

Chapter 3

Basics of Music Notation

A Glimpse of History

Early in the 11th century a Benedictine monk named Guido of Arezzo wished to assist his church choir in their singing of Gregorian chants. This led to his invention of a method of writing music that is the basis of the notation system that we use today.

Developed by musicians over almost one thousand years, staff notation is the universal mode for representing music.

The two most important elements of music notation are pitch and duration. First we will discuss pitch notation: that is - names of notes, their symbols and how they are represented:

Notes

Notes are named after the first seven letters of the alphabet:

A B C D E F G

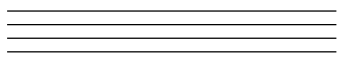
Notes are placed on a *staff* (the higher the pitch, the higher it is placed on the staff) using a symbol called the *notehead*.

The notehead can be either:

1. a hollow oval: ○
2. or a filled-in oval: ●

The Staff

The staff is a five-line graphic matrix that notes are placed in:



Treble Clef →



The guitar uses the treble clef to notate music for the guitar. The treble clef is placed at the beginning of each line of music and fixes the note "G" on the second line of the staff:

Treble Clef →



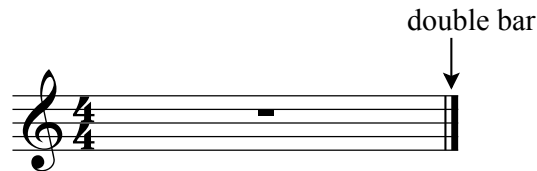
G (This G is the note the 3rd string is tuned to.)

Additional Elements of Music Notation

On this page you will find a few more commonly encountered elements of music notation.

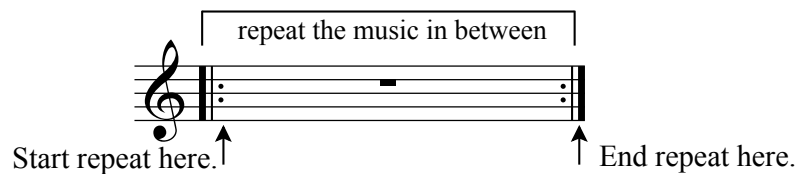
Double Bar

A double bar signifies the end of the composition or a portion of it:



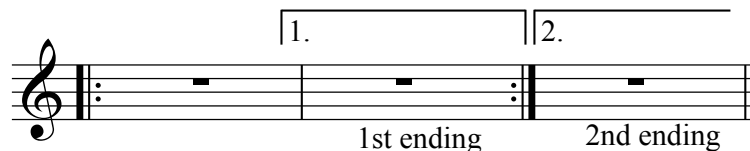
Repeat Signs

A repeated section of music is indicated by a double bar with added dots. (If there is no "start repeat" sign it means to repeat to the very beginning of the music.)



First and Second Endings

Sometimes a repeated passage has a different closing when played for the second time. The 1st ending is played only the first time. When playing the repeat do not play the 1st ending, rather skip directly to the bracketed music that shows the 2nd ending.



A Hint about Working with Music Notation

This chapter illustrates the most essential elements of music notation. Use this section as a reference when you wish to identify a symbol or element of music notation you are working on.

What you study in this chapter is applicable to music for *any* instrument or voice. Used in conjunction with Chapter 4 on Guitar Notation, over time it will become second nature for you to pick up any guitar piece and just begin to play.

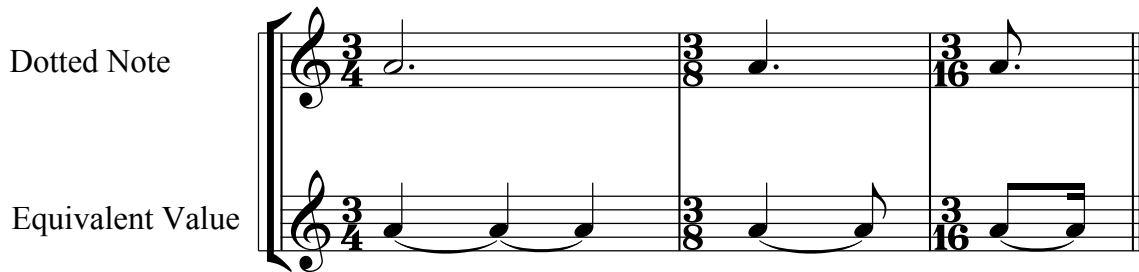
The Tie

A curved line connecting two notes of the same pitch is called a tie. Only the first note of a tie is played, the value of the second note is added to it. The arrows below point to the ties that lengthen the initial notes:



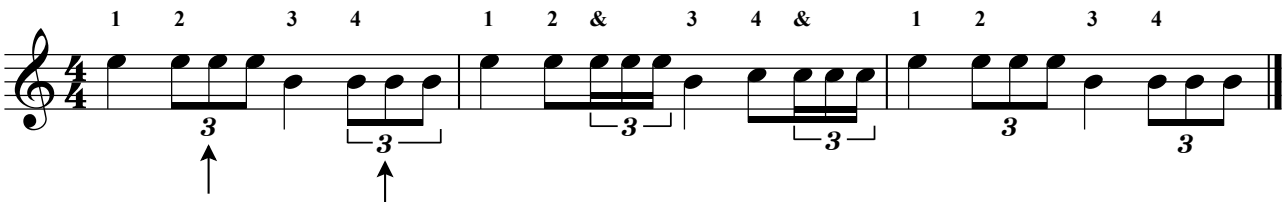
Dotted Notes

A dot placed after a note adds to the time value of the note by half its value:



Triplets

Three notes of equal length in one beat is called a triplet. A triplet can be applied to any note value. Here below are a few of the most common triplets:



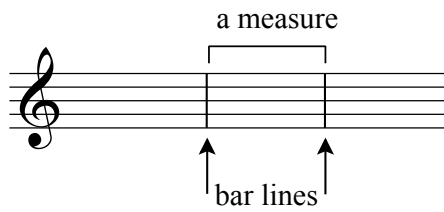
The triplet is shown with the number "3" centered above or below the three note group. The triplet can be notated with or without accompanying brackets.

Mastering Rhythmic Structures

All elements of rhythmic notation are mastered through practice. When you are ready, begin to study Chapter 13, called Basic Rhythm Exercises. It will guide you to a deeper understanding of all the elements of rhythm notation introduced here.

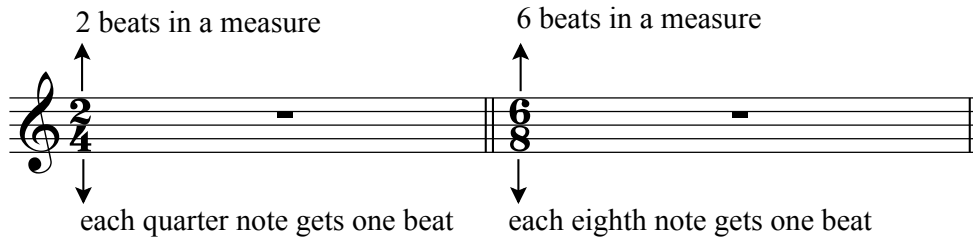
Measures and Bar Lines

Music is divided by vertical lines called bar lines into portions called *bars* or *measures*. Both words mean the same thing.



Time Signatures

A time signature consists of two numbers shown at the beginning of the music. The upper number tells how many beats are in each measure. The lower number indicates the kind of note that gets one beat.



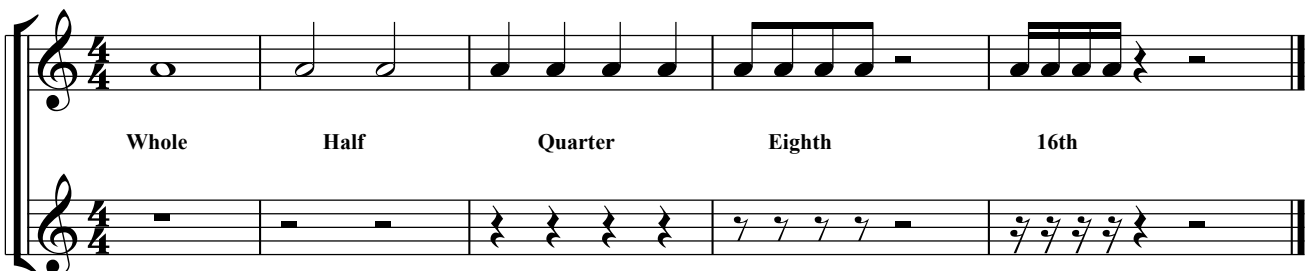
Beams and Flags

Notes with flags may be joined together with beams. The flag and corresponding beam have the same rhythmic value:



Rests

Each note has a corresponding rest which is counted in the same way as the note.



Time Value of Notes

The mapping of durations, or the time value of notes, is another crucial aspect of music notation.

A Common Misconception

Many novice musicians feel that they lack "rhythm ability" because of the time required to master rhythm notation. Yet almost everyone has an innate sense of rhythm. Musical rhythms are reflections of how humans breathe, move, laugh, speak, and sing.

What does take effort and plenty of patience is learning to interpret the notation for rhythm. When we contemplate the miraculous precision of rhythm notation, and its capacity to map rhythm structures for every style and combination of instruments, it should be no surprise that fluency in reading rhythms is a precious journey shared with all other trained musicians. It does not happen in a blink of an eye.

Even if the top innovators of Google or Microsoft decided to produce the ultimate instruction book on musical rhythm, every person would still have to learn by doing. If you remember learning to ride a bicycle, your success was not based on what someone told you, or reading a book. You kept trying until you got the hang of it. Then it was easy. Rhythm notation is just like that.

How Rhythm is Notated

Rhythm is notated using symbols that are attached to or next to the symbols for pitch. The chart below names the basic symbols, shows what they look like, and gives the number of counts that each symbol gets.

Kind of Note	What It Looks Like	Number of Counts
Whole Note -----	○	4 quarter note counts
Half Note -----	♪	2 quarter note counts
Quarter Note -----	♪	1 count per quarter note
Eighth Note -----	♪	2 counts to a quarter note
Sixteenth Note -----	♪	4 counts to a quarter note
Thirty-second Note -----	♪	8 counts to a quarter note

The example below illustrates notes with different rhythmic values placed on the staff:



Accidentals

The signs which raise, lower, or alter the pitch of a note are called accidentals. Accidentals modify the pitch of the note they come before by 1/2 step:

- ♭ ← This is a flat: It lowers the note by 1/2 step or 1 fret.
- ♯ ← This is a sharp: It raises the note by 1/2 step or 1 fret.
- ♮ ← This is a natural: It removes the sharp or flat of the note.



Key Signatures

Sharps and flats at the beginning of a piece are used throughout the piece. This is called the key signature. The key signature can indicate *either* a major or a minor key.

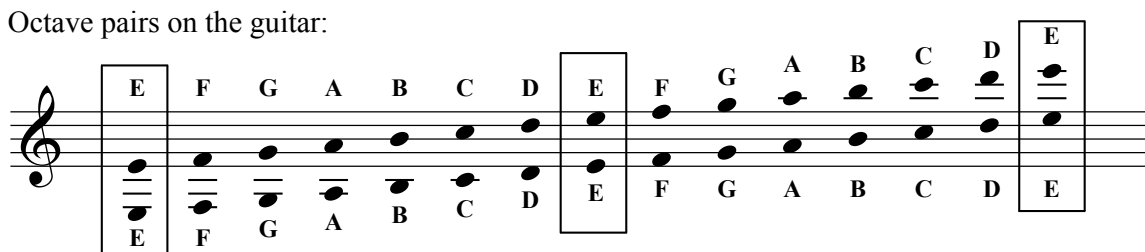
Further study of music theory will help you determine which key, major or minor, is associated with a given key signature. Below are examples of common key signatures that the guitar plays in:



The Octave

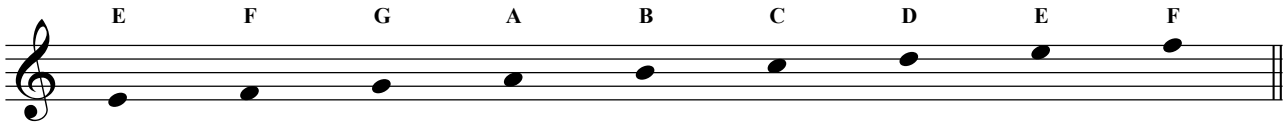
The *octave* is the interval spanned by two notes, where the higher note is twice the frequency of the lower note. The sound of both notes is so close to being identical that they are given the same letter name. This is why the seven letter names of the notes (A → G) are *repeated* as they cycle throughout the staff.

Staff notation has a unique position for each note we play. Study the example below and observe each pair of notes. The boxed pairs show octaves created with the notes named E. Visually the octave always is written with one note in a space, and its octave pair on a line, with 2 and 1/2 spaces between them.

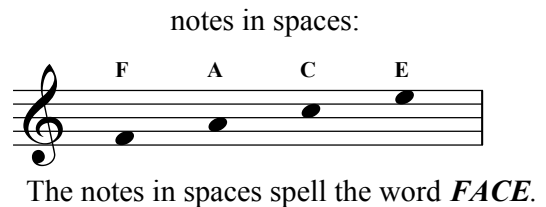
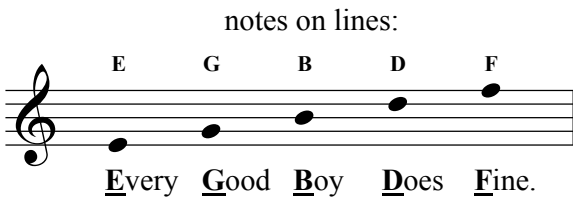


Notes on the Staff

The notes are placed on the lines or in the spaces of the musical staff:



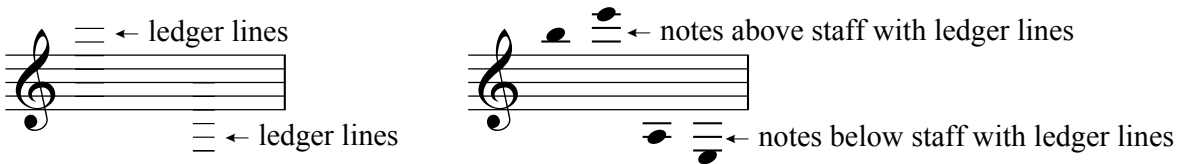
Many find it helpful to divide the notes within the staff to notes on lines and notes in spaces.



The notes on lines can be memorized using the mnemonic above.

Ledger Lines

Notes that are higher or lower than the staff are notated with small lines, called *ledger* lines, that in effect *extend* the staff just for that note:



Musical Intervals

In music the term *interval* means the musical distance between two notes.

The Half-Step

The smallest interval is called the 1/2 step. On the guitar a half-step is formed between any two notes on adjacent frets of a string. Also, a 1/2 step is formed between any open string and the first fret of that string.

