

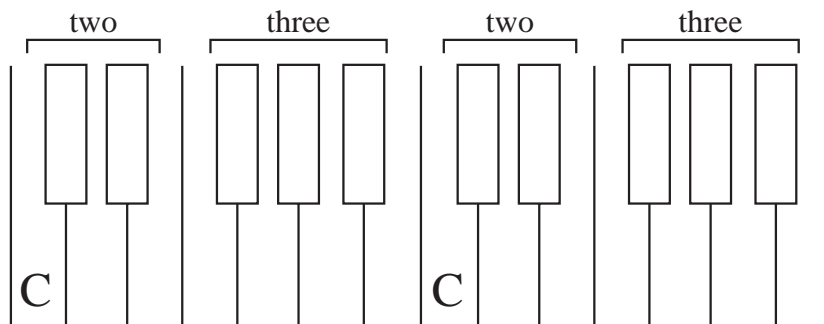
Meet the Piano Keyboard

“Why should I learn about the piano?” you might ask. There are a few good reasons. It’s extremely useful for understanding musical space - the notes are laid out in a sort of grid that only extends in two directions, and there is a clear division between white and black keys. (I’ll say more about why that’s useful in a little bit.)

Also, it’s the ultimate instrument for understanding how notes combine to make harmonies. With a full two-handed technique you can mimic the texture of a chorus or orchestra -- this is why most Classical composers have used the piano as their main compositional tool.

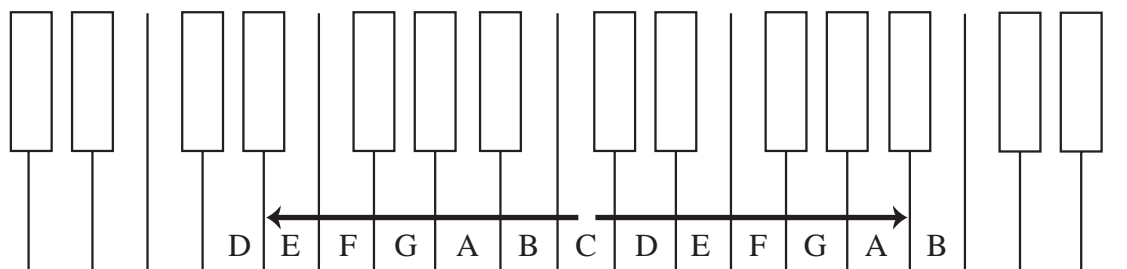
Getting Oriented

The first note you want to find is probably middle C. Most beginning piano methods start with music in the key of C major, and so this will be your most useful reference point. To find C, look at your black keys first. They have an alternating pattern of two and three keys grouped closely together. Find a group of two keys, and hit the white note immediately to the left of it. That’s a C!



There are probably multiple Cs on your keyboard instrument. (A standard 88-key piano has eight of them.) Middle C should (unsurprisingly) be in the center. It will probably sound like a perfectly “medium” note to you, neither low nor high.

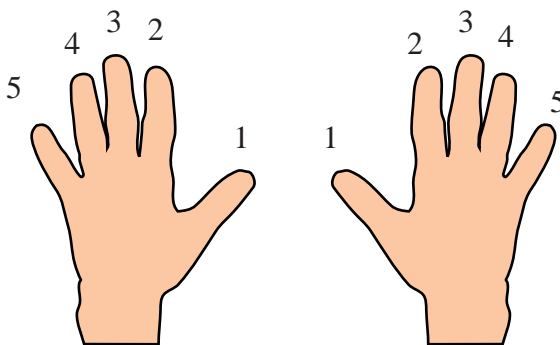
The white keys on the piano correspond to the plain letter names we use to name notes. So you can count up or down from C and find all of the other tones.



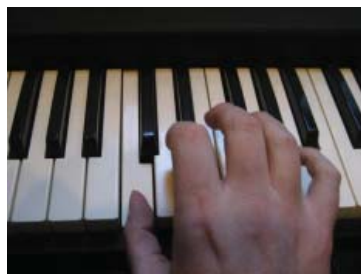
In the beginning we'll stick to the key of C major, which uses only these white notes.

Fingering

If you are going to actually play the piano, you need to understand the concept of fingering. There are times when it really makes sense to pay attention to how your hand moves while you play. Pianists use a number system to refer to the different fingers - the thumb of each hand is 1 and the pinky is 5. When you see a little number above a note, it means "play this note with this finger."

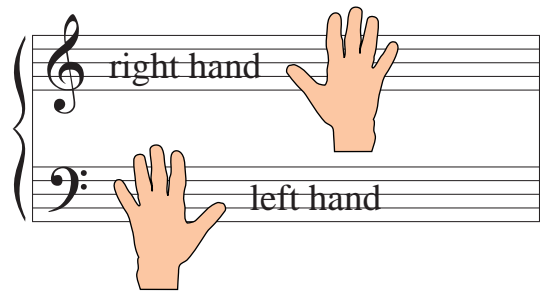


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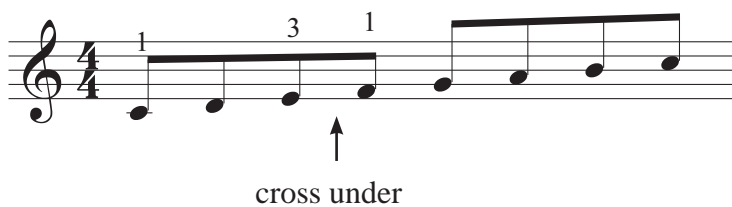
(You will also want to write your own fingerings in the music to remember the best way to play it.)

In general the music in the top staff is usually played with the right hand, and the bottom staff is played with the left.

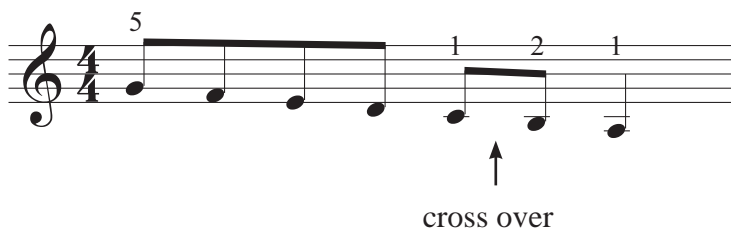


You usually want to keep your hand in a relaxed shape that covers about five white keys (one for each finger.) But sometimes a melody continues for more than five notes - what do you do then? Sometimes you will need to cross fingers over or under each other in order to continue the line and make a smooth connection.

In order to play this scale I'd cross my thumb under my third finger.



And to play this descending line I'd cross one finger over my thumb.



But, if you use a beginner's piano method you'll probably start with easy pieces that don't require a lot of fancy fingering.

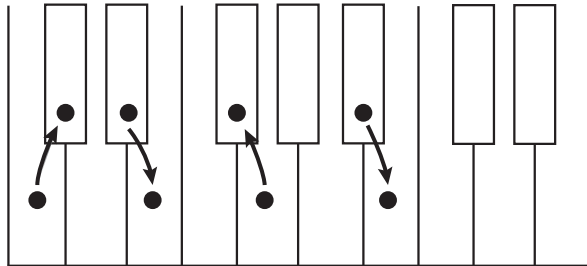
Whole Steps and Half Steps

So as I mentioned above white notes correspond to the “plain” letter names. The black keys are in-between notes which require sharps and flats to name. As far as I know the piano is the only instrument with such a clear visual separation of the basic musical alphabet from these slightly more complicated pitch locations.

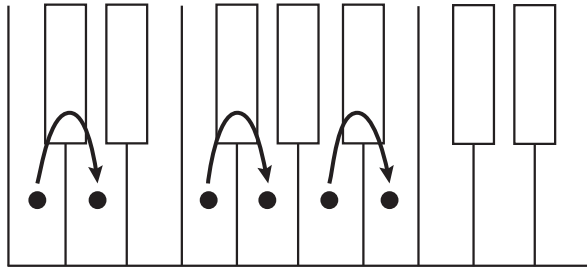
And here’s why that’s important - not all of the white notes are the same distance apart.

The most basic units of measurement for musical distance are whole steps and half steps.

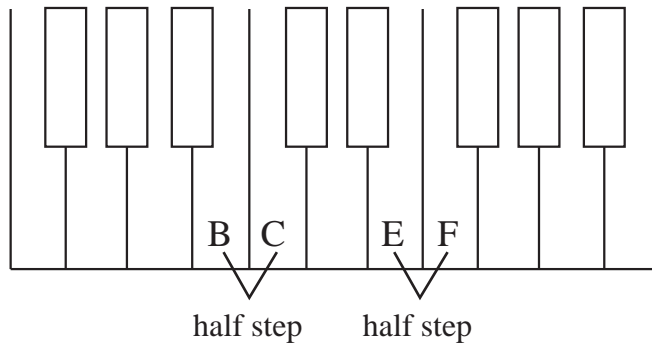
A **half step** is the smallest possible interval in the standard musical system. It is the distance between any white note and black note that touch each other.



A **whole step** is two half steps. This is the typical distance from one white key to the next. To get from one to another you have to travel a half step to the intervening black key and then another half step to the next white key.



However, some white keys have no intervening black key. They are only a half step apart! If you play these pairs of white keys you’ll hear that they sound closer together than the whole-step pairs.



Thus, the way we talk about music with the letter names etc. isn’t perfectly consistent and even - it is a somewhat warped space. The piano keyboard is the only place where this irregularity is visually obvious. It’s an excellent tool for figuring out the basic materials of music like scales, chords, and intervals.

So, finally, here is a paper piano that you can use for our future theoretic endeavors.

