

The note names

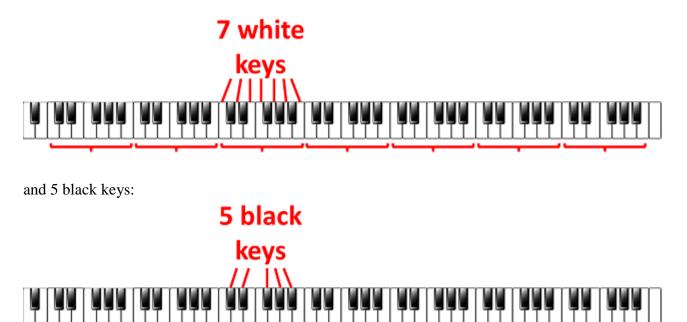
In Western music, we can distinguish 12 different notes. Every song or piece of music is made of only those 12 different notes.

On the keyboard, you can see a repetitive pattern of white and black keys.



One such a pattern consists of 12 keys,

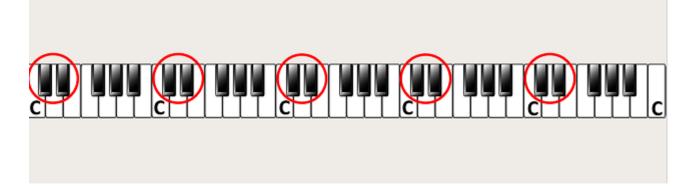
7 white keys:



Those are exactly the 12 different notes in Western music I spoke of above.

The note names of the white keys

This might sound funny, but to find the names of the white keys, look first at the black keys: they come in groups of 2 black keys and 3 black keys. Just at the left of a group of 2 black keys you can find the note C.



To find the names of the other white keys, just go up alphabetically to G as in the next figure.



Now, we have to name 2 more white keys. Notice that we've used the letters C to G in alphabetical order, but we haven't used the 2 first letters of the alphabet yet. So, let's use them for the 2 missing keys, as follows:

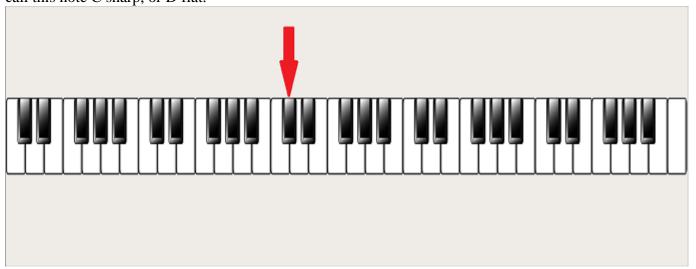


The note names of the black keys

Do you remember that we had to look at the black keys first to find the names of the white keys? Well, let's reverse the roles now: to find the names of the black keys, we have to look at the white key names first, since the names of the black keys are derived from the white key names.

As you can see, a black key is always situated between 2 white keys. The black key indicated by the arrow in the figure below is for example between the C and the D. As this note is higher than

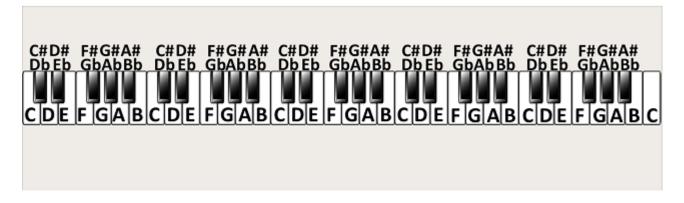
the C, but lower than the D (the pitch of the notes gets higher when you go from left to right), we call this note C sharp, or D flat.



So, sharp means: the note just at the right, and flat means: the note just at the left. We write C sharp as C# and D flat as Db.

So the black keys actually have 2 names, the name of the white key at the left with a sharp (#) sign, or the name of the white key at the right with a flat (b) sign.

In the next figure, you can see all the names of the notes on a piano keyboard.



As you can see, this is a pattern of 12 different notes (represented on the piano by 7 white keys and 5 black keys) that repeats itself.

Double sharps and double flats

Btw, notice that on the right side of the B and on the right side of the E, there is no black key. So you could call the C also B#, and the F an E#. Or, in the same way, you could call the B a Cb and the E an Fb. In music theory, this is sometimes needed (the 7th note in the F# major scale is an E#, not an F, even if it is exactly the same note). It is even possible to have double flats (bb) or double sharps (##). For example, a C## is raised 2 times, so this is equivalent to a D. A shorter

writing for double sharp looks a bit like an x (see figure below), so Cx would be the same note as C## or just simply D.



Enharmonic equivalent

Two notes that are written differently, but that are actually one and the same note, are called enharmonic equivalent notes.

C# and Db are for example enharmonic equivalent notes: they are written differently, but are the same note.

Other examples:

- A# and Bb
- E# and F
- F## (or Fx) and G
- Bbb and A
- etcetera

Now you should be able to recognize the keys of the piano and know the names of the corresponding notes. In the beginning, you will probably not remember every note and every key on the piano, so just practice 5 minutes a day and you will see: in no time you will master it.

The middle C

From all the C's on the piano, there's only one that is the middle C. The middle C is, as you guessed already, a C that doesn't sound (very) low nor (very) high. It sounds, well, in the middle... But where is middle C on a piano or keyboard?

Where is the middle C?

The location of the middle C on a piano or keyboard depends on the number of keys that your instrument has. An acoustic piano normally has 88 keys. An electronic keyboard however has not necessarily always 88 keys. There are keyboards with 76, 73, 61 or 54 keys, and even other numbers of keys exist. As a general rule: the middle C is the C that is nearest to the exact middle of the keyboard.

Let me illustrate this with some keyboard-examples.

The middle C on an 88 key piano (most acoustic pianos)

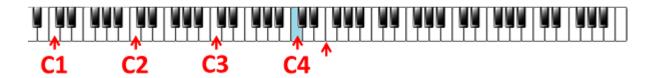
To find the middle C on an 88 key piano or keyboard, look for the exact middle of the keyboard. Since the keyboard has 88 keys, this is between key 44 and 45 (red arrow in figure). The middle C (highlighted in blue) is the C nearest to the exact middle of the piano.

88 keys



On an 88 key piano or keyboard, the middle C is the 4th C from the left of the keyboard.

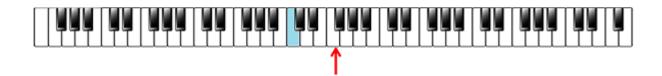
88 keys



The middle C on a 76 key piano

The exact middle of a 76 key piano is showed in the next figure. In the same figure, the middle C —which is the C nearest to the middle of the keyboard- is also indicated.

76 keys



The middle C on other keyboards

As mentioned above, the general rule states: the middle C is the C that is nearest to the exact middle of the keyboard. And, to be honest, it's normally not even necessary to count the number of keys, divide by 2, look for the nearest C, etcetera: with a little bit of feeling, you can see at a glance which C is the middle C.

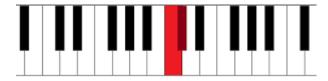
Half steps, whole steps, octaves

When you play 2 different notes at the same time or one after the other, you will have a lower and a higher note. This means there is a distance (in pitch) between the 2 notes. This distance is called the interval between the 2 notes, the note interval, or simply interval.

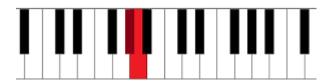
You can measure this intervals between notes in number of semitones, and this takes us directly to our first interval: the semitone.

The semitone

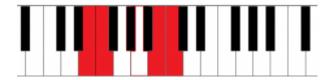
The easiest way to explain semitones is to look at the piano keyboard. A semitone is the interval from a key on the keyboard to the first note at the left or the right. So, for example, the interval from C to C# (or Db) in the next figure is a semitone.



Or, for example from G# (or Ab) to A:



It's also possible to have a semitone between 2 white keys; this is the case between E and F and between B and C:



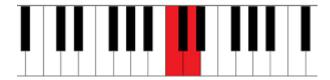
Notice that it's not possible to have an interval of a semitone between 2 black keys on the piano.

Other names for a semitone are: half tone or half step.

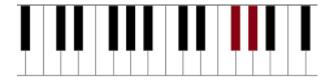
The whole tone

The whole tone, or also called whole step, is an interval that consists of 2 semitones. Here are some examples of a whole tone:

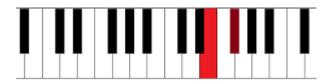
From C to D:



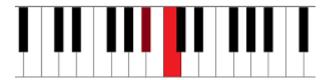
From F# (or Gb) to G# (or Ab):



From E to F# (or Gb):



From Bb (or A#) to C:

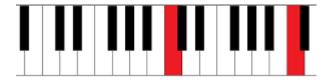


The octave

The octave is an interval of 12 semitones, or 6 whole tones.

Since there are 12 different notes in Western music, this means that when you go up an octave, you arrive at the same note. Well, it's of course not exactly the same note, since it's higher in pitch: an octave higher.

For example, from C to C:



Or, from Ab to Ab:

