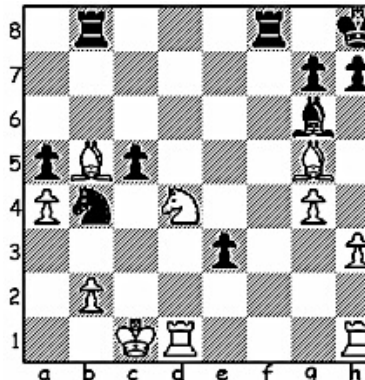
B. Mate in 1 move; Black to move:



C. Mate in 1 move; White to move:



D. Mate in 1 move; Black to move:

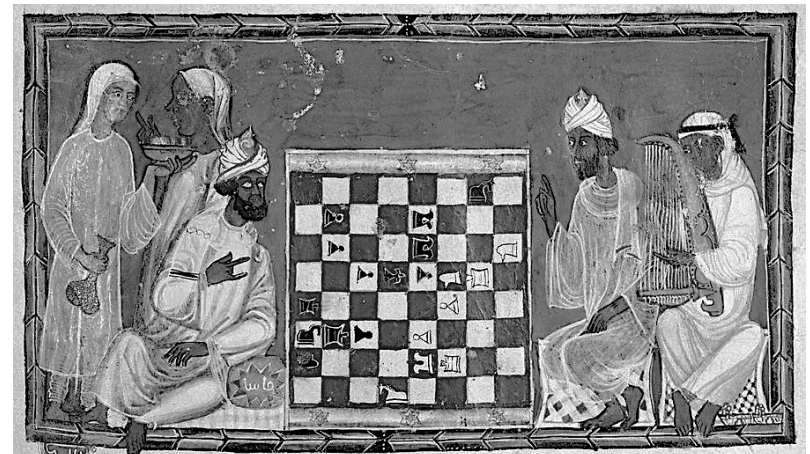


From India, the game traveled northeast over the Himalaya's to China in the 7<sup>th</sup> century, from China it traveled to Southeast Asia in the 8<sup>th</sup>-12<sup>th</sup> centuries, and to Siberia in the 15<sup>th</sup> century.

Chess also spread westward along the Silk Road, reaching Persia shortly before the Muslim conquest in the 7<sup>th</sup> century. There the game came to be known as shatranj. Shatranj was taken up by the Islamic world and spread throughout the Arabian Peninsula, North Africa, and Ethiopia in the next three centuries.

In the 8<sup>th</sup> century, Islamic Arabs and North Africans of Berber descent (aka the "Moors") crossed the Strait of Gibraltar, conquered the Visigoths, and brought most of the Iberian Peninsula (Spain and Portugal) under Islamic rule. From there, chess spread north across the Pyrenees Mountains into central Europe and Scandinavia in the next 2 centuries; by the end of 12<sup>th</sup> century, exquisitely carved chess sets from ivory and walrus tusks were being shipped as far west as Iceland (see page 19).

Chess was reintroduced to Europe in the 9<sup>th</sup> century via Sicily and Italy, and in the 11<sup>th</sup> and 12<sup>th</sup> centuries, knights returning from the Crusades introduced the game to Eastern Europe, from where it spread as far east as the Ural Mountains in central Russia.

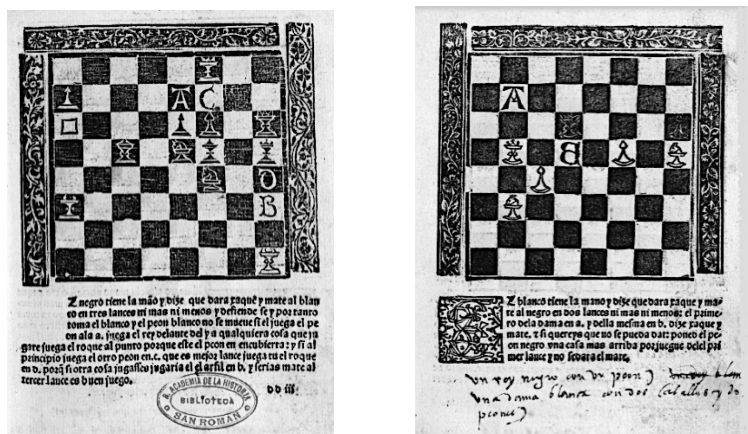


Moors Playing Chess, *El Libro de Juegos*, Alfonso X El Sabio, Andalusia, 1283.

One of the most important documents in the history of chess is *El Libro de Juegos* (Book of Games) or the *Libro de axedrez, dados e tablas* (Book of chess, dice and tables), which was commissioned by Alfonso X, King of Castile in the 13<sup>th</sup> century. The document was a Castilian translation of Arabic texts, which were themselves translations of Persian manuscripts.

*El Libro de Juegos* included over 100 miniatures typically showing two players (and sometimes spectators) on either side of a board tilted up to reveal either a chess problem or solution. Reflecting the contemporaneous cultural, ethnic, and religious tolerance of the time, the people depicted in the *El Libro de Juegos* included Christians, Muslims, Jews, men and women, and nobility as well commoners (see pages 11, 13, 15).

The oldest extant book devoted solely to the game of chess was written by Luis de Lucena in 1497, a time when the rules of chess were taking their modern form. Lucena's book, *Repetición de Amores y Arte de Ajedrez* (Repetition of Loves and the Art of Chess), played a significant role in establishing the current powers and movements of the pieces. At this time, e.g., pawns gained the option of advancing two squares on their first move and a variant of castling was introduced. These developments and other developments in the rules of the game spread throughout Western Europe. Nevertheless, regional differences about the rules of the game persisted, some of which, such as the rules concerning checkmate, weren't resolved until the 19<sup>th</sup> century.



Tactical puzzles from *Repetición de amores y Arte de ajedrez*, Luis de Lucena, 1496.

As chess clubs arose and international tournaments became common, pressure developed to codify the rules, and finally, in 1924, a governing body, the Fédération Internationale des Échecs (FIDE), was formed and it took up the task of standardizing the rules. FIDE also awards lifetime master titles to skilled players, the highest of which is grandmaster.

Since the second half of the 20<sup>th</sup> century, computers have been programmed to play chess with increasing success, to the point where computers play at a higher level than the best human players. IBM's computer Deep Blue was the first machine to overcome a reigning World Chess Champion in a match when it defeated Garry Kasparov in 1997.

## On the Etiquette and Cognitive Benefits of Chess

Chess has long been recognized throughout the world as a builder of strong intellects and has been endorsed as such by educators for millennia. Ben Franklin championed the game for those reasons, and in an essay he wrote (circa 1786) titled *The Morals of Chess*, he also underscored the character building aspects of the game:

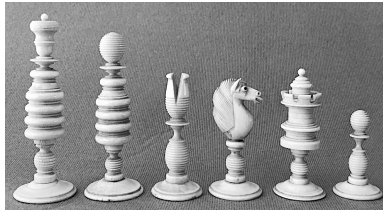
"The game of Chess is not merely an idle amusement. Several very valuable qualities of the mind, useful in the course of human life, are to be acquired or strengthened by it, so as to become habits, ready on all occasions. For life is a kind of chess, in which we have often points to gain, and competitors or adversaries to contend with, and in which there is a vast variety of good and ill events, that are, in some degree, the effects of prudence or the want of it. By playing at chess, then, we may learn:

1. *Foresight*, which looks a little into futurity, and considers the consequences that may attend an action: for it is continually occurring to the player, "If I move this piece, what will be the advantages of my new situation? What use can my adversary make of it to annoy me? What other moves can I make to support it, and to defend myself from his attacks?"
2. *Circumspection*, which surveys the whole chess-board, or scene of action, the relations of the several pieces and situations, the dangers they are respectively exposed to, the several possibilities of their aiding each other; the probabilities that the adversary may make this or that move, and attack this or the other piece; and what different means can be used to avoid his stroke, or turn its consequences against him.
3. *Caution*, not to make our moves too hastily. This habit is best acquired by observing strictly the laws of the game, such as, if you touch a piece, you must move it somewhere; if you set it down, you must let it stand. And it is therefore best that these rules should be observed, as the game thereby becomes more the image of human life, and particularly of war; in which, if you have incautiously put yourself into a bad and dangerous position, you cannot obtain your enemy's leave to withdraw your troops, and place them more securely; but you must abide all the consequences of your rashness.

And, lastly, we learn by chess the habit of not being discouraged by present bad appearances in the state of our affairs, the habit of hoping for a favourable change, and that of persevering in the search of resources. The game is so full of events, there is such a variety of turns in it, the fortune of it is so subject to sudden vicissitudes, and one so frequently, after long contemplation, discovers the means of extricating one's self from a supposed insurmountable difficulty, that one is encouraged to continue the contest to the last..."



English, bone, 1840.



Indian, ivory, c. 1800.



English, *French Regency*, boxwood, 1840.



English, *Northern Upright*, boxwood, 1800s.

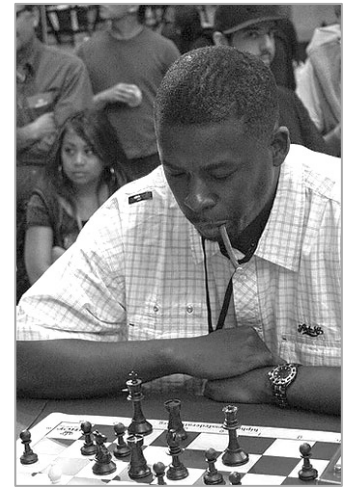
By the 19th century, given the rising popularity of international tournaments, it became necessary to use a standardized set of pieces that would enable players from different cultures to compete without getting confused. In 1849 that challenge would be met by the 'Staunton' design, produced by the firm of John Jacques of London. They are named after the English chess master Howard Staunton, a chess authority who organized many tournaments and clubs in London and was widely considered to be one of the best players in the world at the time. The Staunton chess pieces soon displaced all other designs as the first choice of chess players for casual and tournament play.



*Jacques-Staunton*, boxwood, 1865, one variation of the classic 'Staunton' that defines the style, according to international rules of chess, to be used for competitions.



Dizzy Gillespie, 1955.



GZA from the Wu-Tang clan. A serious chess player, GZA released an entire album *Grand-master* dedicated to the game in 2005. Every song had a chess-themed title, e.g., *Queen's Gambit*, *Advanced Pawns*, and *Illusory Protection*.



Tolstoy and a friend, 1907.



Baraka Shabazz, c. 1980 (Shabazz represented the U.S. in the under-16 girls' tournament in England, circa 1980).



Ray Charles, c. 1960.

## The Evolution of Chess Pieces



Illustration of Chaturanga pieces, *Mandragorias, seu, Historia shahiludii*  
Thomas Hyde. India, 1694.

Prior to 1849, there was no such thing as a “normal chess set.” At least not like we think of it today. As mentioned above, chess's ancient Indian ancestor chaturanga was originally conceived of as a field of battle, composed of the king, his counselor, and four divisions of an army. As the game spread geographically, however, the symbolic meaning of the game changed and the pieces were transformed from their origins in 6th century India to reflect or respect cultural and religious mores. In the Islamic world, e.g., the prohibitions against idolatry and the creation of figural images led to caliphal decrees prohibiting the game as early as the 8<sup>th</sup> century. Non-representational pieces, such as those below then replaced the figural ones in order to circumvent those laws.



From left to right, non-figurative pieces from different sets (1.5-2 inches high):

- King, ivory, Russia, 12<sup>th</sup> century
- Rook, carved deer bone, France, 10<sup>th</sup>-11<sup>th</sup> century
- Pawn, glass millefiori, Persia (Iran), 9<sup>th</sup>-10<sup>th</sup> century
- Queen, Persia, 9<sup>th</sup>-11<sup>th</sup> century
- King or pawn, carved jet, North Africa, 9<sup>th</sup>-10<sup>th</sup> century
- Bishop, ivory, Sicily 11<sup>th</sup>-12<sup>th</sup> century

As the game proliferated through Europe in 9<sup>th</sup> – 12<sup>th</sup> century, the game came to be thought of not as a battle between warring Indian factions but as a mortal grudge being acted in out by two kings in European medieval society. Thus, the original chess pieces: the counselor, infantry, cavalry, elephants, and chariots, became the queen, pawns, knights, bishops, and rooks, respectively. And as to the king—at the head of an ancient army or medieval royal court—the king remained a king.

Some of the most distinctive chess pieces discovered in Europe, and one of the last surviving medieval sets, are the elaborately worked Lewis chessmen, named after the bay in the Outer Hebrides, Scotland where they were found in 1831. Carved mostly out of walrus ivory and whales' teeth, they were found inside a sand dune in a small carrying case made of stone. The cache included 8 kings, 8 queens, 16 bishops, 15 knights, 12 warders (aka 'berserker', fierce warriors that are the equivalent of modern rooks), and 19 pawns carved from walrus tusks and whale teeth. In that the collection of pieces did not make complete sets and were in unused condition led to speculation that the pieces formed part of the stock of a merchant ship wrecked on the shores of the island, subsequently hidden and not recovered.

Although the origin of the Lewis pieces is contested, the style of the carvings on the thrones, the armor of the knights, and archeological evidence strongly suggests that they were made in Norway between 1150 and 1200. At this period, the Western Isles (aka Hebrides), where the chess pieces were found, were part of the Kingdom of Norway, not Scotland. It seems likely they were buried for safe keeping on route to be traded in Ireland or Iceland.

In 2001, a replica of the Lewis chess set played a cameo role in the first Harry Potter film, *Harry Potter and the Sorcerer's Stone*.



A seated Lewis chess king, side, front, and back view, and a wild-eyed berserker biting his shield, walrus ivory, 11<sup>th</sup> century (2-3" in height).