How to Read and Write Algebraic Chess Notation

Algebraic notation (or **AN**) is a method for recording and describing the moves in a game of chess. It is now standard among all chess organizations and most books, magazines, and newspapers.

Each square of the chessboard is identified by a unique coordinate pair consisting of a letter and a number. The *vertical* rows of squares (called *files*) from White's left (the queenside) to his right (the kingside) are labeled **a** through **h**. The *horizontal* rows of squares (called *ranks*) are numbered **1** to **8** starting from White's side of the board. Thus, each square has a unique identification of file letter followed by rank number. (For example, the white king starts the game on square **e1**, while the black knight on **b8** can move to open squares **a6** or **c6**.)

Each type of piece (other than pawns) is identified by an uppercase letter, usually the first letter in the name of the piece in whatever language is spoken by the player recording. English-speaking players use **K** for king, **Q** for queen, **R** for rook, **B** for bishop, and **N** for knight (since K is already used). Pawns are not indicated by a letter, but rather by the absence of any letter—it is not necessary to distinguish between pawns for moves, since only one pawn can move to a given square.

Each move of a piece is indicated by the piece's uppercase letter, plus the coordinate of the destination square. For example, **Be5** (move a bishop to **e5**), **Nf3** (move a knight to **f3**), **c5** (move a pawn to **c5**—no piece letter in the case of pawn moves).

When a piece makes a capture, an *x* is inserted between the piece's letter and the destination square. For example, **Bxe5** (bishop captures the piece on **e5**). When a pawn makes a capture, the *file* from which the pawn departed is used to identify the pawn, rather than a letter representing the pawn itself. For example, **exd5** (pawn on the **e**-file captures the piece on **d5**).

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

When two (or more) identical pieces can move to the same square, the moving piece is uniquely identified by specifying the piece's letter, followed by (in descending order of preference):

1. the **file** of departure (if they differ); or
2. the **rank** of departure (if the files are the same but the ranks differ); or
3. both the **rank** and **file** (if neither alone is sufficient to identify the piece—which occurs only in rare cases where one or more pawns have promoted, resulting in a player having three or more identical pieces able to reach the same square).

For example, with knights on **g1** and **d2**, either of which might move to **f3**, the move is specified as **Ngf3** or **Ndf3**, as appropriate. With knights on **g5** and **g1**, the moves are **N5f3** or **N1f3**. As above, an *x* can be inserted to indicate a capture, for example: **N5xf3**.

When a pawn moves to the last rank and promotes, the piece promoted to is indicated at the end of the move notation, for example: **e8Q** (promoting to queen). Sometimes an equals sign (=) or parentheses are used: **e8=Q** or **e8(Q),**

Castling is indicated by the special notations **0-0** (for kingside castling) and **0-0-0** (queenside castling).

A move which places the opponent's king in check usually has the notation "+" appended.

Checkmate at the completion of moves can be notated as "#" (some use "++" instead). Or the word *mate* is commonly used.

The notation **1–0** at the completion of moves indicates that White won, **0–1** indicates that Black won, and **½–½** indicates a draw.

Notice how this is shown on the sample score sheet. This is an official chess score sheet that is used in USCF rated chess tournaments. It is included here for you to quickly get a concept of how this will appear when you actually record your games.

Graphic Examples on How to Write Algebraic Chess Notation

To write chess notation you must indicate the **piece** and the **square** it's moving to. Notice how each piece is abbreviated with a single letter except the pawn! If no piece is named it's assumed that a pawn move is made. Notice also how the Knight is abbreviated with a "N" not "K"
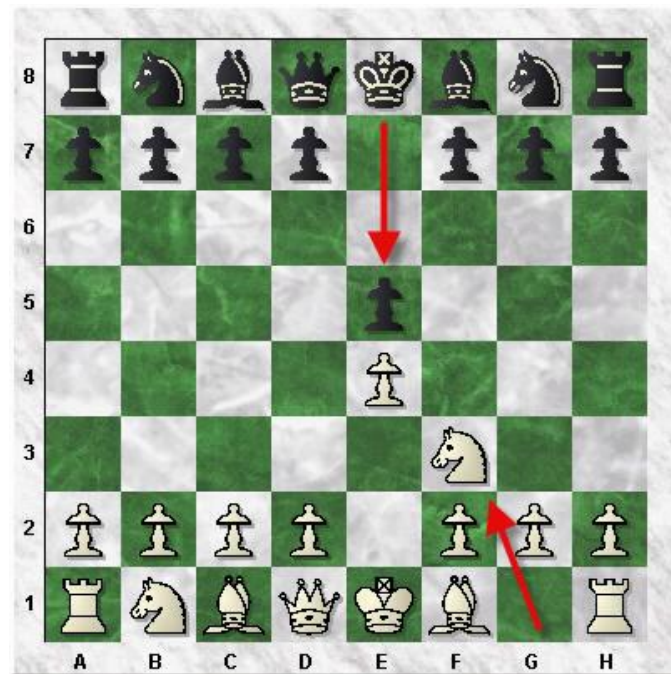
King = K

Queen = Q

Knight = N

Bishop = B

Rook = R
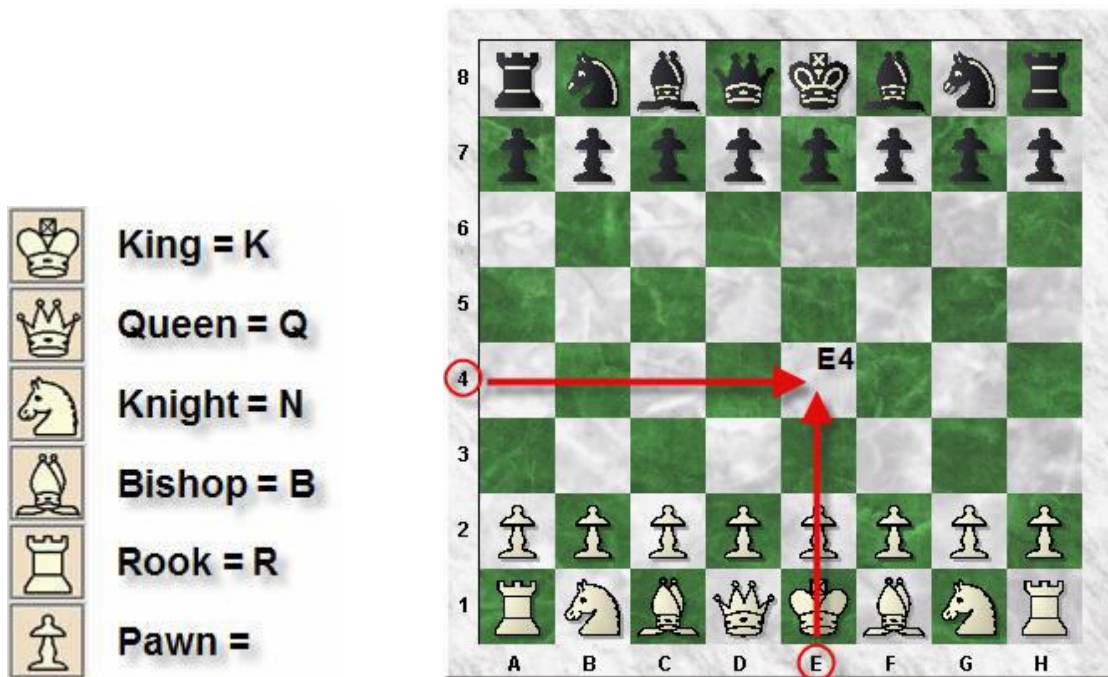
Pawn =

In the following diagram the first move was pawn to **e4.** The name of this move is simply "e4". (since the pawn's name is not written)
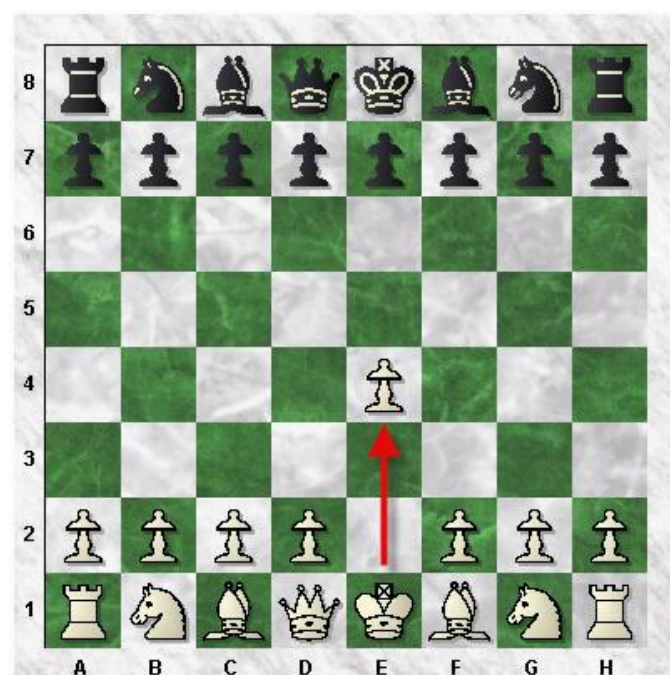
Now black has made a pawn move... this is written as **e5.**
Next, White has replied with **Nf3**. Notice how the name of the piece is written as well as the name of the square.


Now, we're going to fast forward to some special moves. See in the next diagram how white has made a special move called **castling kingside.** This move is written as **0-0**. If the King castles on the **queenside** (to the other direction on the chessboard) it would be written as **0-0-0**.
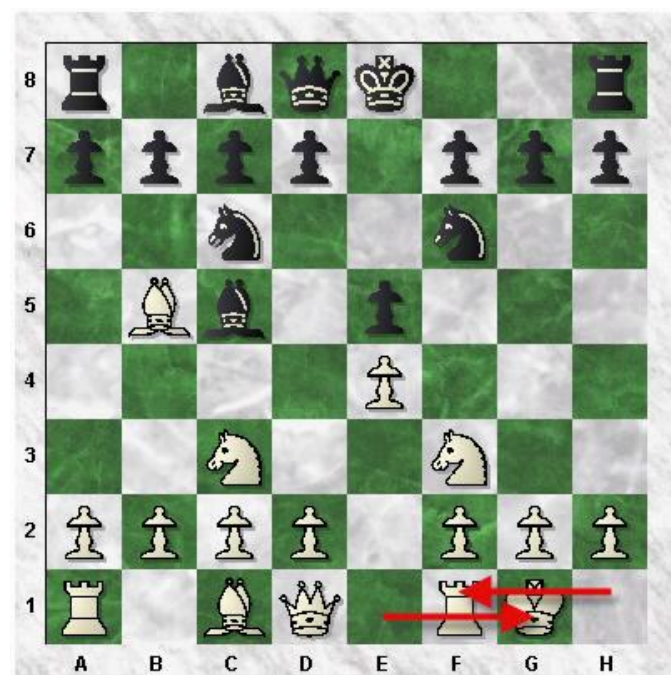
In the next diagram, White is going to capture Black's pawn on **d5**. This move is called **exd5**. When a "capture" is made this is indicated with an **x**.
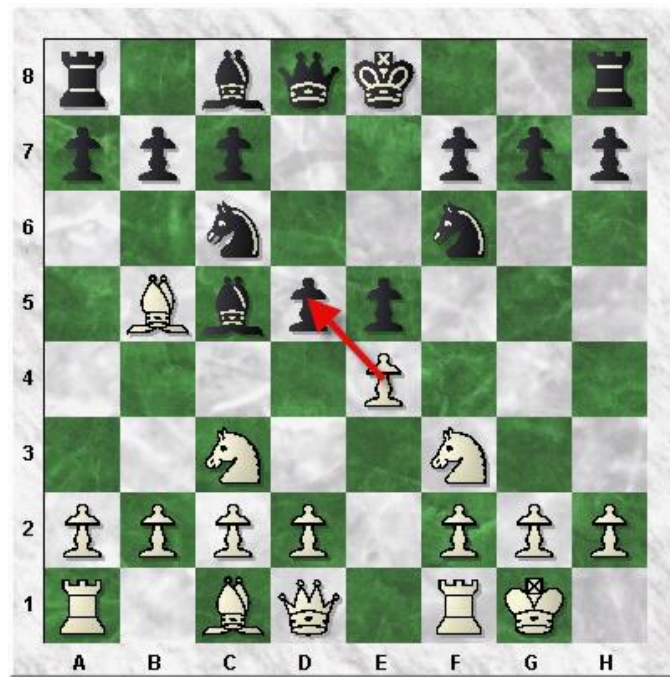

Next, White captures the Knight on c6. This move is written as **Bxc6+**. Notice the "+" sign. This represents "check" since Black's King is now in check.
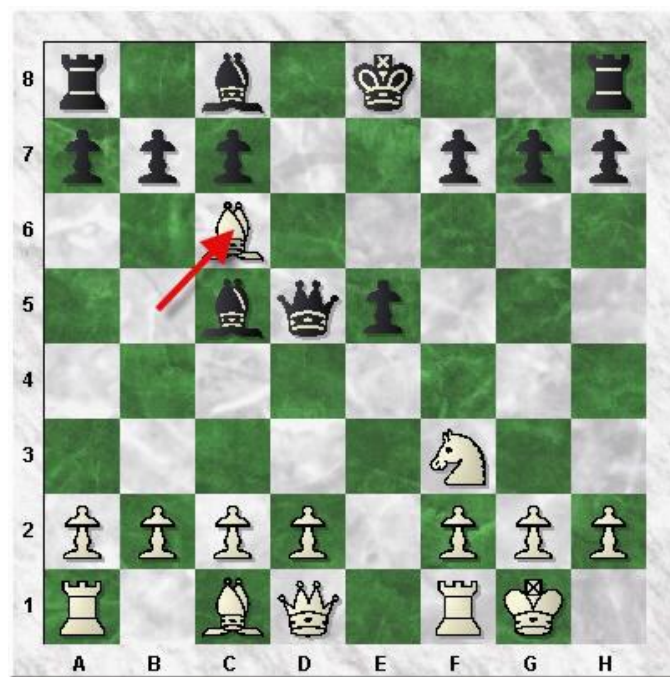
White just moved **d4**. Black's next move **exd3(ep)**, called *en passant* captures white's d4 pawn while moving his pawn to d3.
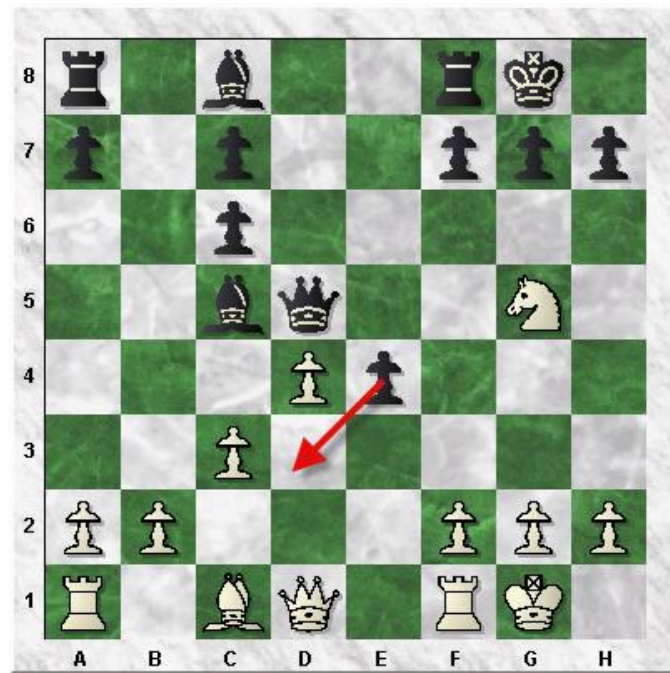

After several more moves, Black captures White's Bishop on c1 with **dxc1=Q**. That's about as complicated as it gets! This means pawn captures piece on c1 and promotes it to a Queen. Black could promote it to any other piece he chooses, but Queen's are nearly always the best choice.
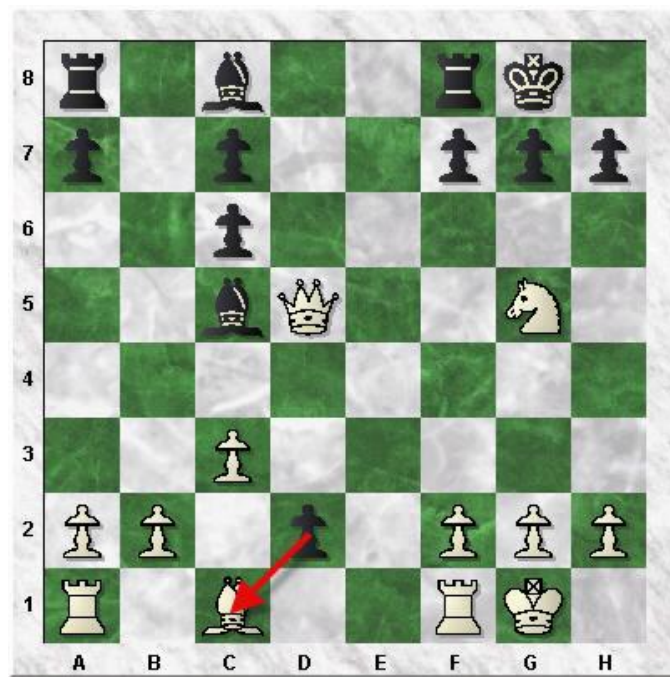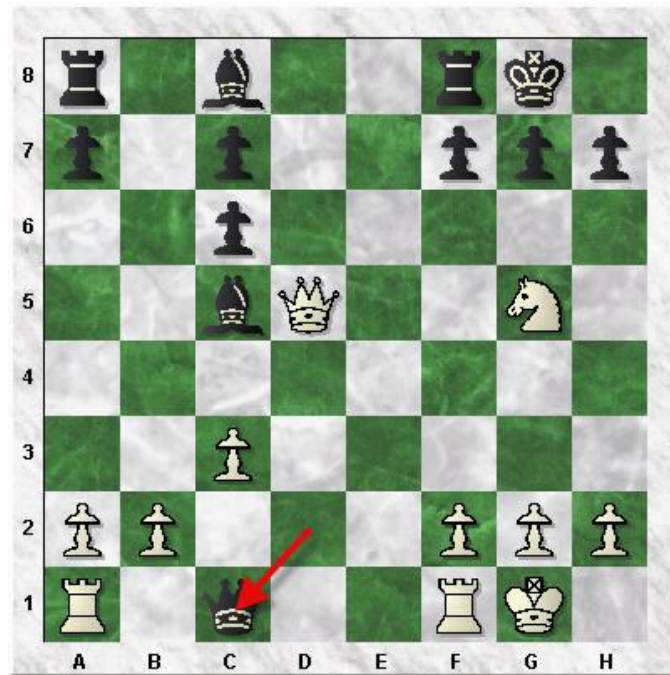
Next, notice how the next move is **Raxc1**. Note that either the rook on **A1 OR F1** can capture the queen. This means that the "a" must be included to indicate which rook.
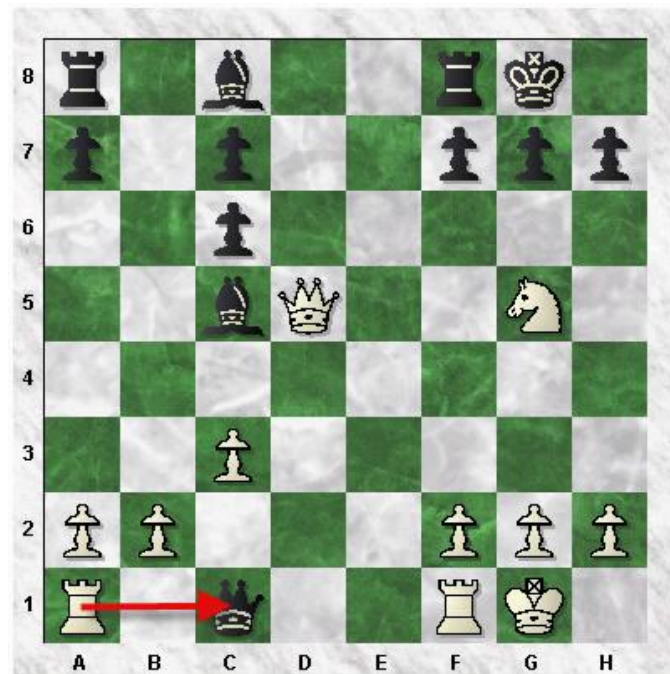
In this next position, white makes a winning move, **d4**++, pawn to d4 CHECKMATE!