Lesson 1: Chess Basics

The Board:

* The game of chess takes place on the chessboard. The board consists of 64 alternating black and white squares arranged in a 8 by 8 square. The columns on the chess board are referred to as “files” and are labeled A through H. The rows on a chess board are referred to as “ranks” and are numbered 1 through 8. Each square on the board has a special name given by his file and then rank for example A1 means the square on the A file at the 1st rank. Diagonals are also important in the game of chess for example the longest diagonal is the A1-H8 diagonal.

Basic Objective:

* Chess is a two player game with each player picking one of two colours to play as, white or black. White always gets the first move and after that it alternates between white and black making one move at a time. The goal of the game is to put the opponent's king into “Checkmate” (more on that later).

Pieces:

* At the beginning of the game each player has a total of 16 chess pieces on their side.

The first and most basic is the king, the king may move in any direction but only one square. The king is also capable of a special move with the rook (more on that later). The king is also the most valuable piece on the chessboard. The white king begins the game on E4, the black king on E8.

The next piece is the rook, a powerful piece. The rook may move any number of unoccupied squares both horizontally and vertically. Each player begins with two rooks and they begin the game on corners of the chess board.

The next piece is the bishop, not as strong as the rook. The bishop may move up and down diagonal. It is strong in the center of the board, but loses strength as it moves away. Also it must stay on the original colour it started on. Each player begins with two bishops, The white bishops begin the game on C1 and F1, the black on C8 and F8.

The next piece is the queen, the most powerful piece. The queen moves as a combination of the rook and bishop, horizontally, vertically, and diagonally. The white queen begins on d1, the black d8.

The next piece is the knight, a tricky piece. The knight moves two squares vertically and one horizontally or two squares horizontally and one vertically. This is often described as an “L” shape. The knight is the only piece that is capable of jumping over others. It also oscillates coloured squares, for example if a knight is on a black square then it will only have moves to white squares. Each player begins the game with two knights, The white knights begin on B1 and G1, the black on B8 and G8.

The final and weakest piece is the pawn, but also the most unique. The pawn may only move forward. On its first move it may move one or two squares forward but every move after that it may only move forward. It is also capable of a special move called promotion (more on that later). Each player begins with 8 pawns, lined up horizontally along the 2nd rank for white and 7th rank for black.

Capturing:

* You may capture your enemies pieces if one of your pieces can move to the square the enemy piece occupies. Upon capturing the enemy piece will be removed and your piece will take the place of the enemy piece. All pieces move like they capture, except for the pawn which captures one square diagonally to the left or right. You can not capture your own piece or move through one of your own pieces.

Special moves:

* Castling:

Castling is a special move performed by the king and a rook. It is the only move in which two pieces can be moved at once. There are some restrictions the king may not be in check, move through a check or land on a checking square, it has to be the rook and king's first move, and there may be no pieces between the rook and king. To perform this move you play a king move to two squares to the right or left of the king. At which point the king will move to the right or left and the rook will move one after the king. If you castle with the rook on the side where the queen was this is called queen side castling, if the other king side castling.

* Promotion:

Promotion is a special move performed by the pawn. It occurs when the pawn

reaches the last rank (8th for white, 1st for black). At which point the pawn

can be turned into any other piece other than the king.

Check, Checkmate, and Stalemate:

* A check occurs when a piece is attacking the king. The check must be dealt with immediately; you must get out of the check. This can be done one of three ways 1.) Move the king to a square where he is not in check, 2.) capture the piece giving the check, 3.) block the check by moving a piece in between the king and the checking piece.
* If the king is in check and you can’t get out of it by doing one of things mentioned above, then this is checkmate. At this point the game is over, the checkmated player loses.
* Chess is a game that may end in a draw. In tournament play this can happen because of a multitude of technical rules Ex: insufficient material rule. In more casual play this can happen because of stalemate. A stalemate occurs when the king is not in check but as no legal moves. The result is a stalemate and a draw.

Lesson 2: Elements and Opening Principles

Elements:

* Space:

Chess is a spatial game. Generally the more space you control the better off you are. Each colour begins with the same amount of territory, divided equally between the 4th and 5th rank. As a result of this controlling places like the center of the board

Become vital to success. It is also why the most popular opening move is pawn to e4

as it immediately controls center squares in black’s territory.

* Material:

Chess is played through its pieces, however not all pieces are created equal. Some are more powerful than others. All pieces are valued relative to the unit of 1 pawn. The knight is worth 3 pawns, the bishop is also worth 3 but sometimes it is suggested the bishop is with 3 ¼ , the rook 5, and queen 9. The king is of infinite value because if you lose the king you lose the game.

* Development:

Chess also contains an element of time, and this in the opening part of the game is called development. Development is about moving your pieces to their optimal square as quickly as possible, their optimal square largely depends on your opponents moves. For example: it’s usually good practice to make a minimal amount pawn moves and to get your minor pieces (bishops and knights) into the center early.

Opening principles:

* Centralization:

Like mentioned before the center of the chess board is the most important part. If you don’t control the center of the chess board then manuerving your pieces becomes very difficult.

* Quick development:

It’s important to get your more dynamic minor pieces (knights and bishops) out and controlling the center as soon as possible rather than moving more static pawns or trying to get your major pieces (queen and rooks) out first. It is also generally accepted that knights should be developed for bishops. This is because it is difficult to know the optimal placement of a bishop until you see the position of the pawns, knights are generally easier to develop in this way.

* Castle Early

If the center of the board is the main theater of combat in the chess game, then the king remaining in it's starting position (behind the center) is a dangerous place for it to be. Castling the king moves it out of the center and protects further.

* The Initiative

When you force your opponent to play reactively to your moves you're said to have the initiative. Because white always moves first white always starts with the initiative but it can be lost through mistakes or passive moves.

Lesson 3: Basic mating patterns

King and Two Rooks vs King:

* Two rooks (or a queen and a rook) can deliver mate without the help of the king. This is done by the rooks being posited on adjacent files. They can then escort themselves down the board until they eventually deliver mate on the last rank (8th or 1st).

King and Two Bishops vs King:

* Two bishops need the help of the king to deliver mate. This can be achieved by placing the bishops on adjacent files and shrinking the area by moving the bishop's alternating one square up the files. Then you can trap the king in the corner and use your own king's support to deliver the mate.

King and Rook vs King:

* A rook and king can always mate a lone king. To achieve this you must use the rook to cut off squares to the opponent's king driving him into the edge of the board. You must use your king aggressively to support your rook once you drive the king to the edge to cut off his escape and deliver mate with the rook.

Bishop, Knight, and King vs King:

* This is the most tricky mate to give, as the knight and bishop don’t coordinate very well. The general way to achieve this is to always drive the king to a corner of the same colour as your bishop, if it is a bishop confined to white squares then you must drive him to a light squared corner, and vice versa.

Back Rank Mates:

* This type of mating pattern commonly occurs because castling is very common. It occurs when the king is castled and the pawns in front of him remain unmoved and he is missing a defending piece (like a rook) on the back rank. A rook or queen can be moved onto the backrank and this will be mate, the king is hemmed in by his own pawns.

Lesson 4: Basic Tactics

* The Pin:

A pin occurs when a piece is attacked and cannot move without exposing another more valuable piece. The queen, rook, and bishop are the only pieces capable of pinning another. When a piece is pinned to the king, this is known as an absolute pin because if the pinned piece were to move it would be illegal according to the rules. A pin can often be exploited by attacking the pinned piece with a piece of lesser value to win material.

* Forks:

A fork is a type of double attack that occurs when one piece attacks two pieces at the same time. This forces the opponent to lose material as they can only save one of their pieces. The most common kinds of forks are from the knight.

* The Skewer:

The skewer occurs when an attack on one piece forces another piece to move exposing a piece behind it for capture.

* Double Attack:

A double attack is the result when one move creates separate attacks by two different pieces.

* Discovered Check:

A discovered check happens when the movement of one piece allows for a second stationary piece to deliver a check to the enemy king. This tactic enables the first piece that moves out of the way to cause all sorts of problems as the opponent has to deal with the check first.

* Double Check:

A double check occurs when a discovered check is paired with the first moving piece also delivering a check. The only way for the opponent to respond to a double check is to move the king.

Lesson 5: Simple openings and defenses

The Ruy Lopez or Spanish Game:

* This is a very commonly played and solid opening for white. It begins e4 from white and then e5 from black. Then f3 from white attacking the pawn on e5 and c6 from black defending the pawn. White then plays bishop b5, the idea being if black allows white to capture the knight then the pawn on e5 while being undefended so white can capture it with it’s knight.

The Berlin defense:

* The Berlin defense is response by black to the ruy lopez. It is considered somewhat old fashioned but pretty sound. After white plays bishop b5, black responds with knight to f6 threatening to capture whites pawn on e4.

The Sicilian Defense:

* The Sicilian Defense is the most popular of all chess openings. The idea behind it is to establish early asymmetries in the position. It begins e4 by white then c5 by black. It continues f3 d6, d4 cxd4, fxd4 f6, c3. If black continues with a6 this is called Najdorf, if g6 then the dragon variation. In this position white has the lead in development, but black has an extra pawn in the center.

The King’s Indian defense:

* The idea behind the king’s indian defense is black will quickly develop its pieces and castle short, ready to attack white center. It goes d4 f6, c4 g6, c3 g7, e4 d6. Black’s pawn on d6 prevents the advance of the e pawn. Balck is also ready to strike back in the center with e7-e5 or c7-c5. The bishop on g7 (called a fianchetto bishop) is in a strong position on the long diagonal indirectly putting pressure on the center.

Book citation(used for lessons)

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