

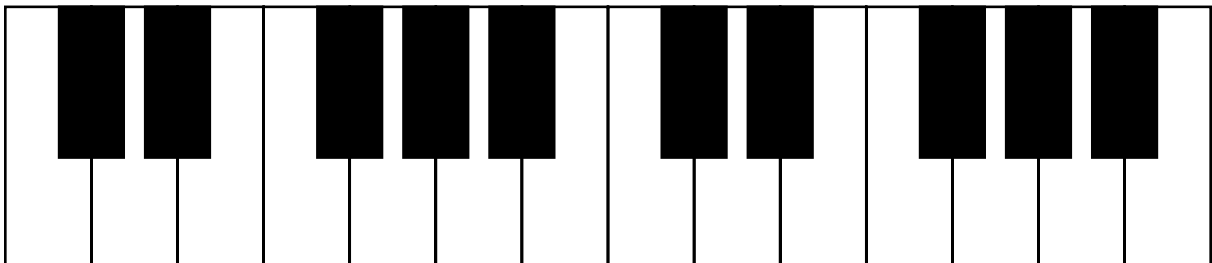
Pitch

1.1 What is Music?

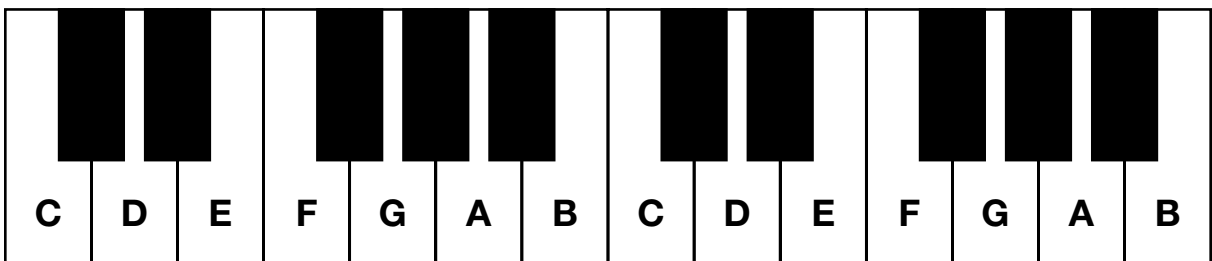
What are the elements of music? There are many correct answers to this question. For the purpose of this book, music will be described as having melody, rhythm, and harmony. We will use notes (pitches) to create both melody and harmony. Rhythm can be a part of the melody, the harmony, or both.

Pitch and the Keyboard

In order to write a paper for an English class, the English language would be used. The English language consists of words made from the 26 letters of the English alphabet. Music has an alphabet as well, but it only uses seven letters: A, B, C, D, E, F, G. Those seven letters of the alphabet correspond to the white notes on a piano keyboard. Here is a picture of a portion of a piano keyboard.

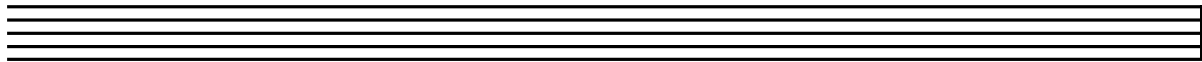


Notice that there are black keys and white keys. The black keys alternate between a group of two black keys, then a group of three black keys, then a group of two black keys, then a group of three black keys ... and so on. Locate a group of two black keys, then look at the white key at the left end of that group of two black keys—that white key is named C. Now locate a group of three black keys, then look at the white key at the left end of that group of three black keys—that white key is named F.



Pitch and the Staff

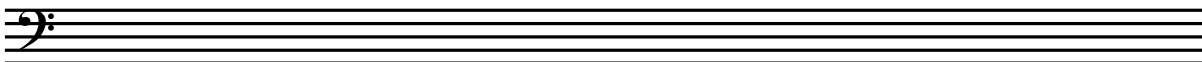
Music is notated on a staff. A staff is five horizontal parallel lines like this:



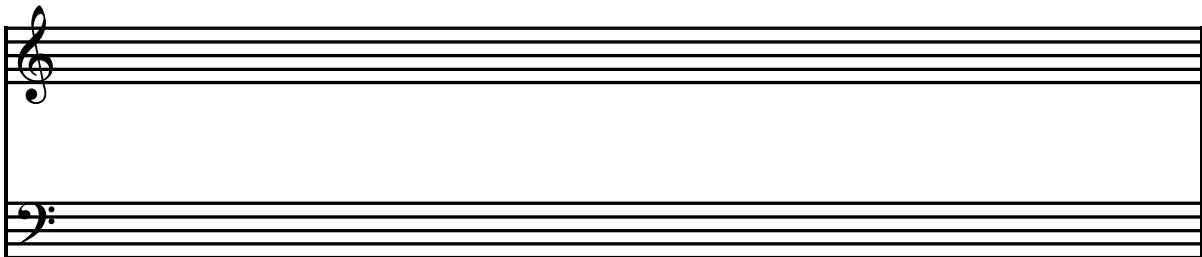
To determine where pitches are located on the staff, a clef sign is used.
This is a staff with a treble clef sign.



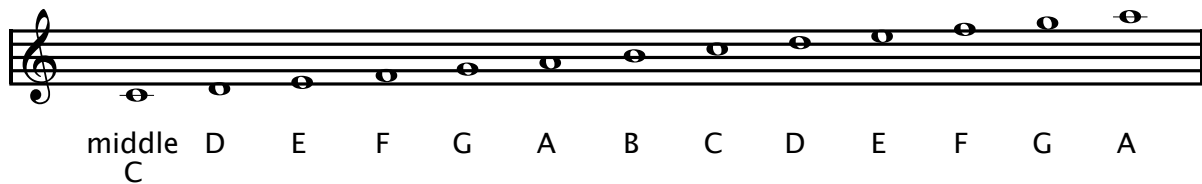
This is a staff with a bass clef sign.



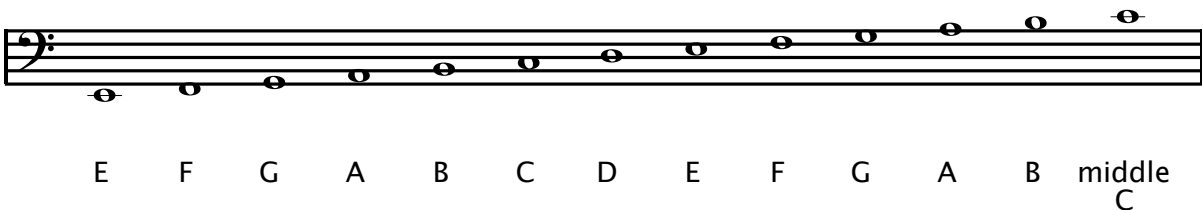
Often, a treble clef sign and a bass clef sign are used together in a **grand staff**.



Knowing the names of the notes on the staff is very important.
Here are note names in treble clef:



Here are note names in bass clef:



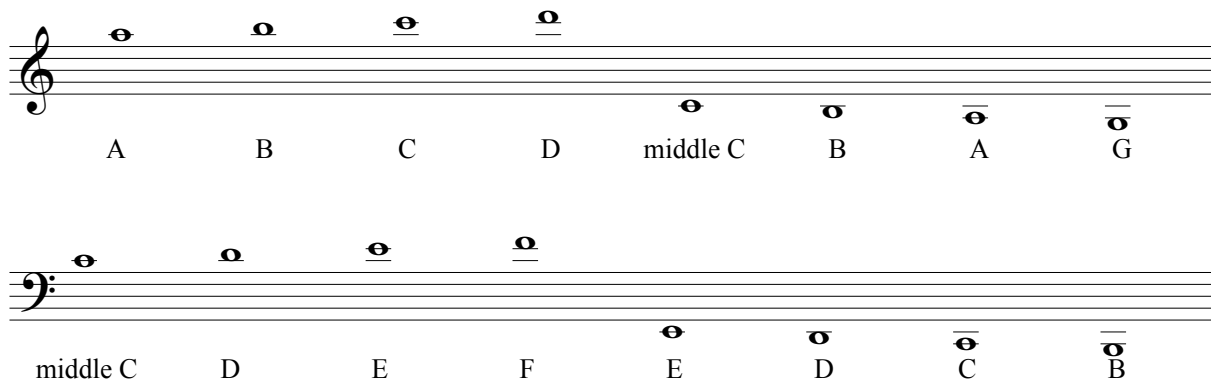
The note that is in the bottom space of the treble clef is named F. The note that is in the bottom space of the bass clef is named A. Please remember that, while a note may look like it is in the same place in the staff, it is the clef sign that determines its name.



In the treble clef, the note name on the bottom space is F. The note name in the next space up is A. The next space's note name is C, and the name of the note in the top space is E. A mnemonic device to remember the names of the notes on the spaces in treble clef is SPACE rhymes with FACE. The names of the notes (again, from the bottom up) in treble clef are E G B D F, which doesn't spell anything. You could remember that **Every Good Boy Deserves Fudge**, or **Every Good Boy Does Fine**.

Looking at the bass clef notes on the lines (again, from the bottom up), the notes are G B D F A. A former student suggested remembering that **Great Big Dogs Fight Animals**. The spaces in the bass clef (from the bottom to the top) could be remembered by the phrase **All Cars Eat Gas** (or **All Cows Eat Grass**).

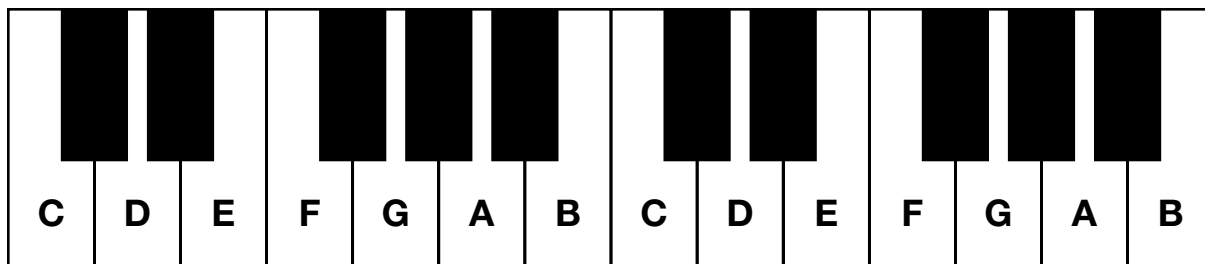
Take a look at the note labeled "Middle C" in both the treble clef and the bass clef. It is different from the other notes in that it requires a line to create it. That line is called a *ledger line*. Middle C in the treble clef is one ledger line **BELOW** the treble clef staff. Middle C in the bass clef is one ledger line **ABOVE** the bass clef staff. Here are more examples of notes using ledger lines.



1.2 Accidentals and the Chromatic Scale

Thus far, the names of the notes have corresponded directly to alphabet names and are located on the white keys of the piano. Looking at the picture of the piano keyboard, notice there is a black key between the white key named C and the white key named D. Similarly, there is a black key between the white key named D and the white key named E. There is **NO** black key between the white keys E and F. Likewise, there is **NO** black key between the white keys B and C.

If there is **NO** key between two notes, the distance is a half step. It is a half step between B and C and it is a half step between E and F. It is a whole step between C and D, however because there is a black key between C and D.



To complete our knowledge of note names, accidentals will be used. There are five symbols which are called accidentals in music: sharp, flat, natural, double sharp, and double flat. Accidentals used in the staff are placed BEFORE the note, and are located so that the middle section of the accidental is in the same line or space governing the note.

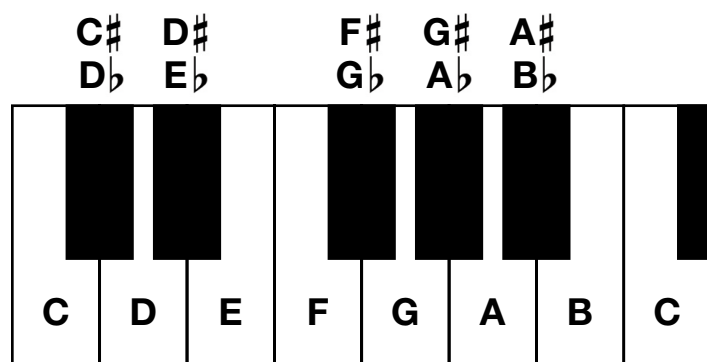
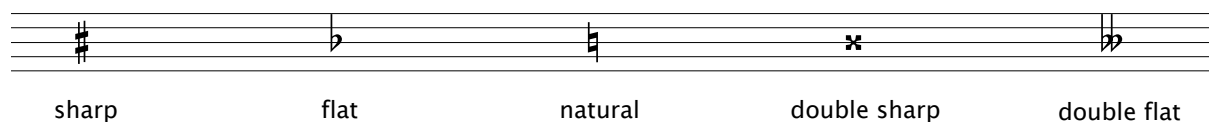
The **sharp** (♯) raises the pitch of a note one half step.

The **flat** (♭) lowers the pitch of a note one half step.

The **natural** (♮) cancels the preceding sharp or flat.

The **double sharp** (×) raises the pitch of a note two half steps.

The **double flat** (♭♭) lowers the pitch of a note two half steps.

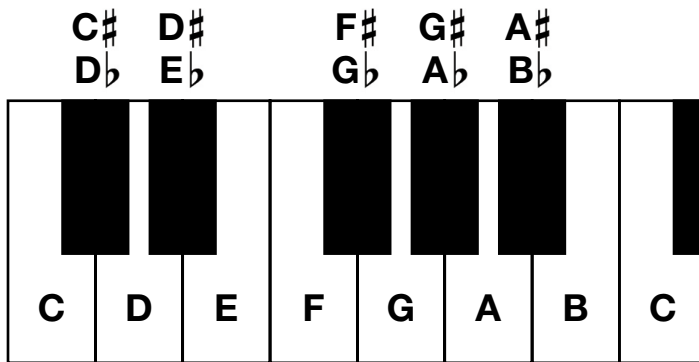


The first use of accidentals will be the chromatic scale. This scale is a collection of pitches arranged so the pitches go up by half step, then return down by half step. Two important things to notice about the chromatic scale are 1) sharps are used for ascending and flats are used for descending, and 2) the chromatic scale does not use E♯, B♯, C♭, or F♭. Accidentals will also be used in other types of scales covered in future chapters.

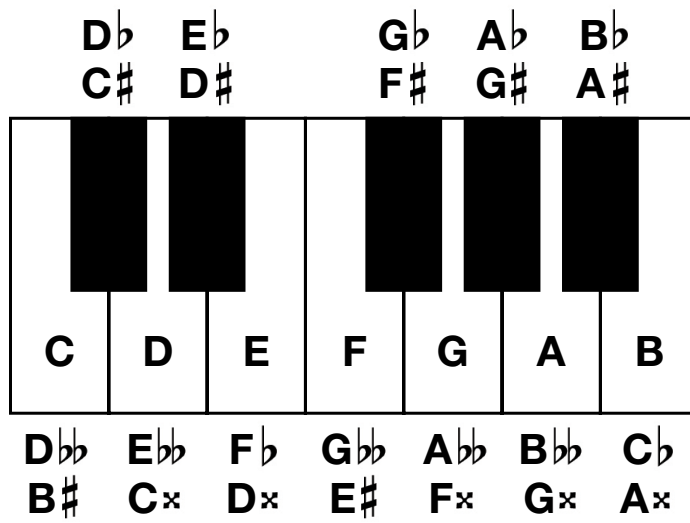
The image displays two musical staves, each with a treble clef and a key signature of one sharp (F#). The first staff shows an ascending chromatic scale starting from middle C (C4) and ending at C5. The notes are: C4 (middle C), C#4, D4, D#4, E4, F4, F#4, G4, G#4, A4, A#4, B4, and C5. The second staff shows a descending chromatic scale starting from C5 and ending at middle C (C4). The notes are: C5, B4, Bb4, A4, Ab4, G4, Gb4, F4, E4, Eb4, D4, Db4, and C4 (middle C).



Notice that each of the black keys have two names, for example D♭ and C♯. When a note has different spellings for the same pitch, that is called enharmonic equivalents. F♯ and G♭ are enharmonic equivalents, as are the pairs D♯ and E♭, G♯ and A♭, B♭ and A♯.



This keyboard diagram more fully illustrates the many enharmonic equivalents:



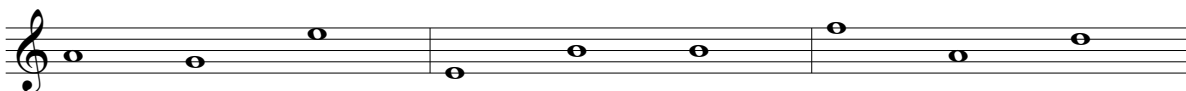
Note Names

Write the name of the note in the space provided.

Treble Clef







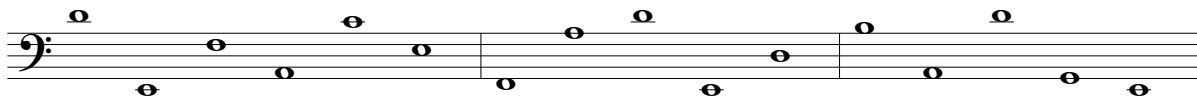
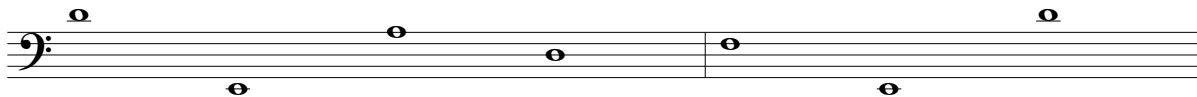
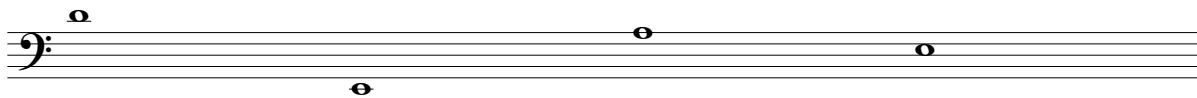
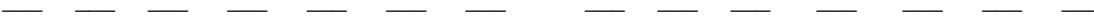




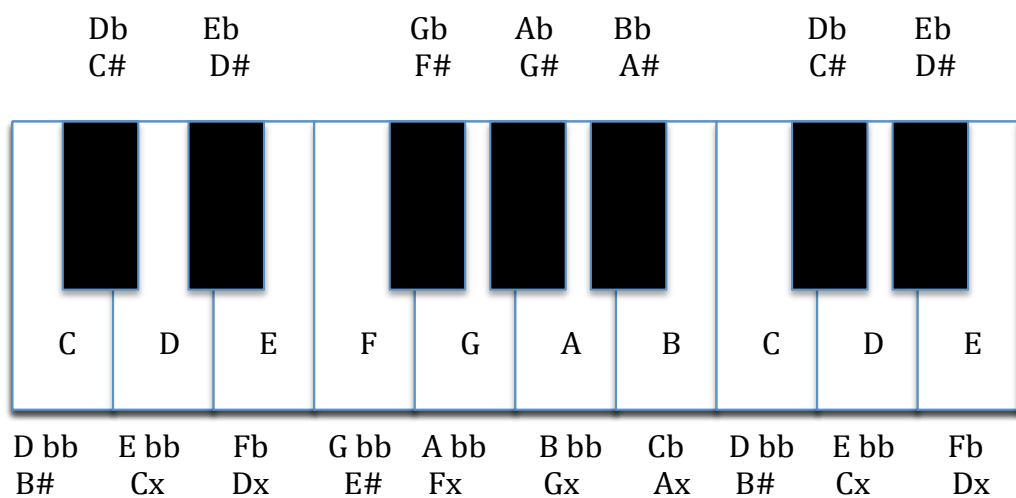




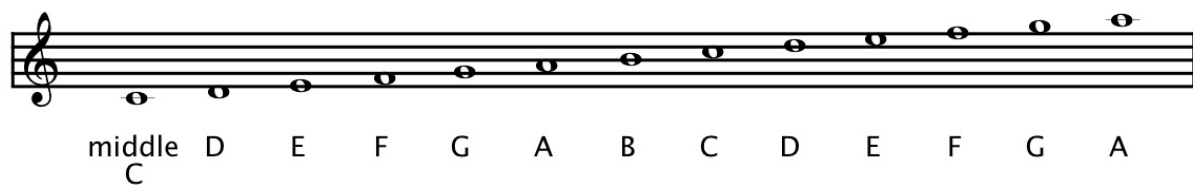
Bass Clef



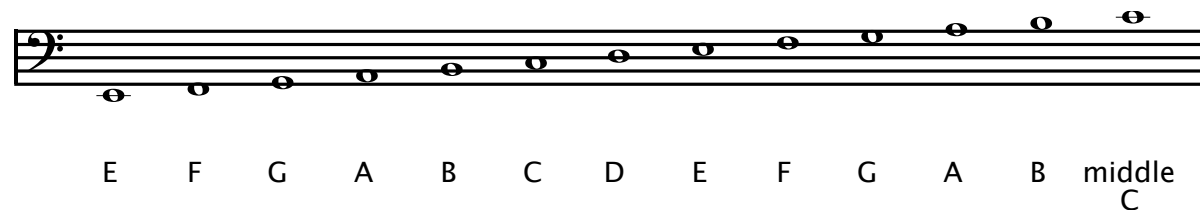
1. Hand draw a copy of this fully labeled keyboard



2. Hand copy on the staff provided. (Note names in treble clef)

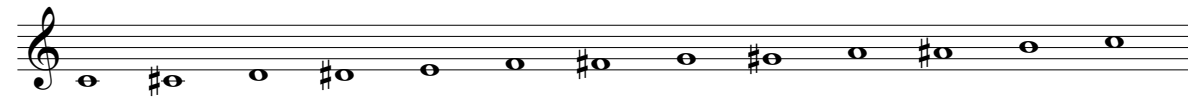


3. Hand copy on the staff provided. (Note names in bass clef)



Homework: Chapter 1

4. Hand copy on the staff provided. (Chromatic scale ascending and descending)



middle C C# D D# E F F# G G# A A# B C



C B Bb A Ab G Gb F E Eb D Db middle C

