
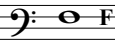


# Basic Music Notation

by John Jorgensen

This is the staff. Each staff consists of five lines on which notes are placed.  
The lines and spaces represent different pitches (frequencies).

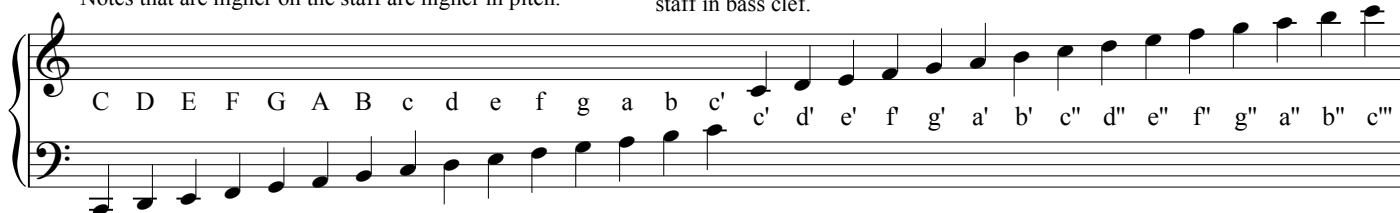
Clefs specify how to read the lines and spaces by giving a reference point. The clef below is called both *treble clef* and *G clef* because the spiral is circling the second line known as G.

Sometimes multiple staves are grouped together to show multiple instruments (such as voices in a choir) or a single instrument with a large pitch range (like a piano).	The vertical line to the right is a barline. It separates the music into groups of notes called measures.	
		The clef below is called both <i>bass clef</i> and <i>F clef</i> because the two dots are above and below the line known as F.
		

Here are the main notes in the treble and bass clefs. Notes that are higher on the staff are higher in pitch.

The note called *middle C* is on a ledger line below the staff in treble clef, and above the staff in bass clef.

Lines called *leger lines* are added above and below the staff to show notes that don't fit on the staff.




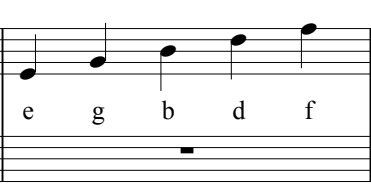


Middle C on the keyboard is in the center of the keyboard directly to the left of two black keys.

The notes shown above correspond to the white keys on the keyboard. The black keys correspond to accidentals (sharps and flats.)



There are more notes and keys on a piano than shown here. Additional ledger lines can be used to show these on the staff.

Here are some ways to remember the notes.

treble clef <i>space</i> notes spell "FACE"	treble clef <i>line</i> notes "Every Good Boy Does Fine"	bass clef <i>space</i> notes "All Cows Eat Grass"	bass clef <i>line</i> notes "Good Boys Do Fine Always"
			

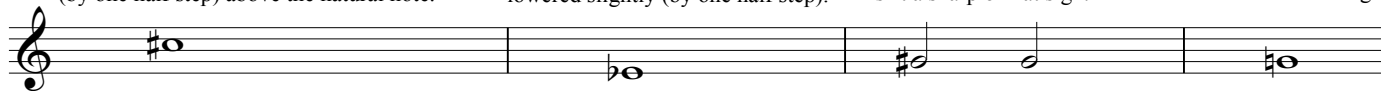
Accidentals allow us to specify pitches immediately above and below the named notes. The black keys on a piano can only be notated using accidentals.

This is a sharp. It indicates that the actual pitch of the note should be raised slightly (by one half step) above the natural note.

This is a flat. It indicates that the actual pitch of the note should be lowered slightly (by one half step).

If there are two or more notes with the same name in the same measure and the first note has a sharp or flat, then the second note will be sharped or flatted as well, even if there isn't a sharp or flat sign.

A note without a sharp or a flat specified is a natural. Sometimes a natural is shown explicitly with the natural sign.



This note is C sharp. It represents the black key on the keyboard to the right of C.

This note is E flat. It is to the left of E on the keyboard. It is the same black key as D sharp.

The first G has a sharp, so the second G will be sharped as well.

This is G natural. It is a white key on the keyboard.

The note duration specifies how long a note is to be played. Notes have fractional durations.  
 A *half note* is half as long as a *whole note*. A *quarter note* is half as long as a *half note*.  
 An *eighth note* is half as long as a *quarter note*. A *sixteenth note* is half as long as an *eighth note*.

Each measure below contains notes whose total duration is equal to 1 whole note.

For more music theory, including training with games and flashcards, visit <http://www.musictheory.net/> and <http://musictheoryblog.blogspot.com/>. You can also buy flash cards and music theory books at a music store.

Eighth notes and sixteenth notes are usually connected together with beams. They are also sometimes left without beams.

1 whole note

2 half notes = 1 whole note

2 quarter notes = 1 half note

2 eighth notes = 1 quarter note

2 sixteenth notes = 1 eighth note

whole rest (looks like a hole in the line)

half rests (look like hats above the line)

quarter rests

eighth rests

sixteenth rests

Rests are used to indicate silences in music. They have duration but no pitch.  
 The bass clef above contains rests.

Time signatures tell us what the meter is and what notes values comprise the beat. Time signatures are written as two numbers, one above the other. The top number tells us how many beats are in the measure. This is also the meter. The bottom number tells which note value comprises one beat.

This is 3/4 time. There are 3 beats in every measure and each quarter note represents one beat.

Two beats in each measure, each *half* note gets one beat.

"Common time". Same as 4/4 time.

"Cut time". Same as 2/2 time.

This is 4/4 time. In this time signature there are 4 beats in every measure and each quarter note represents a single beat.

Two beats in each measure, each quarter note gets one beat.

Six beats in each measure, each *eighth* note gets one beat.

A dot after the note means to increase the duration of the note by half the value of the note.

A dotted quarter note is the same duration as a quarter note plus an eighth note. Here a dotted quarter note lasts 1 1/2 beats.

In this time signature the dotted quarter notes last 3 beats (each eighth note gets 1 beat.)

When the same note is connected over a barline, the note is held longer without replaying the note. This is called a tie.

This half circle with a dot is a fermata. It means hold the note a little longer.

A dotted half note is the same duration as a half note plus a quarter note. In this time signature the dotted half note lasts for 3 beats.

Dotted eighth notes are usually connected to a single sixteenth note.

This tied note lasts for 3 beats (half note + quarter note).

This is a key signature. It indicates any sharps or flats that must be observed across all measures.

This is an accent.

This is tenuto. It means emphasize the note.

A pair of solid barlines with dots means repeat this music.

A double barline represents an important change in the music

This is the final barline signifying the end of the song.

With this key signature, all F's, C's, and G's are to be sharped across all measures.

*diminuendo* or *dim.* means get softer.

*pp* means very soft

*p* means soft

*mp* means medium-soft

*mf* means medium-loud

*f* means loud

*crescendo* or *cresc.* means get louder

*ff* means very loud