

# Basic Music Theory-Lesson Three

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Last month, as you will recall, we talked about the staff and just what all the lines and spaces mean in printed music. You should know by now that in the treble clef the lines represent the musical notes, E, G, B, D, F and the spaces represent the notes F, A, C, E. I'll leave it up to you to go back and read about the lines and spaces in the bass clef. As I mentioned, you should memorize these, although by knowing what the clefs stand for, one can easily figure out what each line and space represents. Knowing the notes only gives you half the story. There are really two pieces of information conveyed by the printed notes. The lines and spaces represent the "pitch" at which the note is sounded. The other piece of information the note represents is "duration", or how long one sounds a particular note. This month, I'll explain how we know just how long to hold the notes we sing.

Pictured below are the most commonly seen notes in barbershop arrangements. The open oval without a stem is called a whole note. As one can see, the notes are very logically named after that. Put a stem on the open oval, and one has a half note. The reason this note is called a half note is because it is sounded or sung for exactly half the time that the whole note is sung.



Figure 1

Likewise, a quarter note is sung for exactly one fourth the time that a whole note is sung. It should be obvious by now, what the eighth notes represent. The relationships are illustrated below. This is by no means complete, it's rare that one sees notes of smaller duration in barbershop music, but in orchestral scores, one often sees sixteenth, thirty-second, and sixty-fourth notes!! I should mention at this time, that "non singing" time is also represented by a similar series of "rests". There are whole rests, half rests, quarter rests etc. These rests are related to each other just like the notes are and are pictured in Fig. 2.



Figure 2

Now that we know the relationships between the notes and rests in terms of duration, how do we know just how much time to give to each note? This is where the time signature, and the unit of the "measure" becomes important. Music is divided by vertical lines, or "bars" into smaller units called measures. The unit of time used in music is called a "beat". Each measure gets only so many "beats". Note that the length of time for any beat is completely arbitrary. A beat can be 1 second long, 2 seconds long or any other length of time. The important relationship is how many beats any note represents. In a simple case, if a whole note gets 4 beats, it follows that a half note only gets 2 beats, while a quarter note gets only 1 beat. Does this make sense? To find out just how many beats are allowed for each measure and which note is assigned one beat, look for the "time signature" at the beginning of each piece of music. The time signature looks like a fraction. The top number tells you how many beats are allowed for each measure, while the bottom number tells you which note gets one beat. For example, music written in "4/4" time, each measure gets 4 beats while the quarter note gets one beat. Although sometimes you see the time signature 4/4 written out in music, it is so "common" that it is represented by a large "C", for "common time" Likewise in "3/4" there are only 3 beats in a measure and the quarter note gets one beat. Any possible combination can be imagined, but the most common time signatures are shown below.



Figure 3. Time Signatures.

This is just a brief introduction to the concept of "rhythm" and we'll learn more next month!

