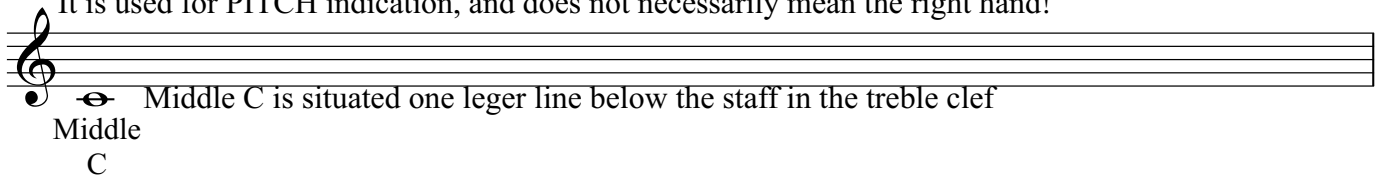


# Basic Rudiments of Music Theory: PITCH

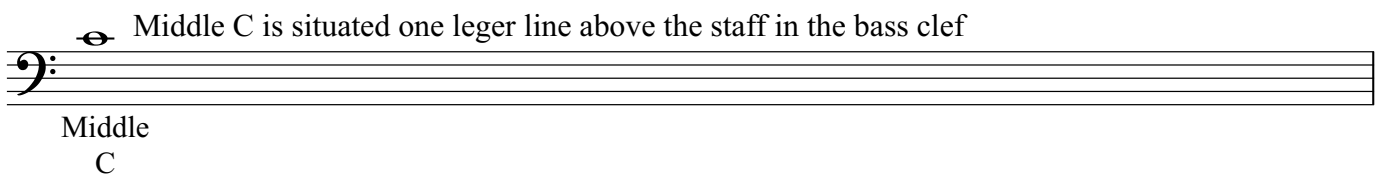
Johan de Cock (2012 - 2023)



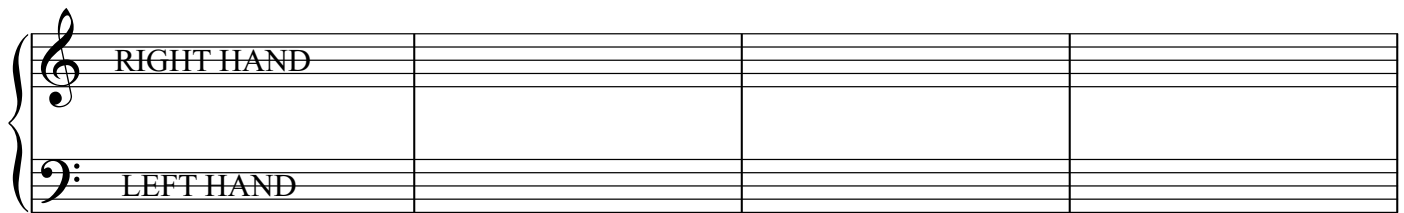
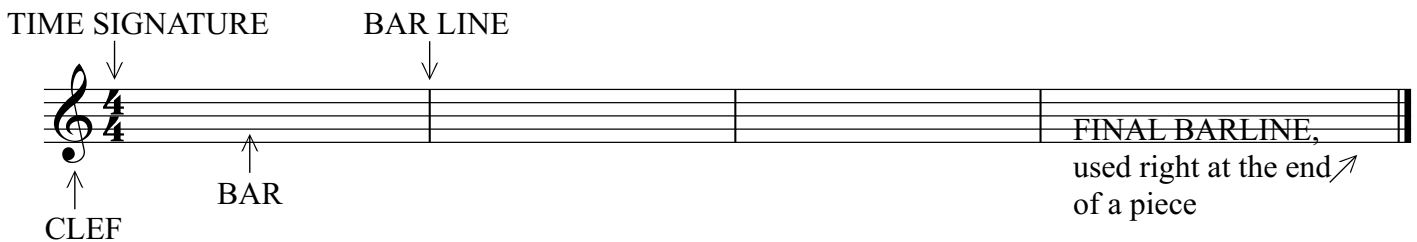
This is a TREBLE or G CLEF - generally it is used to notate notes written ABOVE Middle C. It is used for PITCH indication, and does not necessarily mean the right hand!



This is a BASS or F CLEF - generally it is used to notate notes written BELOW Middle C. It is also used for PITCH indication, and does not necessarily mean the left hand!

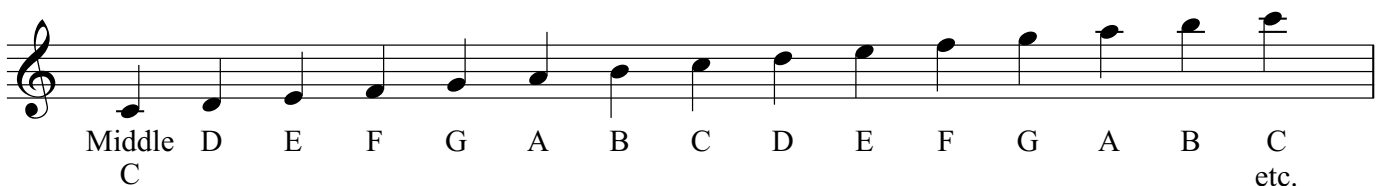


The notes are written on a STAVE or STAFF (the 5 lines), which are divided into BARS, separated by BARLINES. The length of each bar is determined by the TIME SIGNATURE.

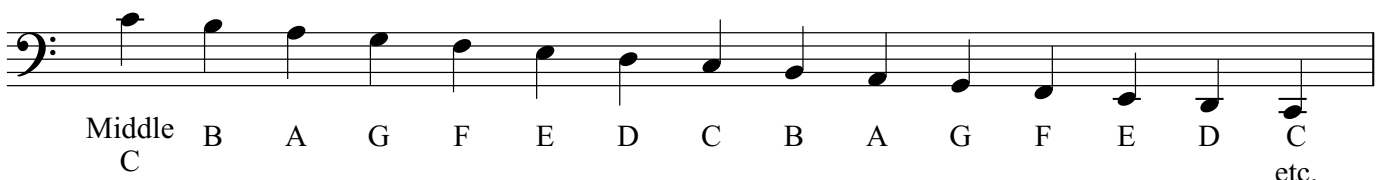


Piano music usually uses two staves (although more can be used), which are bracketed together (and are played at the same time). We read the music from left to right.

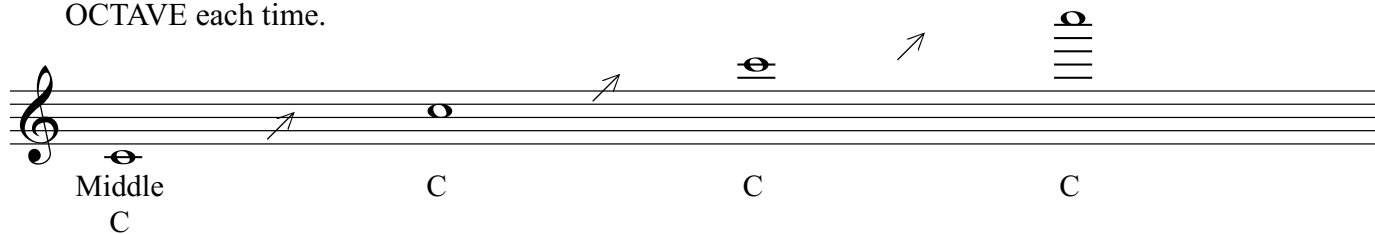
Keyboardists usually take their bearings from Middle C. The musical 'alphabet' - all WHITE NOTES - starts on a 'C' and goes upwards: C, D, E, F, G, A, B, and after that, the whole sequence repeats over and over...



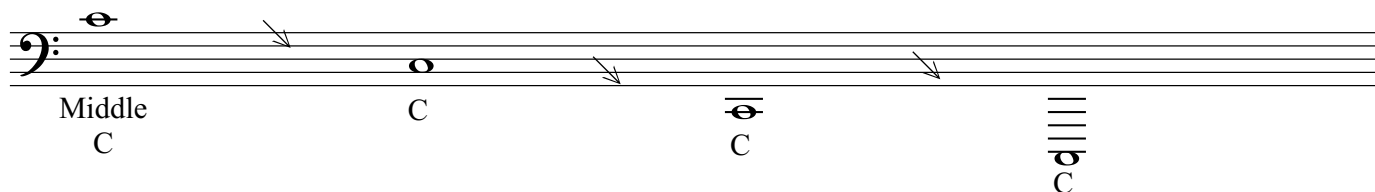
And in the Bass Clef, working backwards...



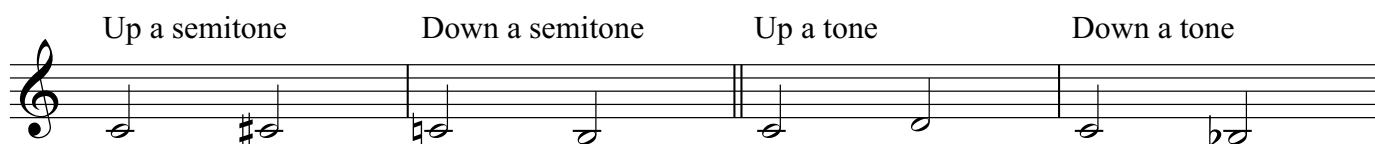
2 In the Treble Clef, the following notes are all 'C' notes, but we say that we've gone UP an OCTAVE each time.



And, in the Bass Clef, all the following notes are also C's, but we say that we've gone DOWN an OCTAVE each time.

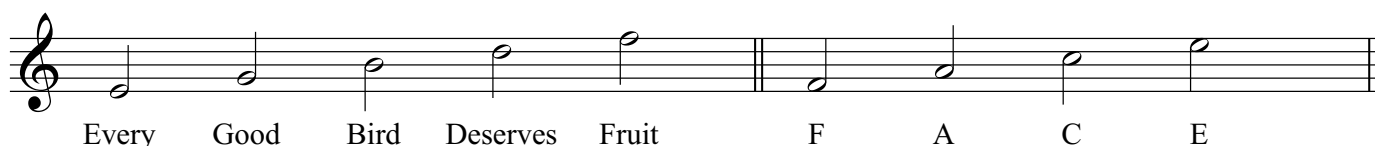


In each musical OCTAVE, there are 12 CHROMATIC NOTES, or 12 small steps, called SEMITONES. The white notes are NOT more important than the black notes - all are EQUALLY important, but we use more of one or the other, depending on the musical KEY. It's important to remember that if we go up or down a SEMITONE, we are simply moving up or down one small, tiny step. A TONE is equal to two semitones, so if we go up or down a TONE, we are going up or down TWO semitones!!!!



Now, as each musical staff consists of 5 lines, we can write notes on either a line or in a space. As each line or space can only indicate ONE lettername, we use LEDGER LINES to indicate notes above or below the staff. This is a way of extending the staff - if we had more than 5 lines in each staff, it would be very confusing to read!!!!

There are some simple rhymes that you can use to remember the note names of the lines and spaces in both the treble and bass clefs:



(for the lines)

(for the spaces)



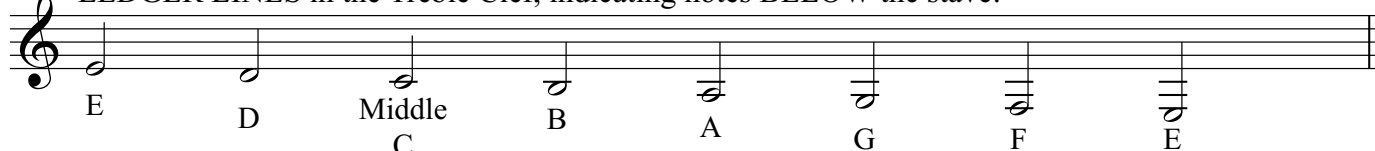
(for the lines)

(for the spaces)

LEDGER LINES in the Treble Clef, indicating notes ABOVE the stave:



LEDGER LINES in the Treble Clef, indicating notes BELOW the stave:



A B Middle C D E F G A

LEDGER LINES in the Bass Clef, indicating notes BELOW the staff:

G F E D C B A G

Therefore, the EXACT same tune - at the EXACT same pitch - can be written in either the treble or bass clefs (the bass clef obviously uses many more ledger lines!):

(Middle C C D E C G A G F E C D B Middle C)

(Middle C C D E C G A G F E C D B Middle C)

The use of too many leger lines, above or below the staff, can make reading rather difficult, so we have a sign that indicates that something is to be played an octave higher, or an octave lower:

So, this very high passage can also be written as: (To be played an octave higher)

And, this very low passage can also be written as: (To be played an octave lower)

## SHARPS, FLATS AND NATURALS

#            b            ♮

The black notes on the piano take their names from the white notes too. If they are to the right (higher in pitch), they are said to be SHARP, and are indicated by a #. If they are to the left (lower in pitch), they are said to be FLAT, and are indicated by a b. To return to the original white note after a sharp or flat has been used, we use a NATURAL sign, indicated with a ♮. Any accidental (sharp, flat or natural sign) lasts for ONE BAR ONLY!

The image shows two staves of music. The top staff is in treble clef and the bottom staff is in bass clef. Both staves show a sequence of notes with accidentals. In the treble clef, the notes are C, C sharp, C natural, D, D flat, and D natural. In the bass clef, the notes are G, G sharp, G natural, E, E flat, and E natural. Each note is shown with its corresponding accidental sign above or below it.

Now, you must remember that a sharp (#) raises a note by one semitone only, and a flat (b) lowers a note by one semitone only. This means that, sometimes, a sharp or a flat can actually be a 'white' note. (On the keyboard there are no black notes in between B and C, or in between E and F!) So, that means that a C<sup>b</sup> is really a B<sup>♮</sup>, a B<sup>#</sup> is a C<sup>♮</sup>, an F<sup>b</sup> is an E<sup>♮</sup>, and an E<sup>#</sup> is an F<sup>♮</sup>!!!!

The image shows a single staff in treble clef. It is divided into two sections by a double bar line. The first section shows a flat sign (b) on the C line, followed by a natural sign (♮) on the B space. Below this is the text "Cb and B<sup>♮</sup> are the same note!". The second section shows a sharp sign (#) on the B space, followed by a natural sign (♮) on the C line. Below this is the text "B<sup>#</sup> and C<sup>♮</sup> are the same note!".

The image shows a single staff in treble clef. It is divided into two sections by a double bar line. The first section shows a flat sign (b) on the F line, followed by a natural sign (♮) on the E space. Below this is the text "F<sup>b</sup> and E<sup>♮</sup> are the same note!". The second section shows a sharp sign (#) on the E space, followed by a natural sign (♮) on the F line. Below this is the text "E<sup>#</sup> and F<sup>♮</sup> are the same note!".

When two notes have the same sound, but have different names, they are called ENHARMONIC notes. Therefore, C<sup>#</sup> is the enharmonic equivalent of D<sup>b</sup>, and vice versa.

Please note that you will sometimes encounter some other accidentals in more complicated music: A double sharp × raises a note by TWO semitones, and a double flat bb lowers a note by TWO semitones. However, you are unlikely to encounter these accidentals often in the beginning!

# Exercises

1. On the manuscript paper (at the back) please practise drawing your musical clefs. Give us four lines of treble clefs and four lines of bass clefs...



2. Name the following notes in the treble clef:

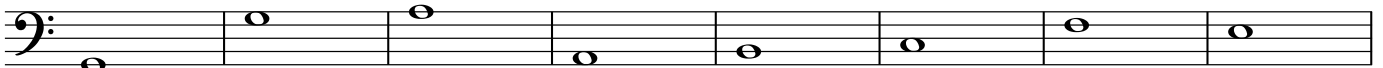


MiddleC ..... ..

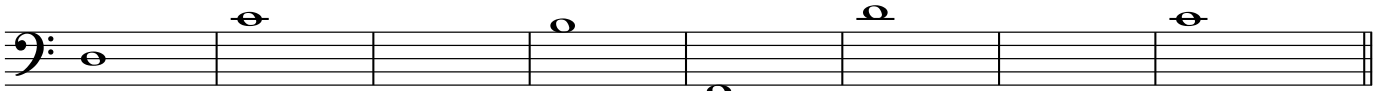


..... ..

3. Name the following notes in the bass clef:



G ..... ..

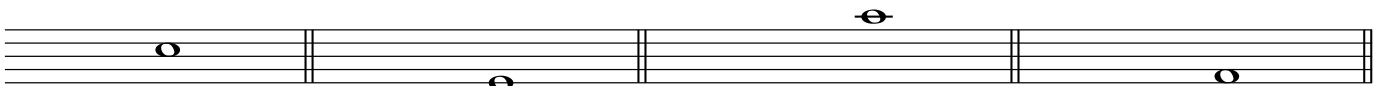


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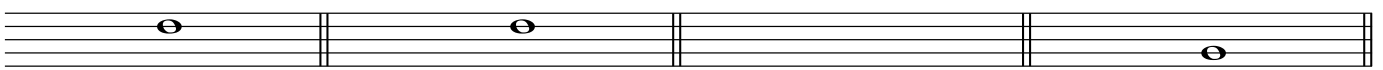
4. Draw the correct clef in front of each note to make the note name correct. The first four have been completed for you, as examples...



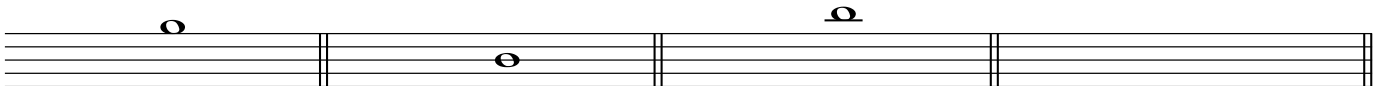
E E F MiddleC



C G A A



F D C G



B B B MiddleC

6 5. Place the correct accidental (#/b) in front of each note to make the lettername correct:

6. State whether the following notes are a SEMITONE or a TONE apart:

7. Rewrite the following passage on the staff below, at the exactly the same pitch, using the bass clef:

7. Rewrite the following passage on the staff below, at the exactly the same pitch, using the treble clef: