



## Introduction

## History

Chess is an incredibly constructed two-player board game that requires countless tactics and vital amounts of strategy. It is one of the oldest and most popular games played by several people worldwide. The origin of chess is remarkably controversial, nevertheless, chess is largely believed to have originated from a game called Chaturanga in India well before the 7th century. Chaturanga was dispersed throughout Asia (the Persians modified the game heavily) and transformed over centuries, ultimately ending up in Europe and taking its current form as what we know today - chess.

## Objective

In chess, one player plays as white controlling the white pieces, and another player plays as black controlling the black pieces. **Note:** keep in mind that some chess sets come with

different colors and more distinct pieces - regardless, everything stated in this article will still apply with some variation and optimization of the resources at hand. The objective of a chess game is to checkmate the opponent's king piece (while ensuring your king is safe). Checkmate essentially means to threaten the opponent's king with inescapable capture. Checkmate occurs when you move your pieces in such a way that the opponent's king is in a position to be captured (called check), and it cannot escape from the check on its next move.

## Why should you learn to play chess?

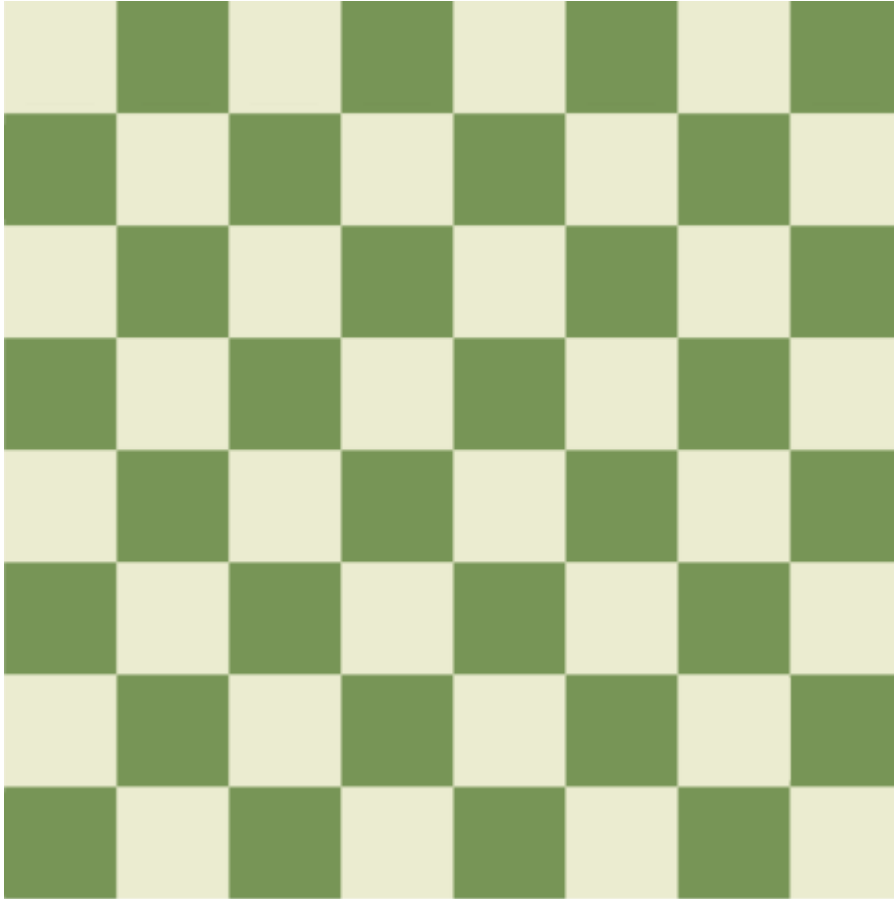
There are innumerable reasons why you should play or start learning to play chess! Playing chess has been shown to develop countless skills, namely, problem-solving skills, concentration, critical thinking skills, strategic thinking skills, pattern recognition, and so much more! Playing chess requires you to think ahead and assess every move while considering the potential consequences of each move. This ideally coerces you to solve problems and think strategically. Playing chess can significantly result in better cognitive performance and immensely improves brain health.

To start playing chess, you need a chessboard and the required chess pieces. For more advanced and serious chess players, there are other pieces of equipment necessary. If players are instructed to or want to play a timed game, a chess clock is required. If permitted, players can use writing utensils and scoresheets to record chess games.

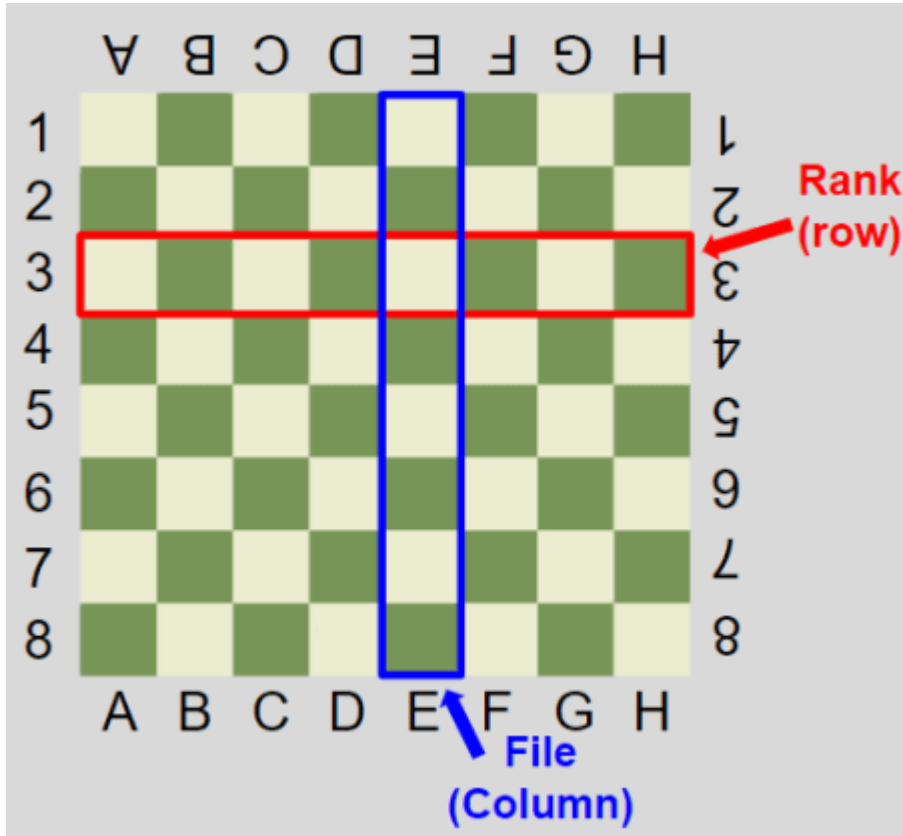
## Getting started

### The chessboard

Chess is played on a square game board (called a chessboard) that is comprised of 64 squares (8×8) of alternating colors in a checkered pattern.



These squares are arranged in ranks and files. Ranks are the horizontal rows that go from side to side across the chessboard. Files are the vertical columns that go up and down on the chessboard. There are eight ranks (marked from 1 through 8) and eight files (marked from a through h) on the chessboard.



## Chess Notation

Each square on the chessboard can be represented by using chess notation. Chess notation is ideal as it allows people to record chess games and describe the moves. There are various forms of chess notation, however, algebraic notation is the current standard for chess notation and the most used form. It is based on a system of coordinates that locates the name of every square by the letter of the file and the number of the rank from White's perspective.

A8	B8	C8	D8	E8	F8	G8	H8
A7	B7	C7	D7	E7	F7	G7	H7
A6	B6	C6	D6	E6	F6	G6	H6
A5	B5	C5	D5	E5	F5	G5	H5
A4	B4	C4	D4	E4	F4	G4	H4
A3	B3	C3	D3	E3	F3	G3	H3
A2	B2	C2	D2	E2	F2	G2	H2
A1	B1	C1	D1	E1	F1	G1	H1

We can use algebraic notation to identify each square on the chessboard as well as record chess games - which will be discussed later in this article.

## Chess pieces

There are 32 chess pieces in a chess set and 6 different types of chess pieces: the king, queen, rook, bishop, knight, and pawn. Each player starts with 16 pieces on each side: eight pawns, two rooks, two knights, two bishops, one queen, and one king. Each piece has its own unique movements and abilities.

Let's look at how each piece moves on the chessboard.

**Pawns** - pawns are the weakest piece on the chess board, yet they are an important part of chess strategy and can play a crucial role in the outcome of a game. A pawn only moves forward, if it is the pawn's first move then it can choose to move one or two squares. Thereafter, it can only move forward one square. The pawns are the only piece on the

chessboard that cannot go backward.

A pawn moving forward one square on its first turn:



A pawn moving forward by two squares on its first move:



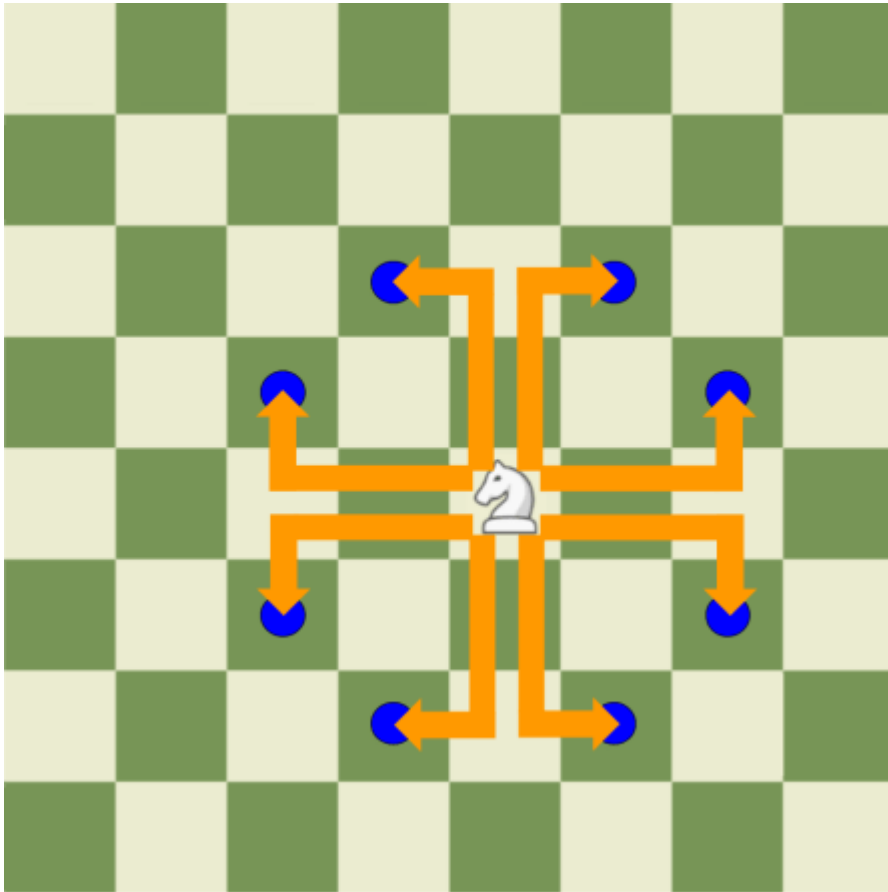
A pawn can capture an opponent's piece if that piece is one square diagonally away from the pawn.



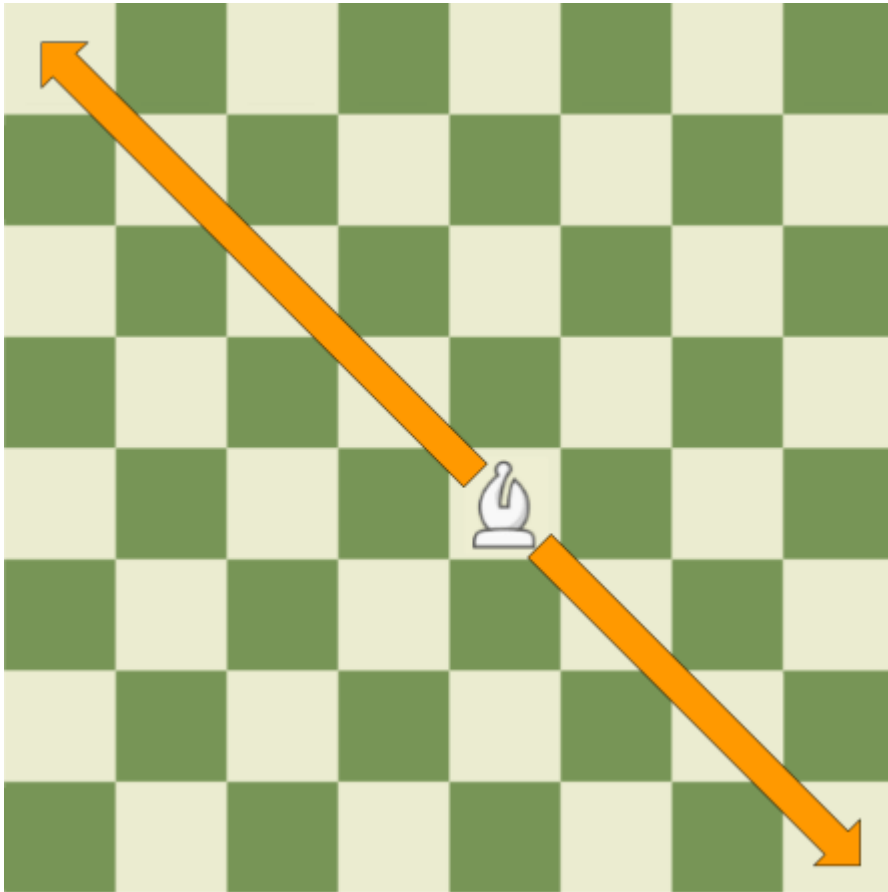
Pawns have two special moves: en passant and pawn promotion - which will be discussed in more detail later in the article.

**Knights** - A knight essentially moves in an L shape (two squares vertically and one square horizontally, or two squares horizontally and one square vertically). It can jump over other pieces and captures other pieces at the end of the L.

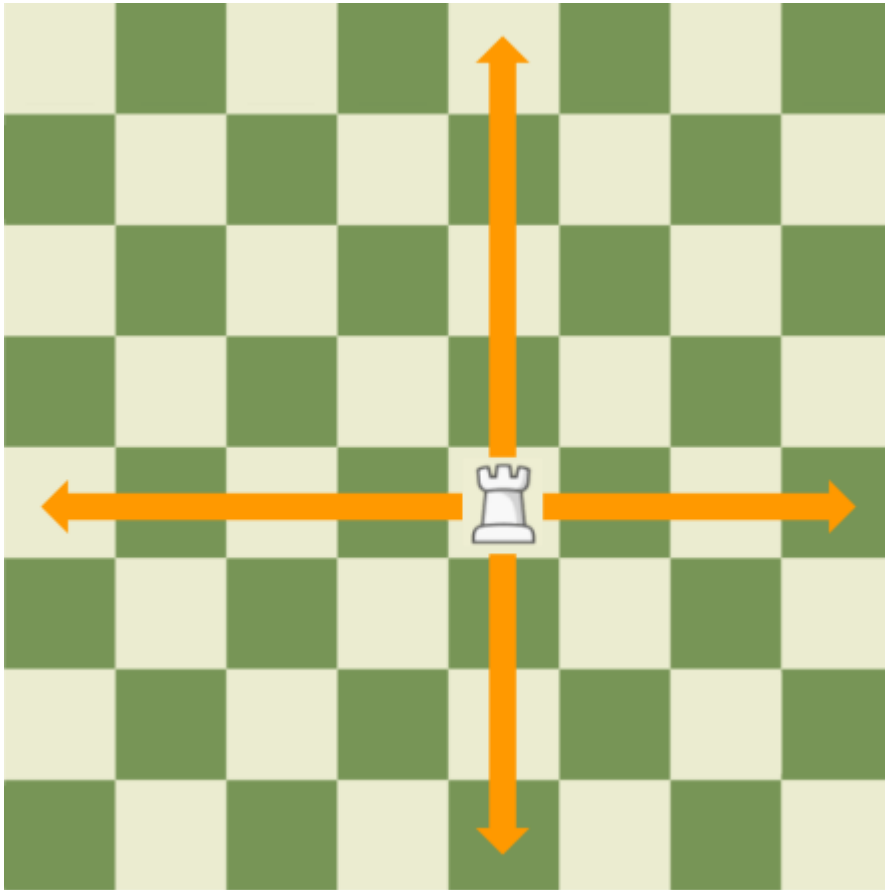




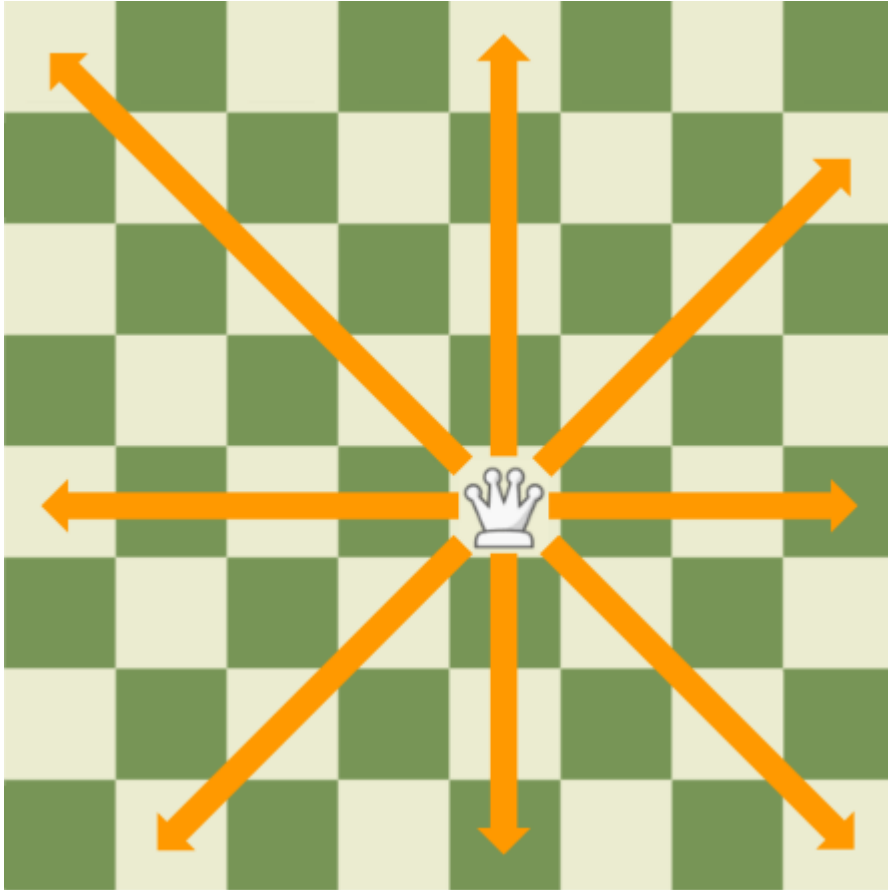
**Bishops** - A bishop moves any number of squares in a diagonal direction.



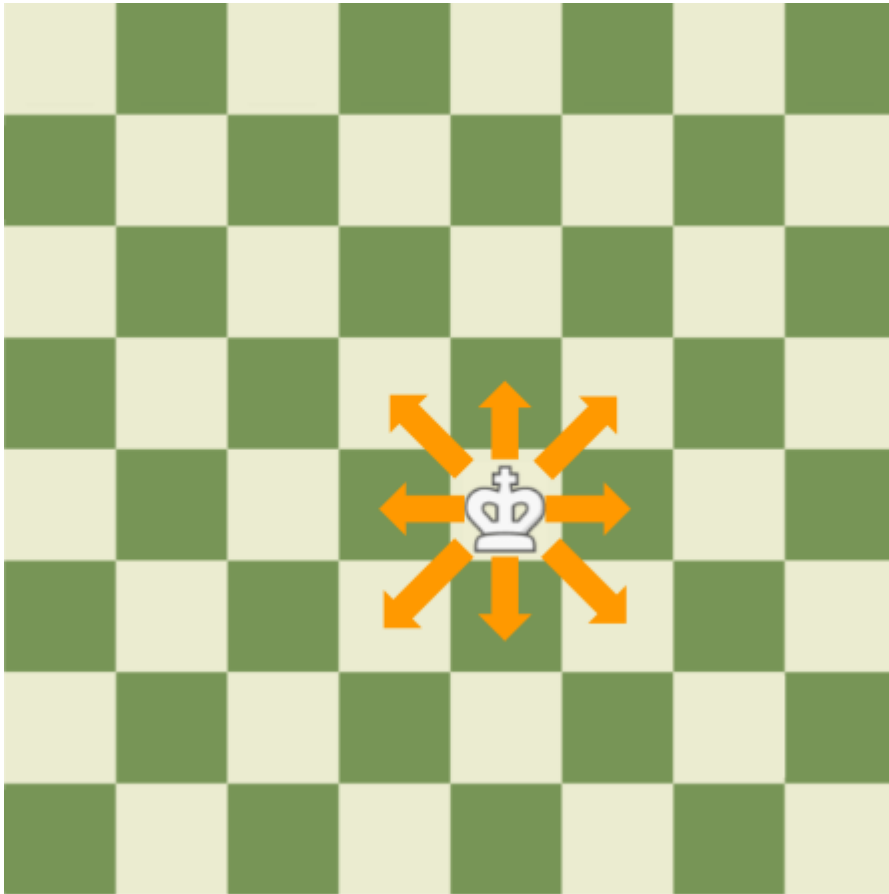
**Rooks** - A rook moves any number of squares either horizontally or vertically.



**Queen** - The queen is the most powerful piece on the chessboard and it moves any number of squares in any direction - horizontally, vertically, or diagonally.



**King** - The most important piece on the board. It moves one square in any direction. It cannot move if it is in check. It cannot move into check.



## Setting up the chessboard

The chessboard is set up in a way where there is a light-colored square at the bottom right of the chessboard and a darker-colored square at the bottom left. If your chessboard has notation at the edges then the files (a-h) should be right side up from White's perspective.

1. To set up the chessboard, start by placing all the pawns on the board. The eight white pawns are placed on the second rank (from a-h). The eight black pawns are placed on the seventh rank (from a-h).



2. The rest of the pieces of each player go behind the pawns. Place the white rooks at the lower left and right corners of the chessboard (at a1 & h1). Then place the black rooks at the upper left and right corners of the chessboard (at a8 and h8).



3. Next, set up the knights on the chessboard. Place the white knights next to the white rooks and place the black knights next to the black rooks.



4. Place the bishops next to the knights.





5. Place the queen on her own color, the white queen should be placed on the light square (d1) and the black queen should be placed on the dark square (d8).



6. Place the king on the remaining square on the row, with the white king on the right side of the white queen and the black king on the left side of the black queen.



This is what the chessboard should look like once you are done setting it up.

## Playing a game

In chess, the player with the white pieces makes the first move. Then, the player with the black pieces makes the second move and the players alternate turns from there. When playing a chess game to determine who will play as white, players can decide who will play as white through a random method such as flipping a coin or they can agree to play as white or black in alternating games.

## Check vs. checkmate

When playing a game of chess, the goal is to place the opponent's king in a position from which it cannot escape capture - checkmate. It is very important to understand what exactly a check and a checkmate are in chess.

**Check** - a situation where the king is under attack by an enemy piece and must avoid the check in one of three ways: capture the piece attacking the king, block the attack of the piece threatening the king, or simply move the king to a square that isn't under attack by an enemy piece.

**Checkmate** - a situation in which the king is in check and the player has no legal moves left to escape capture. the ultimate goal of chess.

Checkmating your opponent's king is the ultimate goal in chess. The players need to move the chess pieces in a strategic way to checkmate the opponent - this can be an elaborate process.

## Phases of a chess game

A game of chess is divided into and takes place in three major phases - the opening, middlegame, and endgame (sometimes a game can end earlier without even reaching the endgame). These stages are vital as they set a standard progression for the game that entails their own set of strategies, tactics, and principles. Let's look at each stage of a chess game in more detail.

### Opening

The opening consists of the first few moves of the chess game and ideally sets a foundation for how the rest of the game will be constructed. During the opening phase, players should focus on developing their pieces and establishing a strong position on the board. The opening of a chess game can have a substantial impact on the rest of the game.

### Middlegame

The middlegame is inarguably the most complex stage of a chess game. During the middegame, players should aim to control key areas and squares of the board, capture enemy pieces, and/or launch attacks on the enemy king while protecting their own king and maintaining a strong defense. This is a critical phase of a chess game and players must make strategic decisions as well as balance their attacks and defenses.

## Endgame

The endgame is the final phase of the game. Many pieces have been captured by this phase of the game so there are fewer pieces left on the chessboard. During this phase, players aim to checkmate their opponent's king or force a draw. There are several endgame scenarios (some include king and pawn endgames, king and queen endgames, queen and rook endgames, etc) and players should familiarize themselves with the specific strategies associated with each one to emerge victorious.

## Special Moves

Chess has many special moves that are essential for players to understand to play the game effectively. These moves are important to understand as they enrich and add complexity to the game which allows players to employ a variety of strategies and tactics.

## Castling

Castling is a special move where the king and the rook move simultaneously. This move protects the king and brings the rook out. There are two types of castling - king's side castling and queen's side castling. To castle on the king's side, move the king two squares towards the rook closest to the king, and then place the rook on the square over which the king has crossed.



To castle on the queen's side, move the king two squares towards the rook near the queen's side. Then place the rook on the square which the king has crossed.



There are a few rules to consider and follow when castling. You can castle only if the king and rook have not moved previously and there must be no pieces between the king and the rook. In addition, the king must not be in check and the squares that the king passes

through or ends up in must not be under attack by enemy pieces. Castling can help improve a player's position on the board by protecting the king and aids in launching an attack on the enemy king as well as other pieces. This is a powerful and important move for players to understand and utilize effectively.

## En passant

En passant is a special move that allows a pawn to capture an enemy pawn that has advanced two squares from its starting position and ends up next to the pawn on an adjacent file. To capture an enemy pawn in en passant, the pawn moves diagonally to the square behind the pawn that advanced two squares, as if the pawn had only advanced one square. En passant is a relatively rare occurrence in chess, but it can be crucial for players to utilize to their advantage. Understanding en passant allows players to be aware of the possibility of en passant and to be prepared to defend against it when necessary while also using it to take advantage of opportunities to capture enemy pawns.



## Pawn promotion

Pawn promotion is a special move that allows a pawn to be promoted to any piece (except for a king) when it reaches the end of the board. This is a very powerful move because it allows pawns - which are generally the weakest piece on the chessboard - to become a

more powerful piece and have a greater impact on the game. Changing the pawn to a more powerful piece can significantly improve the player's position on the board and can aid in launching attacks. Players should consider how to defend against pawn promotions and utilize them to their advantage as pawn promotion has the potential to change the outcome of a game.



## Ending a game

The ultimate goal of chess is to checkmate the opponent's king - this ends the game and ultimately decides the winner of the game. However, sometimes a game can end in other ways. Let's look at the different ways a game of chess can end:

### Checkmate

A game of chess ends when a player's king is checkmated - a situation where the king is in check and the player has no legal moves left to escape the capture. When a player's king is checkmated, the game is over and the player who checkmated the opponent's king wins. Players should be aware of the various ways in which it can be achieved and also should avoid allowing the opponent to checkmate their king.



## Stalemate

A stalemate is a situation where a player's king is not in check, but the player has no legal moves in chess. This leads to the game ending in a draw, where no player wins or loses.

## Resignation

A game of chess can end if a player chooses to resign from the game (players might resign because they feel that they are losing and have no chance of winning). This allows the game to not be prolonged unnecessarily and ends the game early. Players mainly choose to resign from a game when they are significantly behind in material or if they are in a position that is difficult to defend.

## Draw by agreement

A draw by agreement is essentially when players agree to draw the game and this ends the game in a draw where neither player wins or loses. A draw by agreement occurs when a player offers a draw to the opponent and the opponent accepts, ending the game in a draw.

## Draw by insufficient material

A draw by insufficient material is a situation in chess that occurs when both players do not have enough material to force a checkmate. This normally occurs when both sides end up only having a king and no other piece. In this situation, the game ends in a draw and no player wins or loses.

## Draw by 50-move rule

The draw by 50-move rule is a rule that allows a game of chess to not be prolonged unnecessarily. A draw occurs when fifty consecutive moves have been played and no pawn has been moved and no piece has been captured. One move consists of one move made by both players.

## Draw by three-fold repetition

Draw by threefold repetition occurs if the same position (same pieces occupy the same squares) on the board happens three times during the game. The game then ends in a draw

where neither player wins or loses.

## Recording a chess game

Algebraic notation is an excellent form of chess notation to record chess games. It allows you to record a chess game, which you can then later review and analyze for any mistakes, see if there were better moves, and essentially learn from those games.

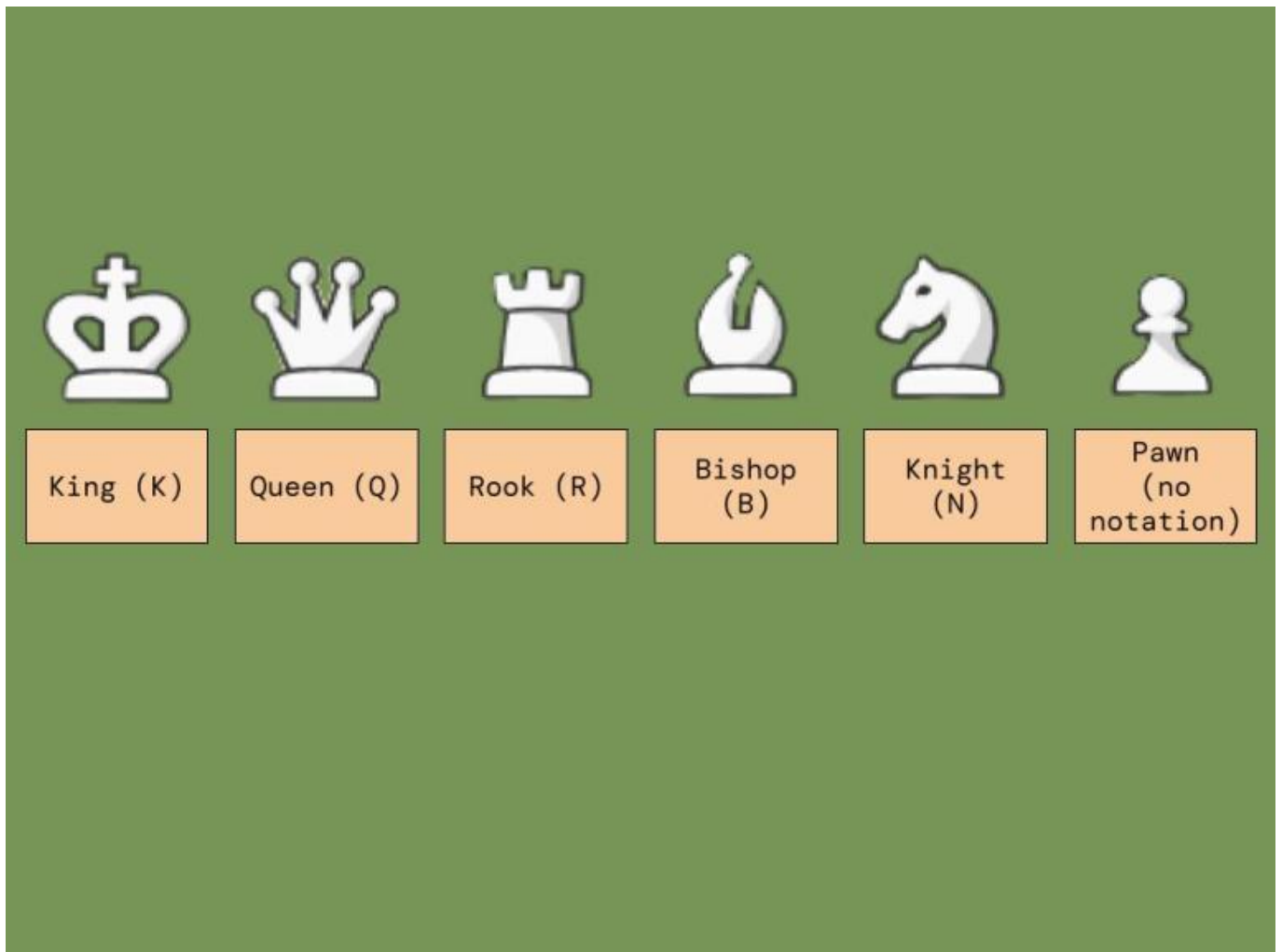
Let's look at how to record games with algebraic notation:

Along with the squares, each piece also has a way to be represented in chess notation. As mentioned earlier in the article - there are 32 chess pieces in a chess set and 6 different types of chess pieces: the king, queen, rook, bishop, knight, and pawn.

Each piece is assigned a letter in algebraic notation (except for the pawn) to be represented in chess notation:

- "K" for the king.
- "Q" for the queen.
- "R" for the rook.
- "B" for the bishop.
- "N" for the knight (since the king has already taken "K").
- No letter is used to represent the notation for the pawn - instead, the name of the square that the pawn has moved to is used.

\*Note that the letter used to represent each piece is capitalized.



To record a chess move, you record the letter of the piece that is being moved, and then the name of the square to which it has moved to. For pawns, just record the name of the square to which the pawn has moved to.

Recording your games and analyzing them will ultimately improve your chess strategy and allow you to improve your skills.

## Summary

Chess is a game of strategy and tactics, where players use their pieces to try to capture their opponent's pieces and force a checkmate. It is an exciting game of rich history and culture that has captivated many players for several centuries. Chess can be learned and enjoyed by people of all ages and skill levels and it is a great way to exercise your mind and

improve your strategic thinking skills.