

The Chess Primer

Learning How to Play Chess

Version 2.0
September 10, 2019

By

Chris Felix

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Introduction

The Chess Primer – Learning How to Play Chess has been created as a self-training guide for learning how to play chess. This workbook deals with the rules of the game and is intended to get the student familiar with the game and able to play a game of chess.

By the end of this workbook the student should be confident that they understand the rules of the game and can complete a game of chess with family and friends.

As a National Candidate Master and someone who has been teaching chess for over 15 years, I hope everyone that uses this free training guide will find it interesting and useful.

For anyone wishing to use this material as a teaching resource in a school, library, club or group, they are more than welcome to use this guide to assist and help others learn how to play chess!

I welcome all feedback and comments. Feel free to e-mail me at chrisfelix1337@hotmail.com.

-Chris Felix

2019 Update

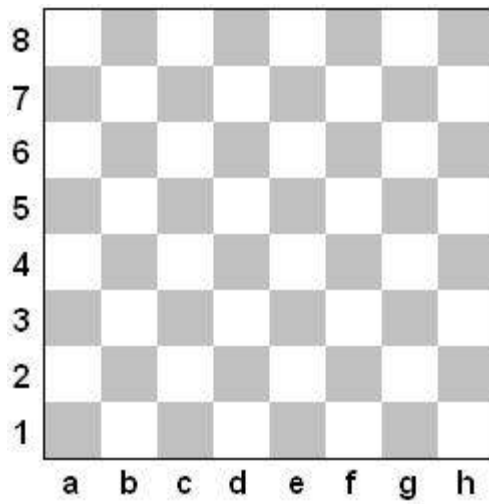
Small fixes and updates were made to this workbook which originally released on September 20, 2012. With the help of Mr. Don Bidgood from the Dartmouth Junior Chess Club we have added a section for the student to learn to play demolition chess, a fun and exciting side-game to practice how the pieces move.

-Chris Felix

The Board

The first thing to learn about chess is the board. This is the playing field that all the pieces will move through and be limited to.

The chessboard is an 8-by-8 grid for a total of 64 squares consisting of two types of squares, **light squares** and **dark squares**, which are generally black and white. Chessboards appear with letters and numbers on the board for the ease of describing parts of the chess board.

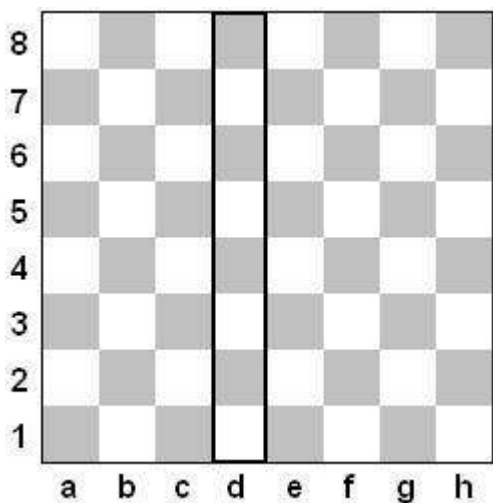


When setting up a chessboard, the right-most corner square should be a light square. You can remember this with an easy saying, “**white in the right**”.

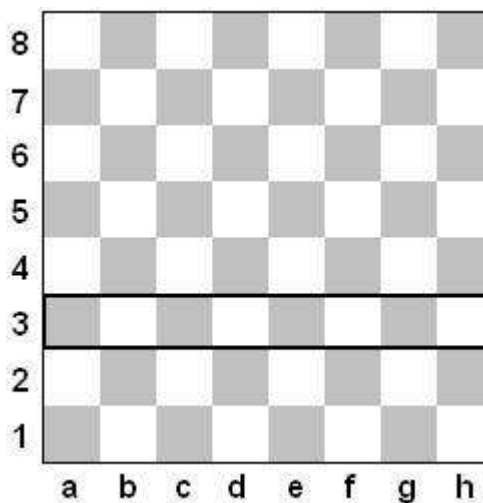
With the diagram above we can see that the light square is in the right hand corner, and letters are running left to right across the board and the numbers are running up and down the board.

If you have a chessboard that is not numbered and lettered, it would be helpful to label your board as shown in the diagram as you progress through this workbook. Practicing all of the lessons and problems on a real board will benefit you more than just looking at the 2D board diagrams.

On the chessboard the lettered columns are called **files**. Every square that falls in the “a” column is referred to as the “a file”. The numbered rows are called **ranks**. Every square that falls in the “4” row is called the “4th rank”. The diagrams below demonstrate this idea and highlights the squares.



The “d file” is highlighted

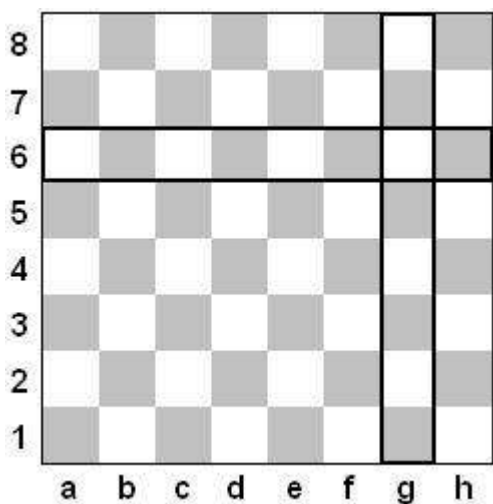


The “3rd rank” is highlighted

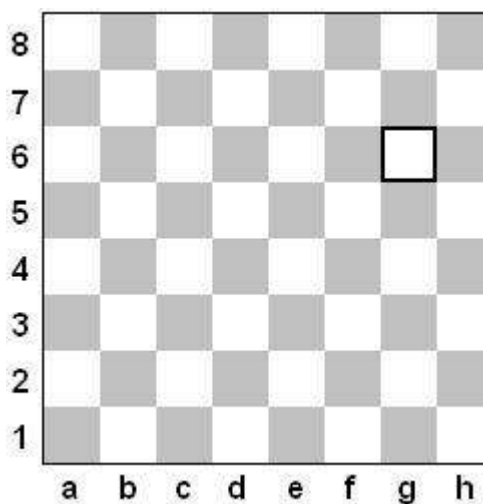
Letters for parts of the chessboard are always written or referred to in lower case letters, never capitals.

When we want to refer to a specific square on the chessboard, we first look at the file the square belongs to, followed by the rank the square belongs to and merge those into a single letter-number combination.

For example, a square that belongs to the g file and the 6th rank is called the g6 square. Notice how the letter is lower case and appears first, followed by the number.

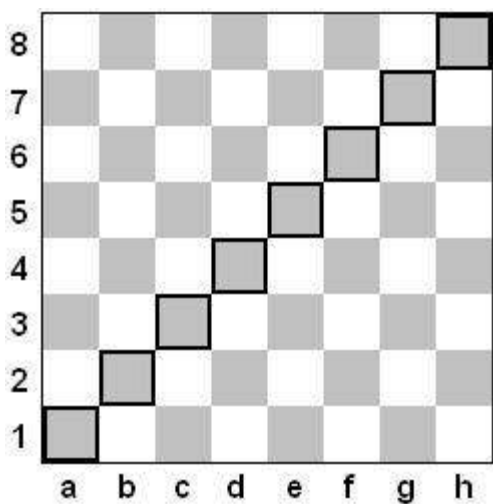


This square belongs to the g file and 6th rank



It’s the g6 square!

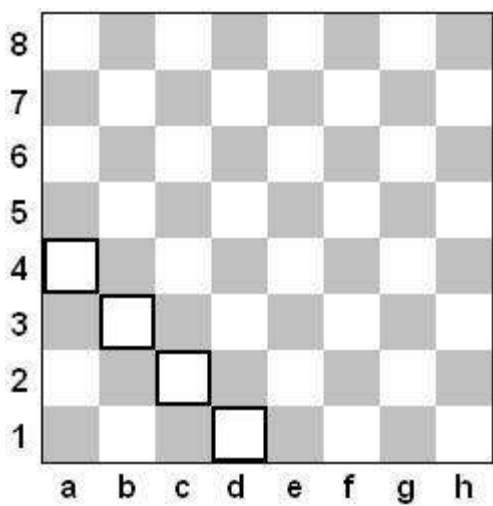
Diagonals also are named in chess, as they also play an important role on the board. When we reference a diagonal we use the starting and ending squares along that diagonal.



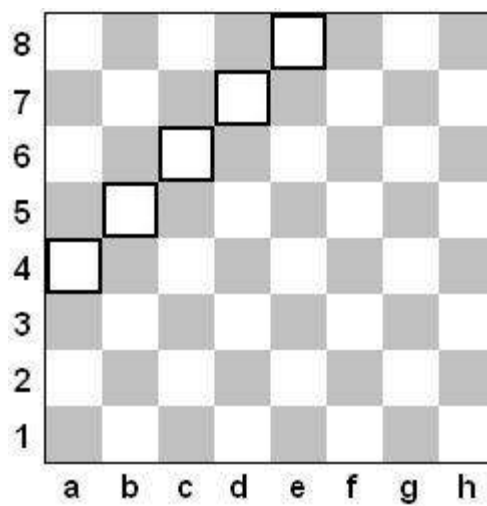
The image to the left shows the a1-h8 diagonal. This is because the diagonal starts at the a1 square and ends on the h8 square.

Generally we use the bottom-most square of the diagonal as the “starting point” but this is not a strict rule. Many people will also call this the h8-a1 diagonal!

Below are two more examples of the naming for diagonals.



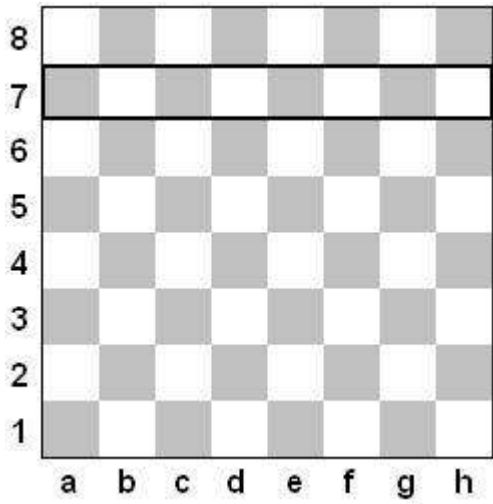
The d1-a4 diagonal! (or a4-d1)



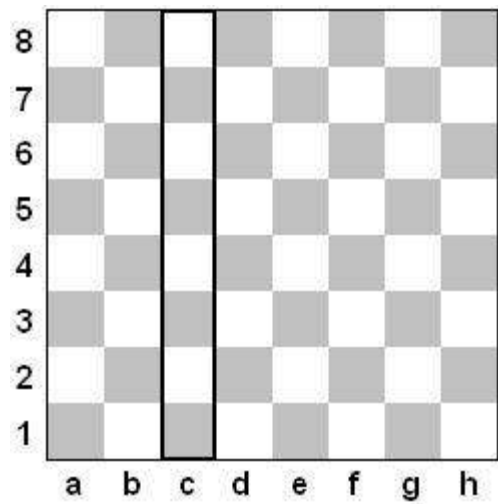
The a4-e8 diagonal! (or e8-a4)

Exercise 1

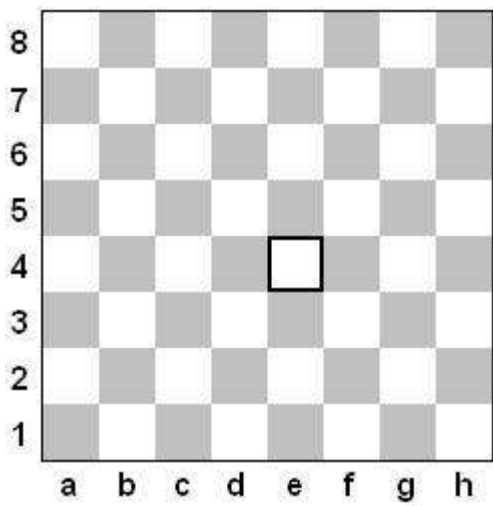
Now it's time to try it yourself! Below each diagram write in what the area of the board is named.



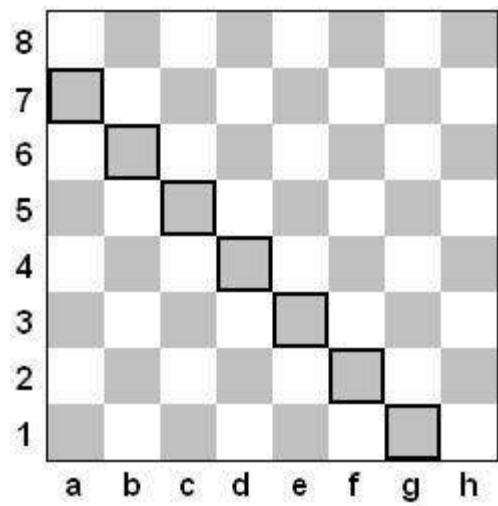
1. _____



2. _____

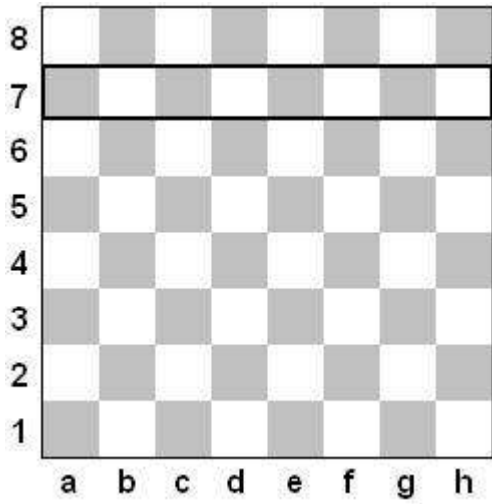


3. _____

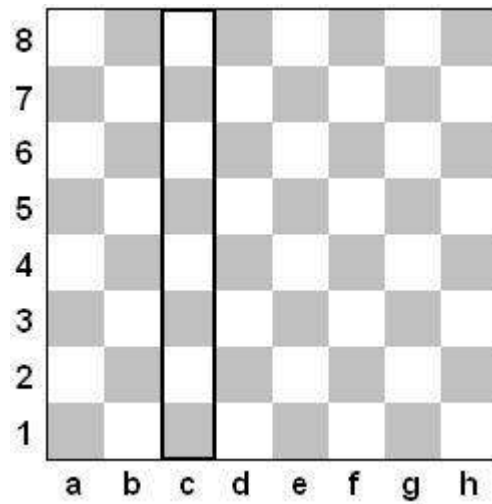


4. _____

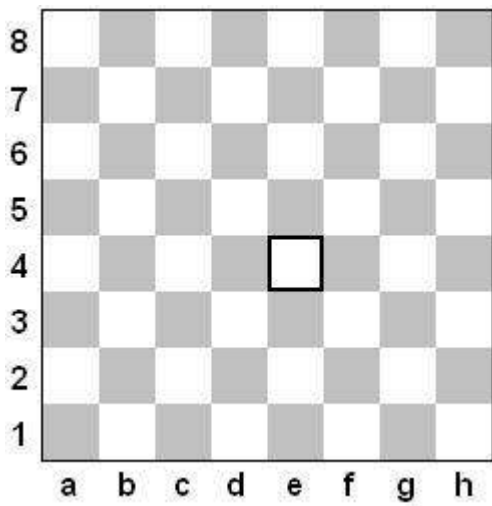
Exercise 1 Answers



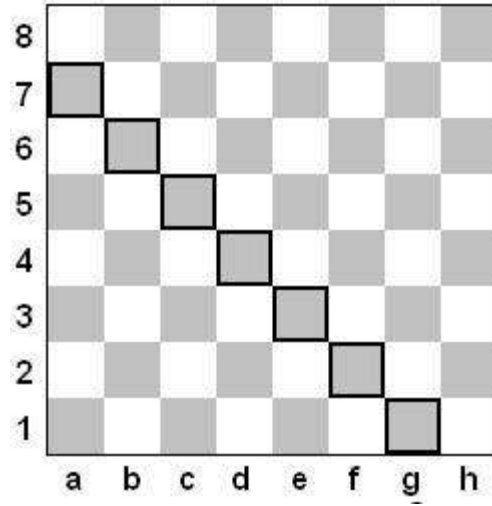
1. The 7th Rank



2. The c File



3. The e4 Square



4. The g1-a7 Diagonal (or a7-g1)

Don't forget that when referring to parts of the chessboard the letters are always lower case!

Moving the Pieces

When you move a chess piece, you pick up the piece and place it down on a different square that the piece can legally move to.

You may never move a piece to a square that is already occupied by one of your own pieces.

When you move one of your pieces to a square that is occupied by one your opponent's pieces, the opponent's piece is removed from the board, and your piece is now placed on that square. This is called **capturing** your opponent's piece.

If a chess piece could capture an opposing piece the very next turn, that piece is said to be **attacking** the opposing piece.

Touch Move Rule

Chess is a game of visualization and thinking; the following rules are generally applied to chess games, but are not always enforced:

- When you touch one of your pieces, you must move that piece if it can be legally moved
- When you touch one of your opponent's pieces, you must capture that piece if it can be legally captured
- You complete all of your chess moves with a single hand (including hitting your clock, if a clock is being used)

Practicing How to Move the Pieces

Once you've learned how the pieces move you can practice moving them by playing a game called "Demolition Chess" without knowing the rest of the rules of chess. Instructions on how to play demolition chess can be found on page 32.

There is also a cheat sheet to help visualize how the pieces move on page 33.

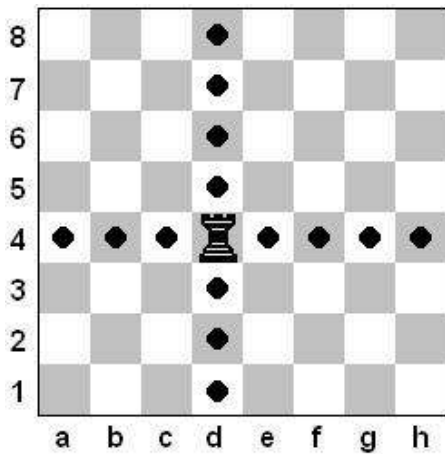
The Pieces

The Rook

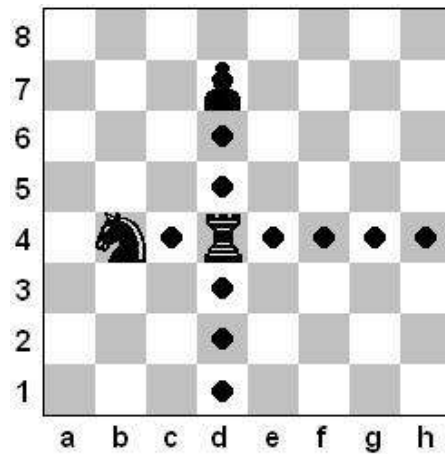
Meet the rook, the piece that resembles a castle tower. Your chess set will have two white rooks and two black rooks.



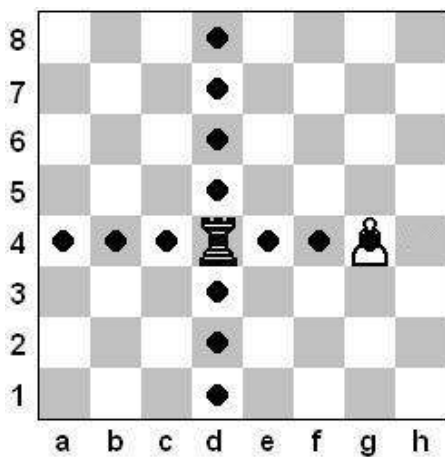
The rook may move any number of squares you want left or right across a rank or up and down along a file, but may not go through any other pieces.



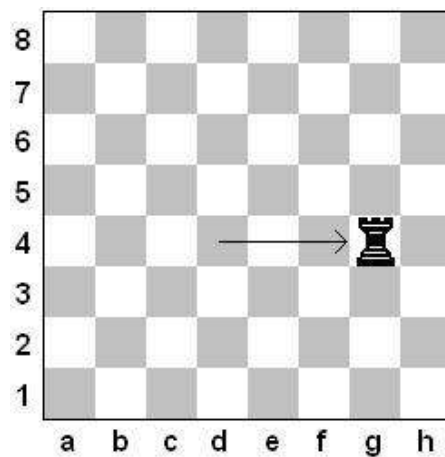
The rook can move any number of squares



The rook can't go through other pieces!



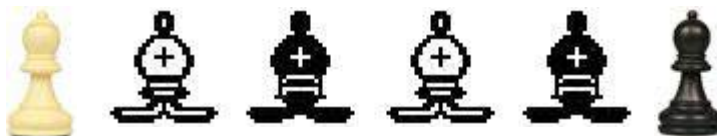
The rook can capture the white piece!



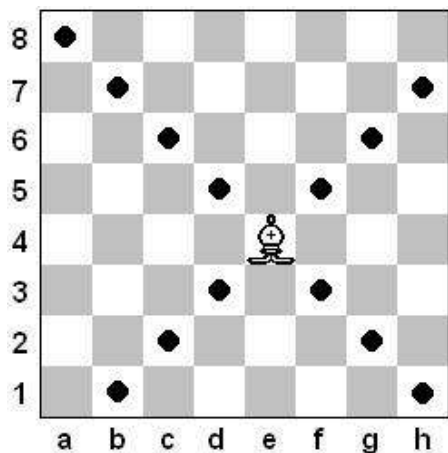
The piece is captured!

The Bishop

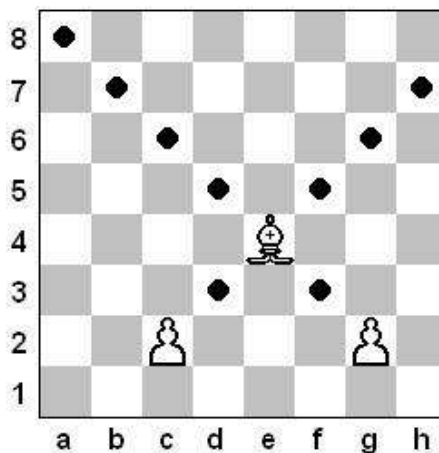
The bishop is one of the more interesting pieces in chess; generally the piece looks like a hat with a little ball on the top and may have a slit cut into the side of the piece. Your chess set will have two white bishops and two black bishops.



The bishop may move any number of squares you want diagonally, but may not go through any other pieces.



The bishop can move any number of squares



The bishop can't go through other pieces!

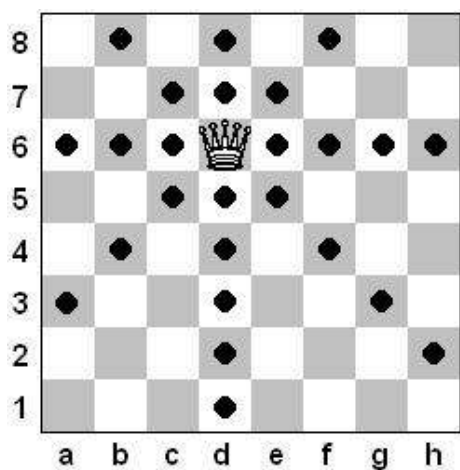
Because the bishop can only move diagonally, this means a bishop that starts on a light square will only ever be able to move on light squares. The bishops are named the **light squared bishop** and **dark squared bishop**.

The Queen

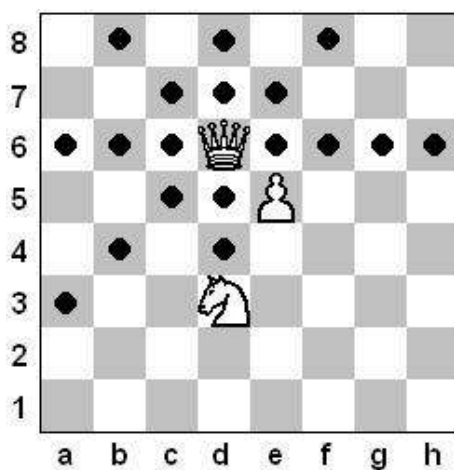
The queen is the most powerful piece in chess; it is a combination of the rook and bishop! Your chess set will generally have one white queen and one black queen. Some chess sets come with multiple queens to use as spares. The queen will be one of the tallest pieces and have a pointy crown on the top of the piece.



The queen may move any number of squares you want left or right across a rank, up and down along a file or diagonally, but may not go through any other pieces.



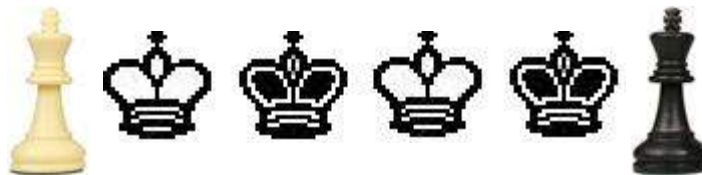
The queen can move any number of squares



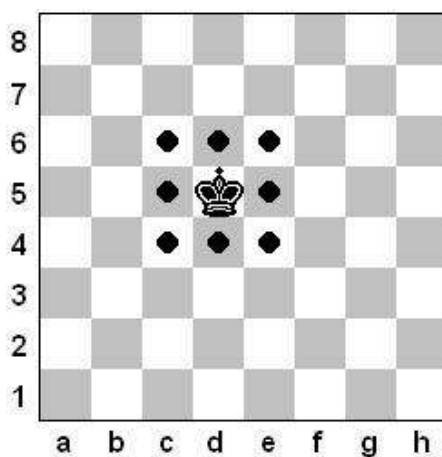
The queen can't go through other pieces!

The King

The king is the most important piece in chess as we will learn later. Your chess set will have one white king and one black king. The king generally be the tallest pieces and have a cross on his head.



The king can only move one square in any direction.

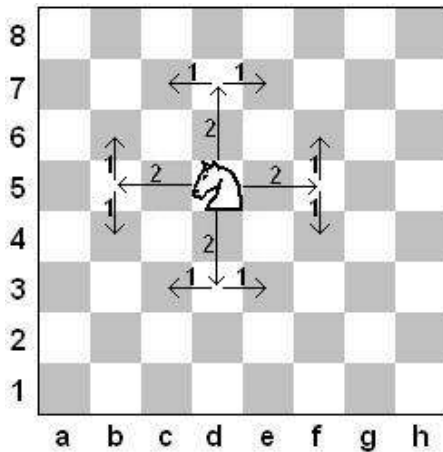


The Knight

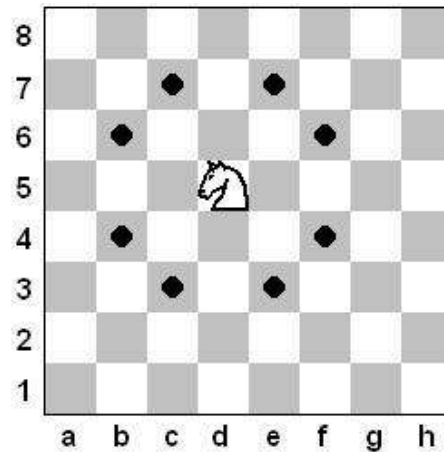
The knight is an unusual piece, as it's the only piece in chess that can "jump" over other pieces.. Your chess set will have two white knights and two black knights. The knight will generally look like a horse.



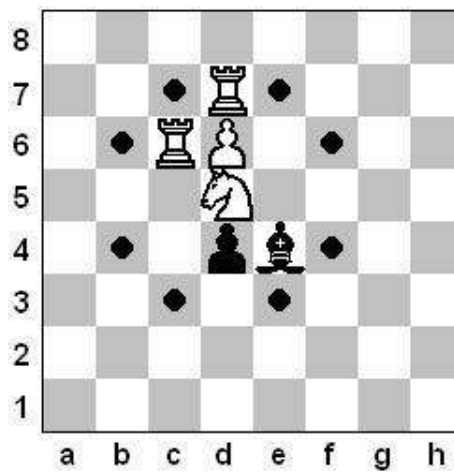
The knight moves in the shape of an "L" and goes directly from the square it is on to the square you are moving it to, this means it can jump over any piece in between those two squares. To find all of the squares a knight can move to you must count two squares in a direction, followed by a single square in an adjacent position from the square the knight is on. For example, you can count two squares "up" and then one square to the "left", the following diagram will make this easier to visualize.



Counting out the squares for possible moves



The squares the knight can move to



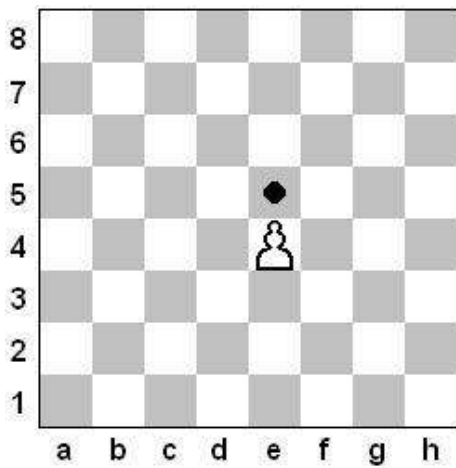
Knights can jump over other pieces!

The Pawn

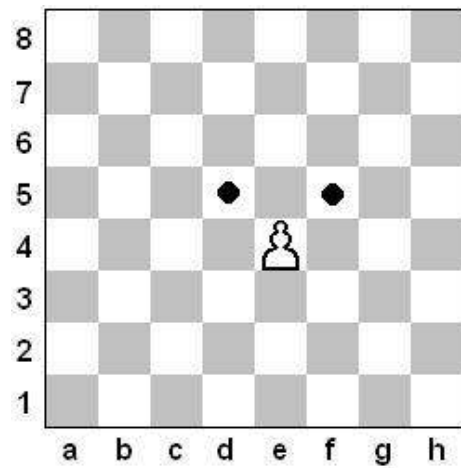
The pawns are very unique and often thought of as weak, this couldn't be further from the truth! Your chess set will have eight white pawns and eight black pawns.



The pawn can only move one square forward if that square is unoccupied by any other piece. A pawn can only capture an opposing piece one square diagonally. A pawn is the only piece that can **never** move backwards!

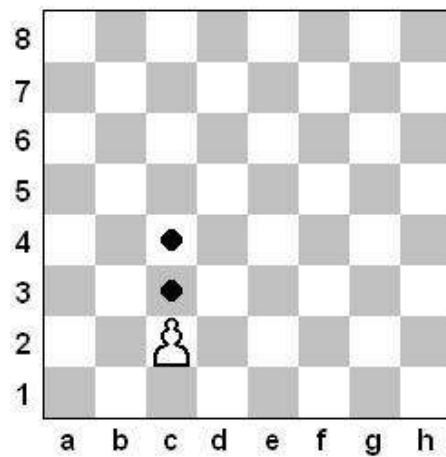


The pawn can only move one square forward



The pawn can only capture one square diagonally

If a pawn has not been moved in the game yet, that pawn is allowed to move either one or two squares forward for it's first move.



Exercise 2

Write the name of the piece in the space provided beside the picture.



1. _____



2. _____



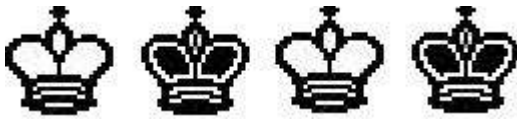
3. _____



4. _____



5. _____



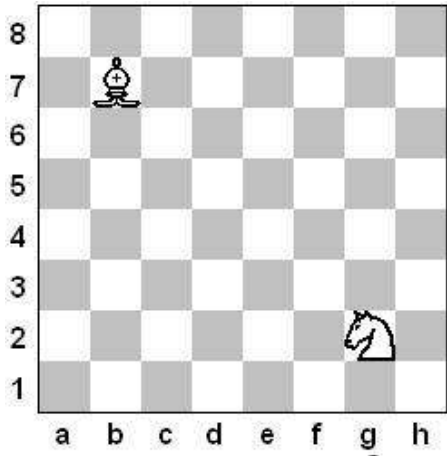
6. _____

7. What is the only piece in chess that may not ever move backwards?

8. The Queen is the combination of which two pieces?

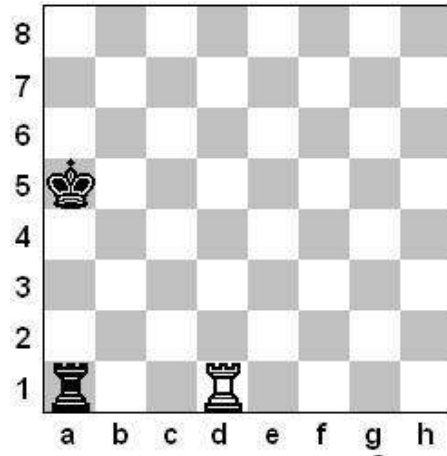
9. Which is the only piece in chess that can jump over other pieces?

Count how many squares the pieces can legally move to in the diagrams given.



10. White Bishop: _____

11. White Knight: _____

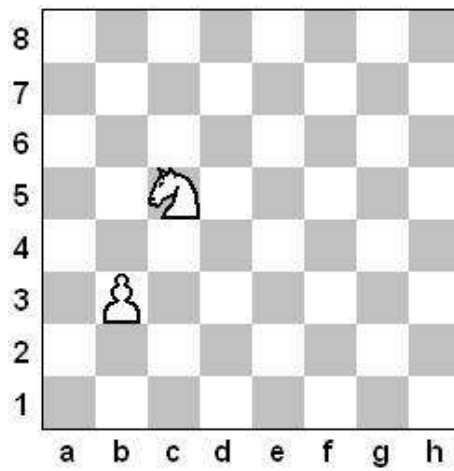


12. Black Rook: _____

13. Black King: _____

14. White Rook: _____

15. Name each of the squares in the position below that the knight can move to.



List the Squares: _____

Exercise 2 Answers

Write the name of the piece in the space provided beside the picture.



1. The Queen



2. The Bishop



3. The Knight



4. The Rook



5. The Pawn



6. The King

7. What is the only piece in chess that may not ever move backwards?

The pawn! It can never move backwards, only forward while moving and capturing.

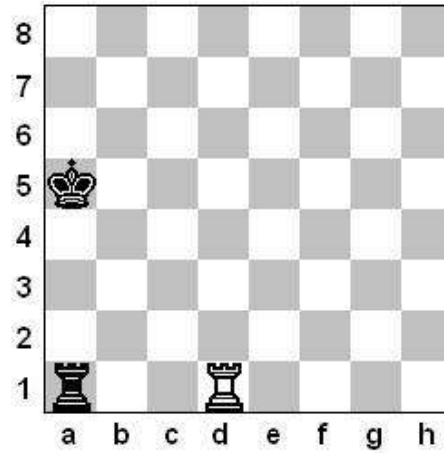
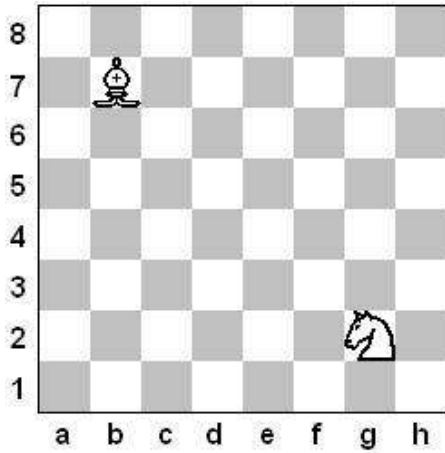
8. The Queen is the combination of which two pieces?

The Rook and the Bishop.

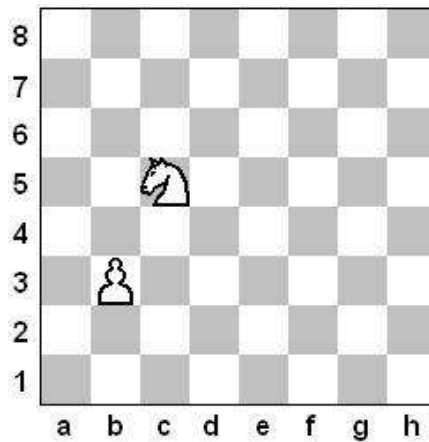
9. Which is the only piece in chess that can jump over other pieces?

The Knight.

Count how many squares the pieces can legally move to in the diagrams given.



- 10. White Bishop: 7 (a8, c6, d5, e4, f3, a6, c8)
- 11. White Knight: 4 (e1, e3, f4, h4)
- 12. Black Rook: 6 (a2, a3, a4, b1, c1, d1!) Don't forget that you can capture the rook on d1!
- 13. Black King: 5 (a6, b6, b5, b4, a4)
- 14. White Rook: 14!! (a1! b1, c1, e1, f1, g1, h1, d2, d3, d4, d5, d6, d7, d8)
- 15. Name each of the squares in the position below that the knight can move to.



a4, a6, b7, d7, e6, e4, d3, remember you can't land on your own piece!

The Object of the Game

The object of the game of chess is to trap your opponent's king. You win the game if your opponent's king is in danger and they cannot make a move to save their king.

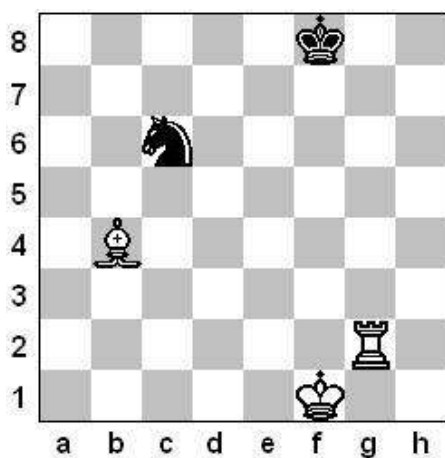
Check

When the king is being **attacked** by a piece, the king is said to be “**in check**”. When a player moves a piece to attack the king, that player announces “**check**” to the opponent.

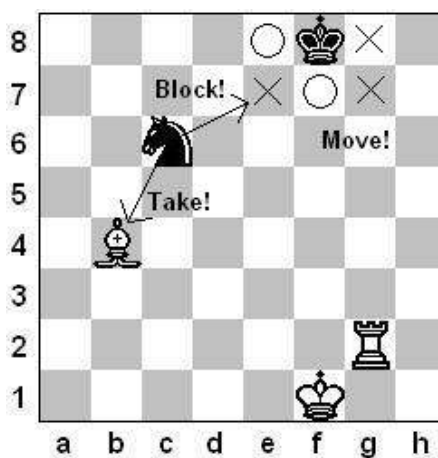
When a king is in check, that player must make a move so that the king is not in check at the end of the turn. This also means that the king cannot move into check, this is an “**illegal**” move. There are three ways that a player can get out of check, they are:

- Move the king, so that the king is not in check
- Capture the checking piece, so that the king is not in check
- Block the checking piece, so that the king is not in check

You can remember these three things with an easy saying, “**Move, Take or Block!**”



The black king is in check by the bishop on b4!



Black can **move** the king to e8 or f7 (e7 is still attacked by b4 bishop g7 and g8 are attacked by the g2 rook)

Black can **take** the bishop on b4 with the knight

Black can **block** the check by moving knight to e7

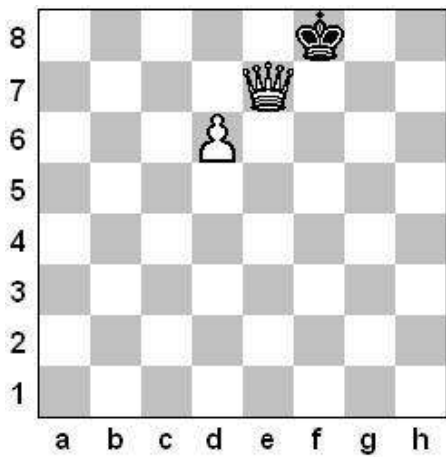
Checkmate

If a king is currently in check, and cannot make a legal move to get the king out of check by moving, taking, or blocking, then the king is said to be in “**checkmate**”. The game is over, and the checkmated side loses the game.

To decide if a position is checkmate, you must ask yourself the following questions:

1. Is the king currently in check?
2. Can the king move out of check?
3. Can you capture the piece to escape check?
4. Can you block the piece to escape check?

If the king is currently in check, and the answer to the other questions is no, then the position is checkmate.



1. Is the king currently in check?

Yes, by the queen on e7

2. Can the king move out of check?

Yes, the king can move to g8
(e8, f7, g7 still attacked by the queen)

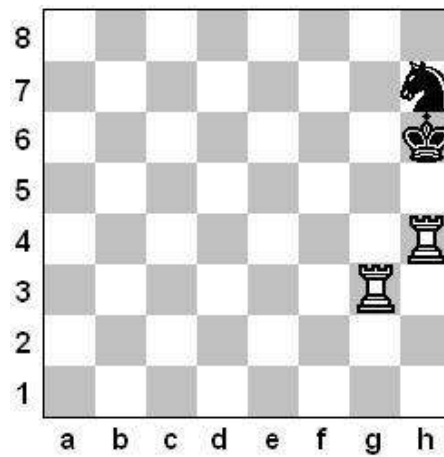
3. Can you capture the piece to escape check?

No, because the king would still be in check by the pawn on d6!

4. Can you block the piece to escape check?

No, there are no pieces to block

The position is **not** checkmate; the King can **move**



1. Is the king currently in check?

Yes, by the rook on h4

2. Can the king move out of check?

No, all squares are covered by the rooks

3. Can you capture the piece to escape check?

No, no piece can capture the rook on h4

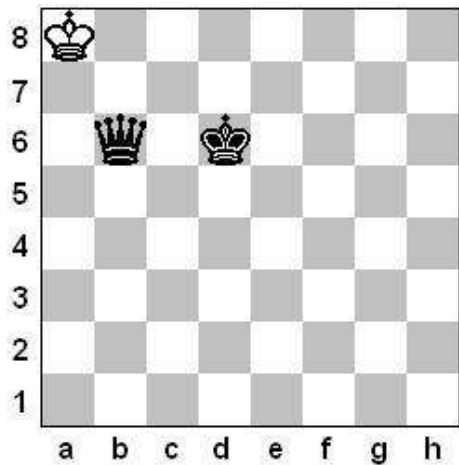
4. Can you block the piece to escape check?

No, the knight cannot block the rook on h4

The position is checkmate!

Stalemate

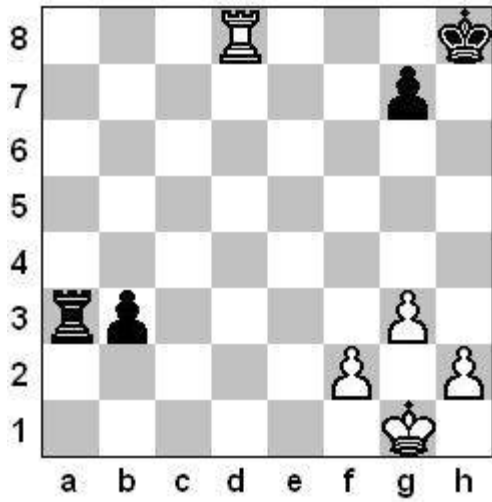
If a player cannot make any legal move on their turn and they are not in check, the game is called a draw by stalemate.



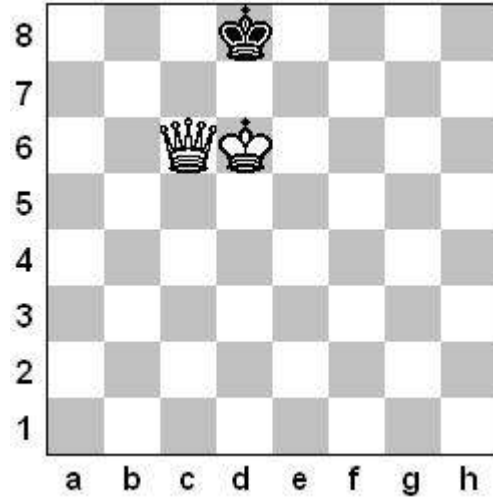
White can't move anywhere on their turn! The game is a draw!

Exercise 3

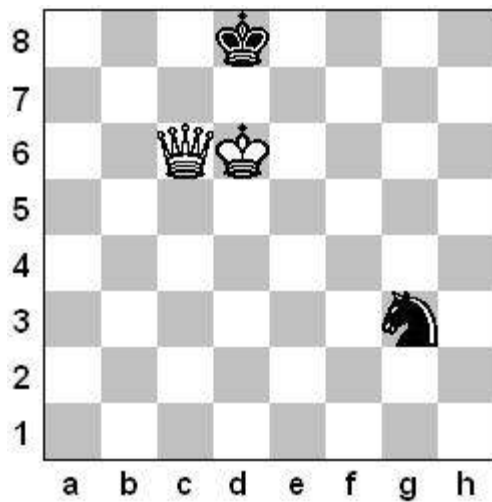
Indicate below each position whether the position is Check, Checkmate, Stalemate, or nothing.



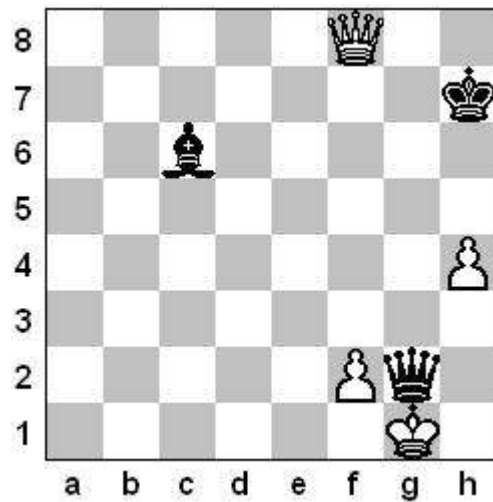
1. _____



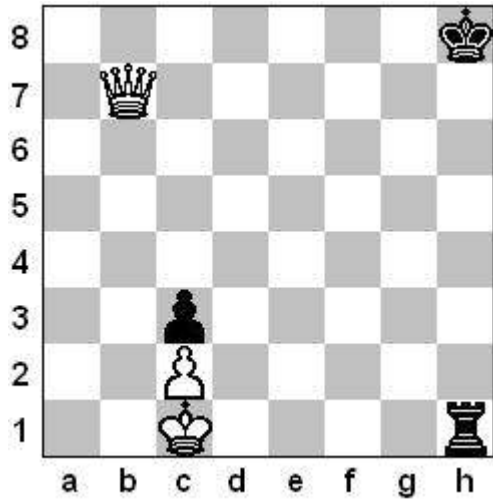
2. _____



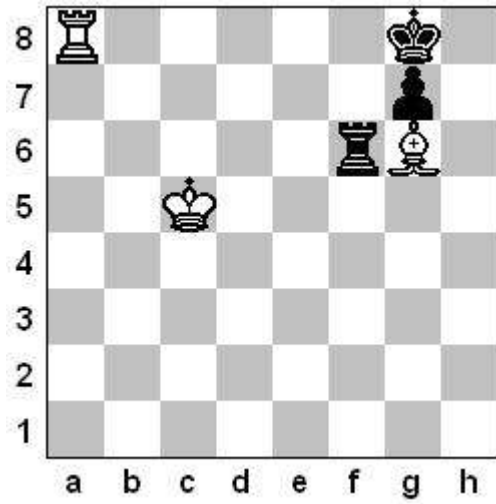
3. _____



4. _____



5. _____



6. _____

Exercise 3 Answers

Position 1:

Check!

The king is in check by the white rook on d8, however it is not checkmate because the king can legally move to h7.

Position 2:

Stalemate

The king is not currently in check, and black has no legal moves on the board. The position is a draw even though white has a queen and black has only a king!

Position 3:

Nothing!! Play continues

The king is not in check, but black can legally move his knight so the position is not a stalemate even though the black king cannot legally move.

Position 4:

Checkmate

The white king is checkmated. He has no squares to legally move, he cannot capture the black queen because of the bishop on c6.

Position 5:

Check

This position is only check, as the white queen can capture the rook on h1. After this capture the white king will not be in check.

Position 6:

Check

This one is tricky, but black can block the check with the rook! Moving black rook to f8 will block the check from the white rook.

Special Moves

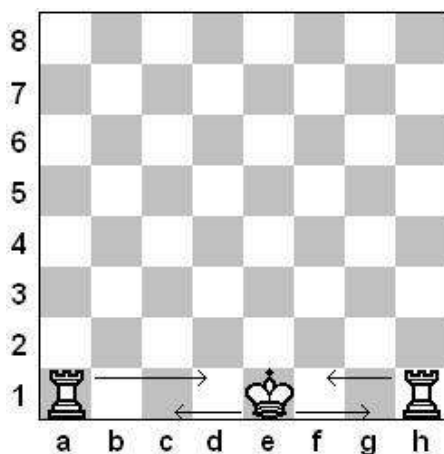
There are three special moves in chess, castling, en passant, and pawn promotion.

Castling

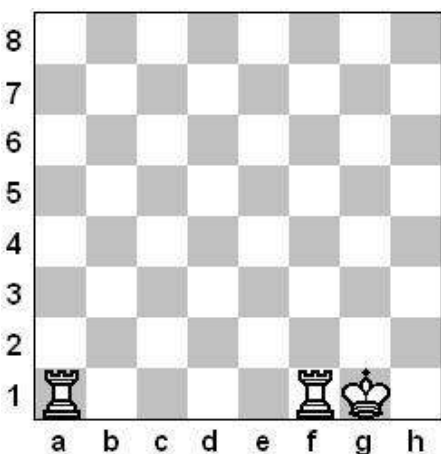
Castling is a special move where the king and a chosen rook are both allowed to move in the same turn. To perform castling, you choose a rook and then move the king two squares towards the chosen rook and then the chosen rook is placed directly on the other side of the king. You may perform castling if the following criteria are met:

- The king has not previously moved
- The chosen rook has not previously moved
- There are no pieces between the king and the chosen rook
- The king is not currently in check
- The king does not pass through a square that is being attacked by an enemy piece
- The king does not end up in check after castling

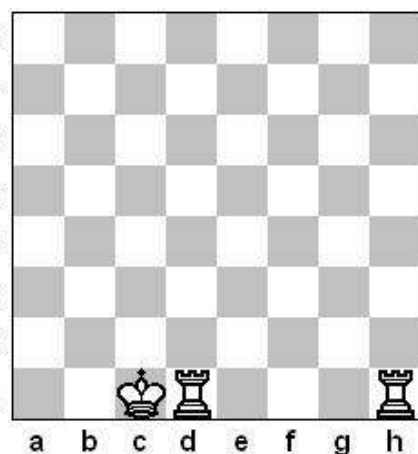
Players can castle both kingside (with the chosen rook on the h file) and queenside (with the chosen rook on the a file).



You can castle either side!

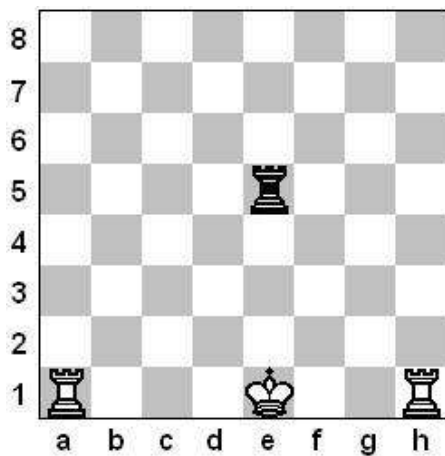


White castled kingside.

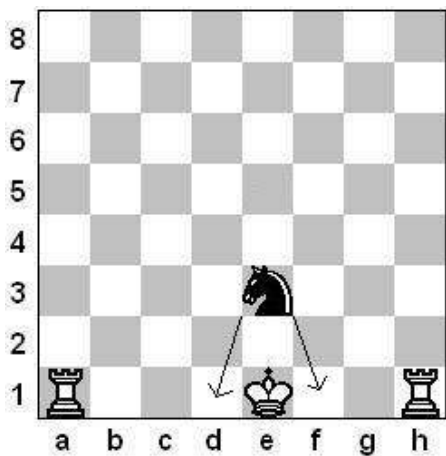


White castled queenside.

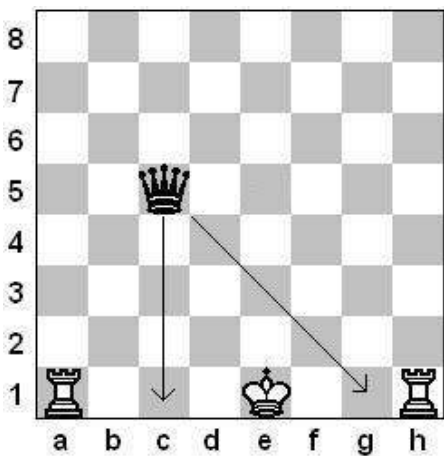
Rules 4, 5 and 6 can easily be remembered by the following saying: “Can’t castle while in check, through check or into check”.



Can't castle while in check!



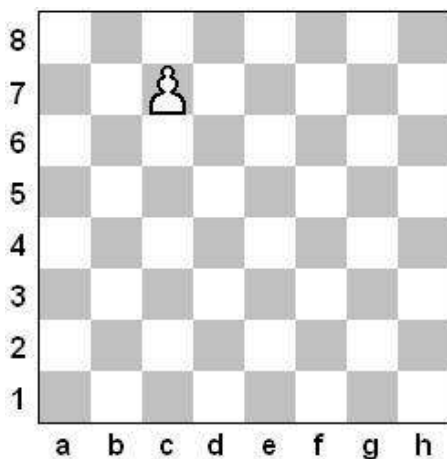
Can't castle through check!



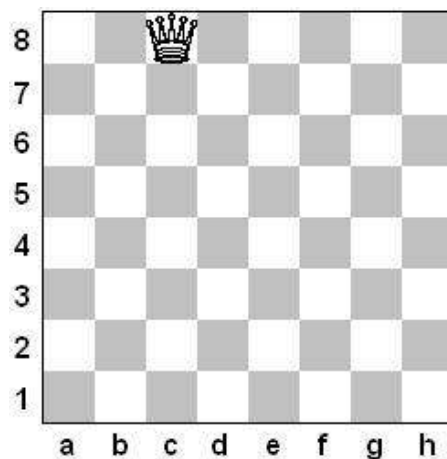
Can't castle into check!

Pawn Promotion

When a pawn reaches the final rank (8th rank for white, 1st rank for black) then the pawn can be replaced by a knight, bishop, rook or queen. This is called a promotion. The player who is promoting the pawn chooses which piece that pawn promotes to.



The pawn is about to reach the last rank!



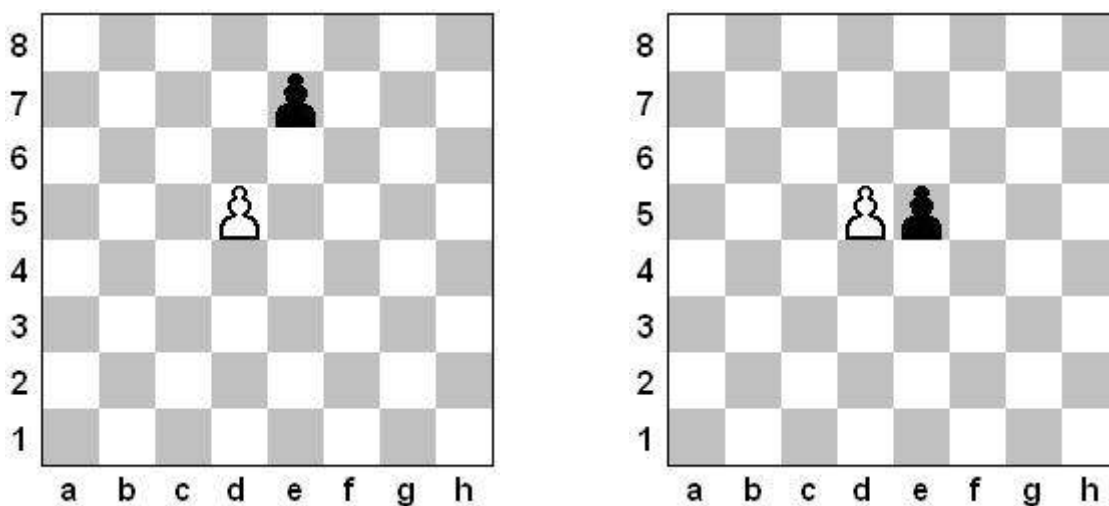
The pawn promotes to a queen on c8!

En Passant

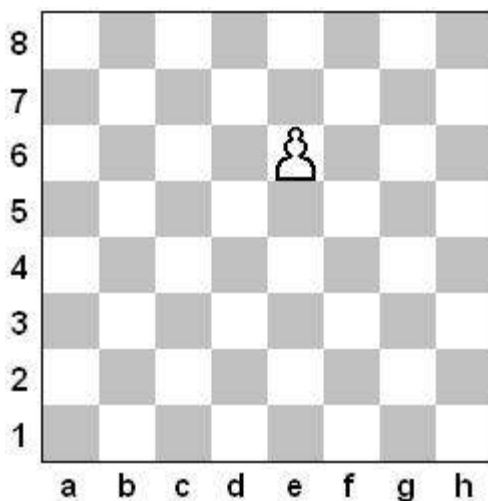
The last special move in chess is called “en passant”, which is French for “in passing”. This special move only occurs when a player chooses to move a pawn two squares forward, and that pawn ends up on a square that is directly beside an enemy pawn.

When these two criteria have been met, the opposing player may capture the pawn **as if** the pawn only moved one square. The opposing player may only do this on their next move; otherwise the en passant rule is no longer in effect.

For example, if the black pawn was moved from e7 to e5, while there was a white pawn on d5, on white’s very next move he may place his pawn on e6, and capture the pawn that is on e5.



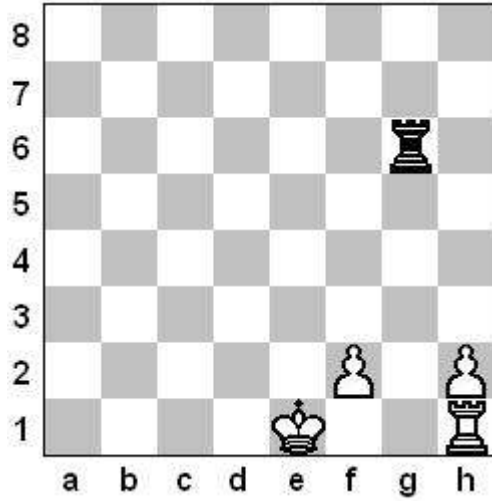
If the black pawn moves to the e5 square, both conditions are met for en passant. The pawn has moved two squares, and the pawn is now directly beside an opposing pawn.



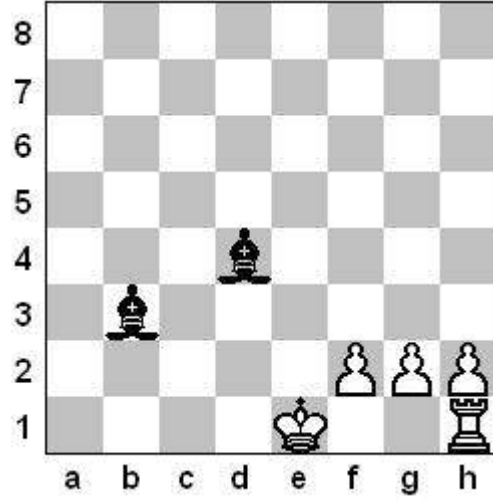
White captures the pawn en passant!

Exercise 4

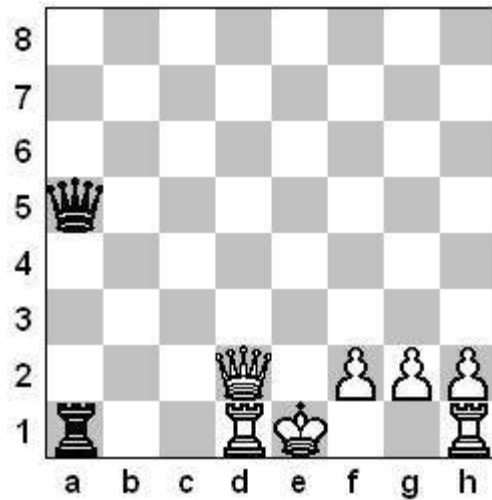
For each position, can white legally castle?



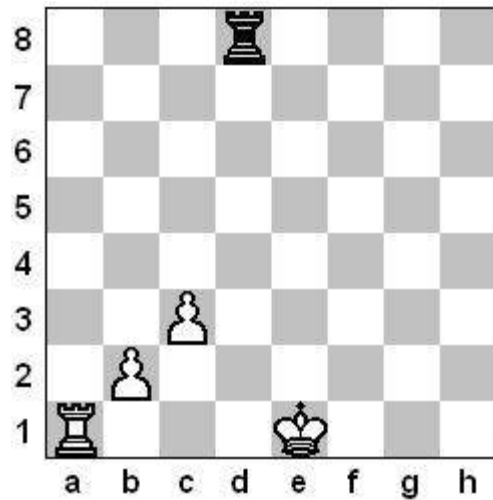
1. _____



2. _____



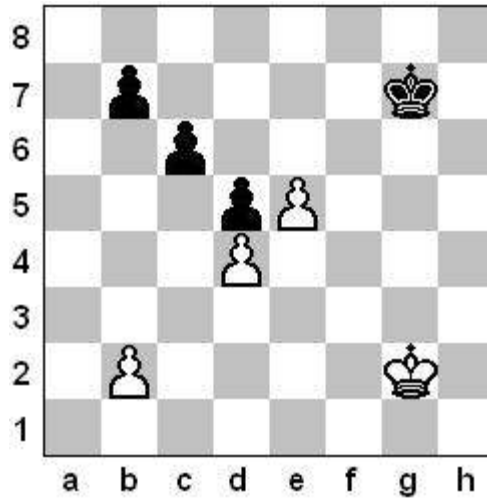
3. _____



4. _____

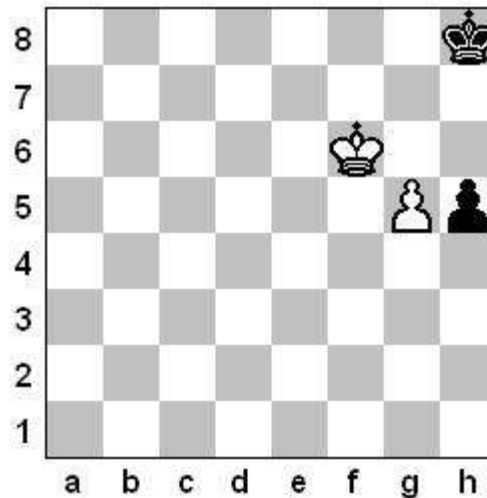
5. A few turns ago in the following position black moved his pawn from d7 to d5. Can white now take en passant on d6?

Yes _____ No _____



6. In the following position black has just played pawn from h7 to h5. Can white now take en passant on h6?

Yes _____ No _____



7. Which rank must a black pawn reach in order to promote?

8. What are all the possible pieces that a pawn can promote to?

Exercise 4 Answers

Position 1:

White cannot castle because after doing so the white king would be in check by the black rook on g6

Position 2:

White can castle

Position 3:

White can castle

Position 4:

White cannot castle because the king would move through an attacked square. The d1 square is being attacked by the black rook on d8.

Position 5:

White cannot take en passant as a few turns have already occurred since the pawn being moved two squares. En passant must be taken right away.

Position 6:

White can take en passant by moving his pawn to h6, and removing the black pawn from h5.

Question 7:

Black pawns must reach the 1st rank in order to promote, while white pawn must reach the 8th rank.

Question 8:

Any pawn can promote to a **Rook, Bishop, Knight** or **Queen**.

Playing Chess

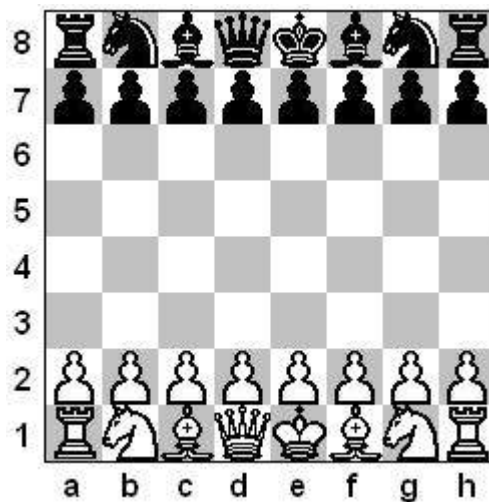
Starting a Game

When setting up a chess board, white sets their pieces up on ranks 1 and 2, while black sets their pieces up on ranks 7 and 8.

Along the back rank both players setup their pieces in the following positions:

- The two rooks are setup on the outside corners of the board.
- The two knights are setup on the next square towards the center beside the rooks.
- The two bishops are setup on the next square towards the center beside the knights.
- The queen goes on her own color (white queen on the white middle square, black queen on the black middle square).
- The king goes on the last available square on the back rank.
- The pawns are all placed on the next rank in front of the other pieces.

A properly setup starting position should look like this:



The player with the white pieces is always first to move and starts the game by making their first move from the starting position.

Demolition Chess

Time for some fun! We are going to play a game called “Demolition Chess” which will help you get familiar with the pieces and how they move.

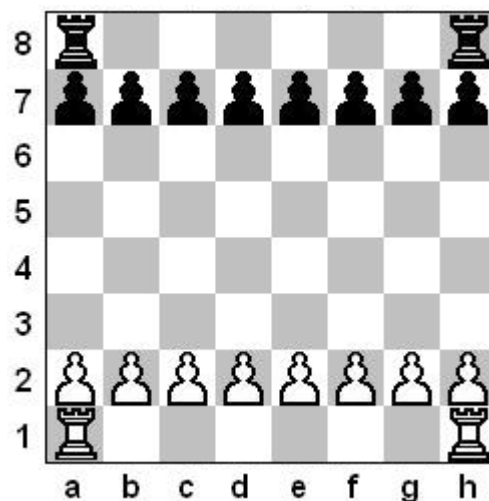
Like all chess games, start by setting the pieces up in the starting position.

For your first game of demolition chess let’s do the following:

- Remove the two kings from the board
- Remove the two queens from the board
- Remove the four bishops from the board
- Remove the four knights from the board

The board should now only have rooks and pawns left on it. Looks pretty empty doesn’t it? That’s ok, you’ll get to add more of the pieces back later!

The object of the game is to **lose** as many of your pieces as possible. The winner is the person at the end of the game who has the **fewest** pieces on the board.

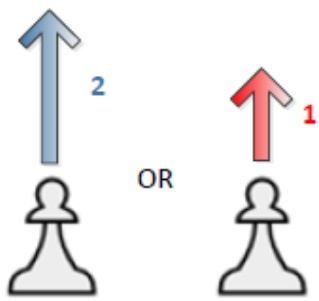
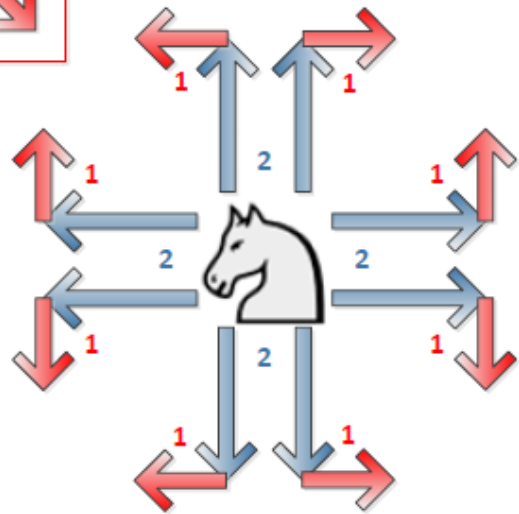
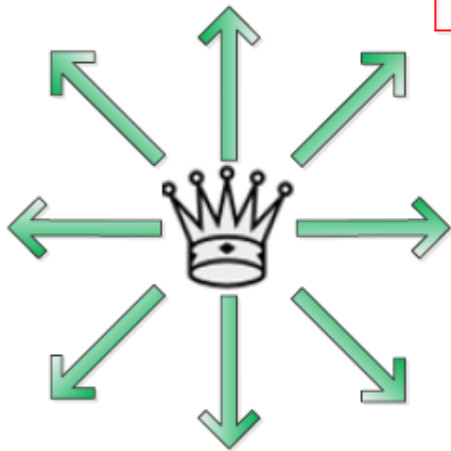
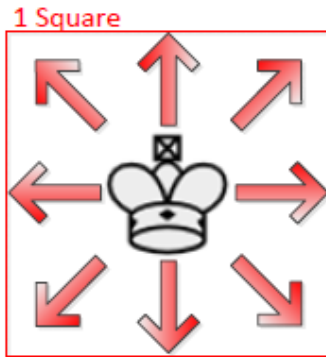
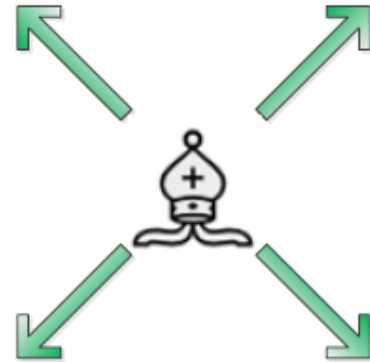
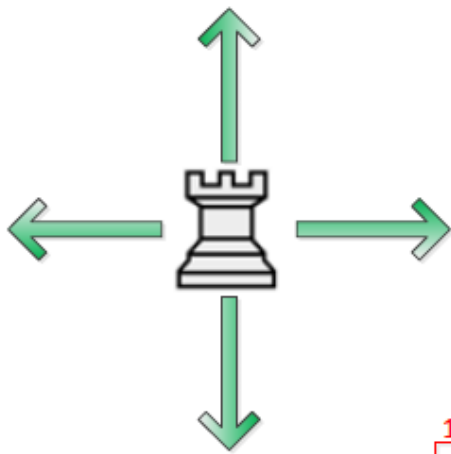


The game begins like regular chess with the player playing the white pieces making the first move, and the pieces move and capture the same. However, demolition chess has some special rules:

- If it’s your turn and you can legally capture an opponent’s piece, you **must** capture that piece
- If it’s your turn and you can legally capture more than one of your opponent’s pieces, you may **choose** which piece you capture, but you **must** capture a piece
- The game ends when either white or black has no pieces left or cannot make a legal move
- The winner is the player with the least number of pieces on the board after the game has ended

For practice with the other pieces, play demolition chess again with the addition of the four bishops, then again by adding the two queens and finally the four knights. You can play using any combination of pieces you like!

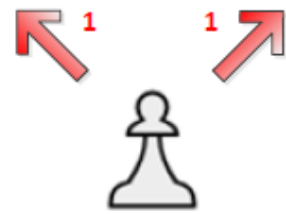
Chess Moves Cheat Sheet



Pawns First Move



Pawn Movement



Pawn Captures