

Algebraic Chess Notation

1. What is algebraic chess notation?

Algebraic chess notation is used to record and describe the moves in a game of chess.

2. Why should I write down my chess moves?

There are many good reasons for writing down your chess moves:

- Chess notation enables you to record your games for playback later. Replaying your games with chess notation enables you to analyze your games so that you can correct any mistakes you made and improve your chess play.
- Chess competitions actually require recording of moves from the beginning scholastic levels to chess championship levels. The reason for this is that the game can be followed and recreated to any position in case there is a dispute.

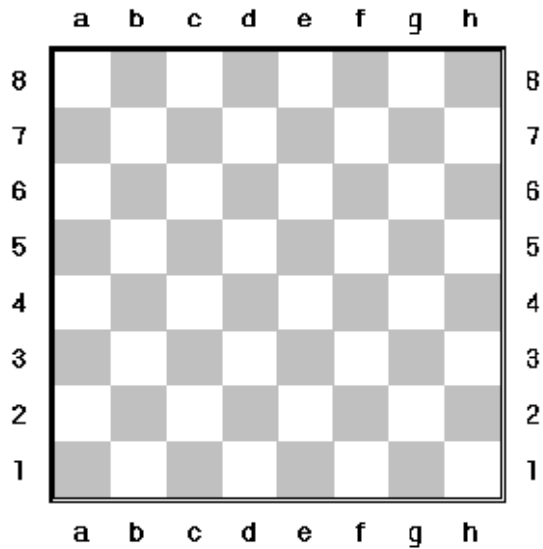
Learning how to read and write chess notations also enables you to read and play through games of great players to learn and improve your own chess game. There is a wealth of materials both in book and digital form allowing you to study the chess moves of great chess players.

3. How to write chess notation

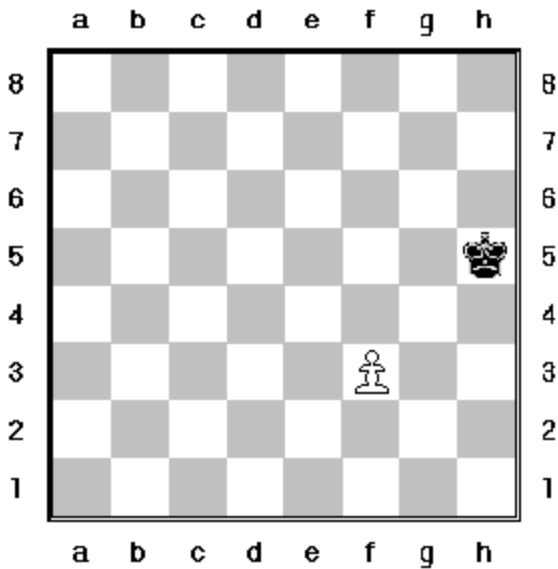
To write chess notation you must indicate the **piece** and the **square** it's moving to. Each piece (except the pawn) is abbreviated with a single **capital** letter as shown below. If no piece is named in the notation, it's assumed that a pawn move is made. Notice also how the Knight is abbreviated with an "N" not "K" since "K" is already used for the King.

	King = K
	Queen = Q
	Knight = N
	Bishop = B
	Rook = R
	Pawn =

All squares on the board can be identified by its coordinates. Along the left and bottom edges of the board there are letters and numbers. They are used to identify squares on the board. The columns (a-h) are called “**files**”, and the rows (1-8) are called “**ranks**”.

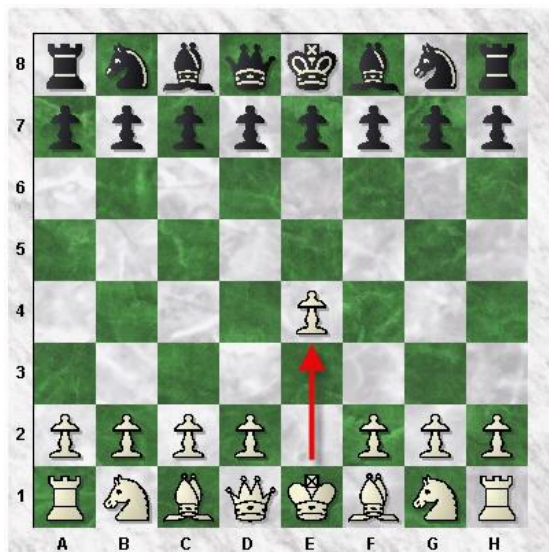


For example:



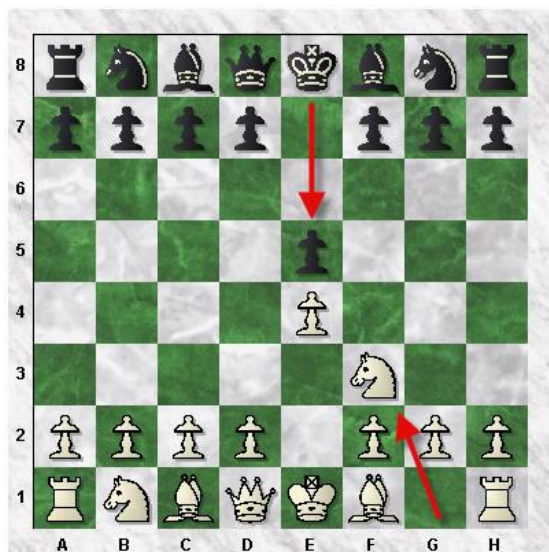
The white Pawn is on square **f3** (the letter **always** comes **before** the number) and the black King on square **h5**. Note that lower-case letters are used for coordinates, while upper-case letters are used for chess piece abbreviation.

For an example above, the white Pawn moves to square e4; so its move is written simply as **e4**.



Move #	White	Black
1	e4	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Then the black Pawn moves to square e5; so its move is written as **e5**. Then, the white Knight moves to square f3; so its move is written as **Nf3**.



Move #	White	Black
1	e4	e5
2	Nf3	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Castling (O-O or O-O-O)

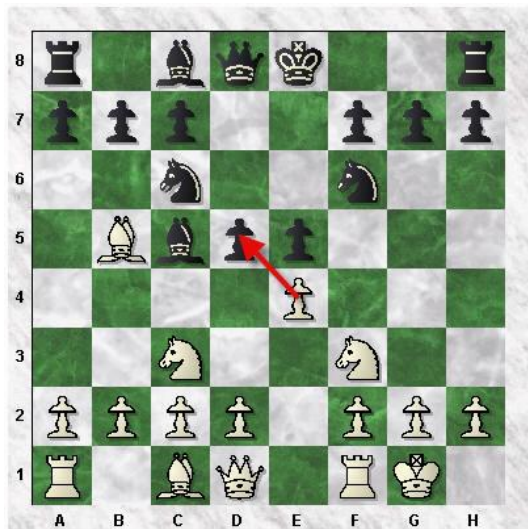
Now, we're going to fast forward to some special moves. See in the next diagram how white has made a special move called **castling kingside**. This move is written as **O-O**. If the King castles on the **queenside** (to the other direction on the chessboard) it would be written as **O-O-O**.



Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	
6		
7		
8		
9		
10		
11		
12		
13		

Capturing (x)

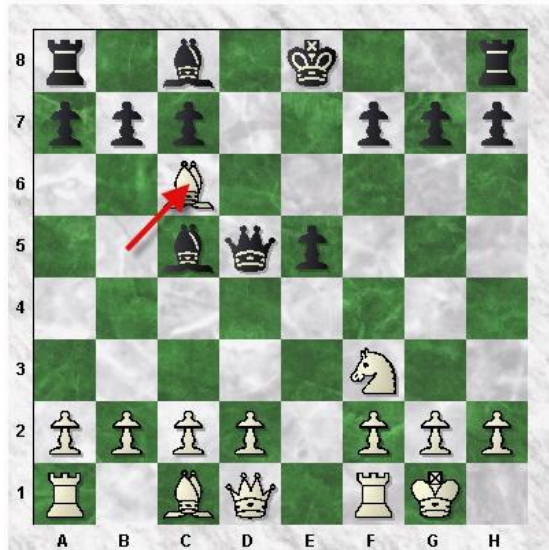
In the next diagram, White is going to capture Black's pawn on **d5**. This move is called **exd5** (the Pawn from **e** file captures piece in square **d5**). When a "capture" is made, this is indicated with an **x**.



Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	d5
6	exd5	
7		
8		
9		
10		
11		
12		
13		

Checking (+)

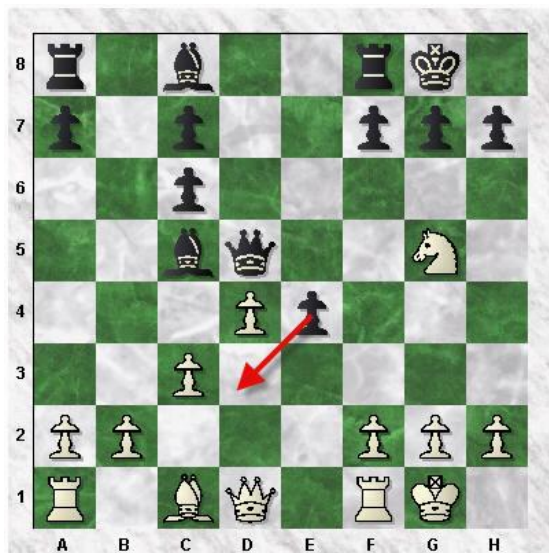
Next, White captures the Knight on c6. This move is written as **Bxc6+**. Notice the "+" sign. This represents "check" since Black's King is now in check.



Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	d5
6	exd5	Nxd5
7	Nxd5	Qxd5
8	Bxc6+	
9		
10		
11		
12		
13		

En Passant (ep)

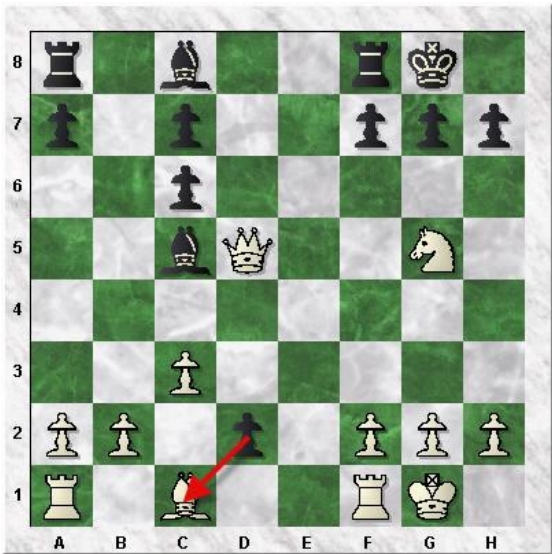
White just moved **d4**. Black's next move **exd3(ep)**, called *en passant* (*ep*), captures white's **d4** pawn while moving his pawn to **d3**.



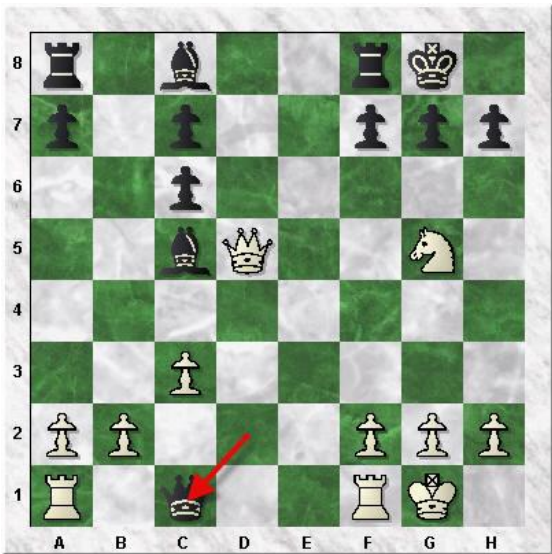
Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	d5
6	exd5	Nxd5
7	Nxd5	Qxd5
8	Bxc6+	bx c6
9	c3	O-O
10	Ng5	e4
11	d4	exd3(ep)
12		
13		

Promotion (=)

After several more moves, Black captures White's Bishop on c1 with **dx1=Q**. That's about as complicated as it gets. This means that the Pawn captures piece on c1 and promotes it to a Queen. If black wanted to promote the pawn to a rook, the notation would be **dx1=R**.

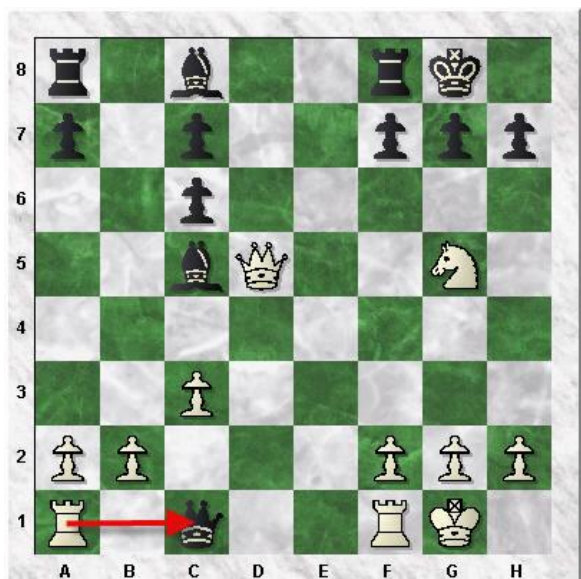


Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	d5
6	exd5	Nxd5
7	Nxd5	Qxd5
8	Bxc6+	bxc6
9	c3	O-O
10	Ng5	e4
11	d4	Exd3(ep)
12	Qf3	d2
13	Qxd5	dx1=Q



Making moves unique

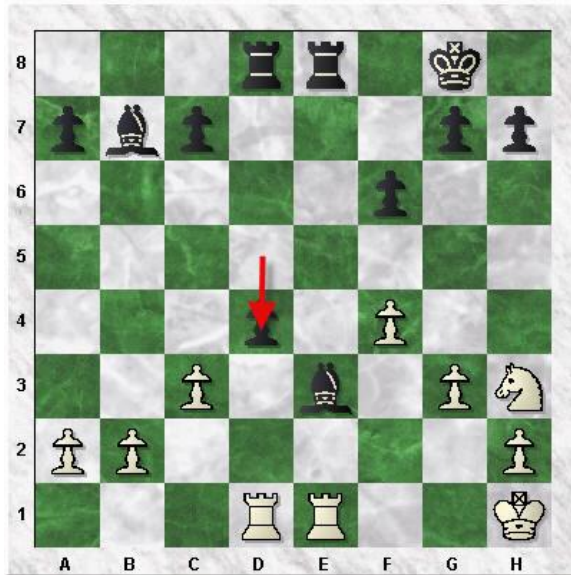
If there are two same pieces that could move to the same square, you specify which piece you mean by specifying the name of the **rank** or file that the **piece** moves from. For the diagram below, note that either the white Rook on **a1** or **f1** can capture the black Queen. In this case, if white wants the Rook on a1 to capture the black Queen, then the move is written as **Raxc1**. This means that the "a" file must be included to indicate which rook to capture the black Queen.



Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	d5
6	exd5	Nxd5
7	Nxd5	Qxd5
8	Bxc6+	bxc6
9	c3	O-O
10	Ng5	e4
11	d4	exd3(ep)
12	Qf3	d2
13	Qxd5	dx1=Q
14	Raxc1	

Checkmate (#)

In this next position, black makes a winning move **d4#**, Pawn to **d4** checkmate. The “#” is added to indicate checkmate.



Move #	White	Black
1	e4	e5
2	Nf3	Nc6
3	Bb5	Nf6
4	Nc3	Bc5
5	O-O	d5
6	exd5	Nxd5
7	Nxd5	Qxd5
8	Bxc6+	bxc6
9	c3	O-O
10	Ng5	e4
11	d4	Exd3(ep)
12	Qf3	d2
13	Qxd5	dxc1=Q
14	Raxc1	cx d5
15	Kh1	Bb7
16	f4	Rfe8
17	Nh3	Rad8
18	g3	Be3
19	Rcd1	f6
20	Rfe1	d4#

Notation Summary

K *King*

Q *Queen*

R *Rook*

B *Bishop*

N *Knight*

No symbol *Pawn*

x *captures*

+ *check*

*checkmate*

(ep) *En passant*

= *Promotion*

O-O *castles kingside*

O-O-O *castles queenside*

4. Reference

- Raphael Neff, “**How to Read and Write Algebraic Chess Notation**”
<http://www.chesshouse.com/v/vspfiles/howto/algebraic-chess-notation.pdf>