

## Notes and Letters

In order to communicate musical ideas, musicians rely on a system or language based on the combination of numbers, letters, and words. The more understood about this system of music theory, the easier it will be to learn music, and the first step for guitarists is to learn how to identify *letter notes* on the guitar.

### Method vs. Memorization

To identify letter notes on the guitar, having a *method* to locate all of the notes works better than having to memorize where certain notes are. This can be done using a *‘horizontal-vertical approach’*, which involves knowing the letter names of the six open strings going across the fretboard (*horizontally*), and then learning how to ‘count-up’ each string going up the fretboard (*vertically*). The following sections provide a step-by-step approach to using this approach.

### ‘Horizontal Approach’ - Open Strings

With a *horizontal approach*, the letter names of the open strings (*from the first ‘top’ string to the sixth ‘bottom’ string*) are: ‘E’- ‘B’- ‘G’- ‘D’- ‘A’- ‘E’. A phrase to help memorize the six open strings is: ‘Every Baby Gets Damp After Eating’. Using the horizontal approach, the open strings can now be considered the ‘starting points’ that will begin the next step of identifying notes going ‘*vertically*’ up each string, which requires knowing the *chromatic scale*.

### The Chromatic Scale

The *chromatic scale* consists of twelve notes and is essentially the ‘music alphabet’. The letters ‘A’ through ‘G’ identify the first seven notes, while the remaining five notes have an additional description of either ‘*sharp*’ (‘#’) or ‘*flat*’ (‘b’) added to a letter name. Sharp and flat notes are essentially synonyms for each other, and will be discussed in more detail on the following page. Below is an example of the complete *twelve-note chromatic scale*, focusing specifically on sharp notes:



**The Chromatic Scale - Sharps**

### The ‘Vertical Approach’

With the *vertical approach*, choose any open string, determine it’s letter name, and begin ‘counting-up’ from that letter note using the chromatic scale. Every note is followed by a sharp note except for ‘B’ & ‘E’. Using this *horizontal-vertical approach*, every note on the guitar can be found. The diagram below shows every letter note on the fretboard from the open strings (*far left*) to the twelfth fret (*far right*):

	E	F	F#	G	G#	A	A#	B	C	C#	D	D#	E
	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
	G	G#	A	A#	B	C	C#	D	D#	E	F	F#	G
	D	D#	E	F	F#	G	G#	A	A#	B	C	C#	D
	A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A
	E	F	F#	G	G#	A	A#	B	C	C#	D	D#	E
		1	2	3	4	5	6	7	8	9	10	11	12

### Everything Repeats Every 12 Frets

The same twelve-note pattern *repeats every twelve frets* on the guitar. In the above diagram, all of the open string notes are the same letter name as those along the twelfth fret. Both the open first string and the first string/twelfth fret are ‘E’ notes, with the ‘E’ along the twelfth fret being an *octave* higher.

## Raised vs Flattened Notes

In music, the term ‘sharp’ means a note is *raised* to higher pitch. For example, ‘A sharp’ (‘A#’) will always be a higher pitch than ‘A’. The musical term ‘flat’ means the opposite. When a note is *flattened*, it is lowered from its original pitch. For example, ‘B flat’ (‘Bb’) will always be a pitch lower than ‘B’. The diagram below shows every letter note (*using flats*) on the fretboard from the open strings (*left*) to the twelfth fret (*right*):

E	F	G <sup>b</sup>	G	A <sup>b</sup>	A	B <sup>b</sup>	B	C	D <sup>b</sup>	D	E <sup>b</sup>	E
B	C	D <sup>b</sup>	D	E <sup>b</sup>	E	F	G <sup>b</sup>	G	A <sup>b</sup>	A	B <sup>b</sup>	B
G	A <sup>b</sup>	A	B <sup>b</sup>	B	C	D <sup>b</sup>	D	E <sup>b</sup>	E	F	G <sup>b</sup>	G
D	E <sup>b</sup>	E	F	G <sup>b</sup>	G	A <sup>b</sup>	A	B <sup>b</sup>	B	C	D <sup>b</sup>	D
A	B <sup>b</sup>	B	C	D <sup>b</sup>	D	E <sup>b</sup>	E	F	G <sup>b</sup>	G	A <sup>b</sup>	A
E	F	G <sup>b</sup>	G	A <sup>b</sup>	A	B <sup>b</sup>	B	C	D <sup>b</sup>	D	E <sup>b</sup>	E
	1	2	3	4	5	6	7	8	9	10	11	12

**The Chromatic Scale: Flats**

## Enharmonic Notes

Is there a difference between ‘A#’ and ‘Bb’? Not really. ‘A#’ and ‘Bb’ are two names for the same note. Notes such as ‘A#’/‘Bb’ and ‘D#’/‘Eb’ are *enharmonic*, meaning they can be referred to as either sharp or flat notes. How to determine when to call a note either sharp or flat isn’t as important as knowing which notes do not have sharps (‘B’ & ‘E’) and which notes do not have flats (‘C’ & ‘F’). Below is a comparison of sharp and flat notes within the chromatic scale:

<b>A</b>	<b>A#</b>	<b>B</b>	<b>C</b>	<b>C#</b>	<b>D</b>	<b>D#</b>	<b>E</b>	<b>F</b>	<b>F#</b>	<b>G</b>	<b>G#</b>	<b>(repeat)</b>
<b>A</b>	<b>B<sup>b</sup></b>	<b>B</b>	<b>C</b>	<b>D<sup>b</sup></b>	<b>D</b>	<b>E<sup>b</sup></b>	<b>E</b>	<b>F</b>	<b>G<sup>b</sup></b>	<b>G</b>	<b>A<sup>b</sup></b>	<b>(repeat)</b>

**Chromatic Scale: Sharps & Flats Comparison**

## Using the Chromatic Scale

Knowing the chromatic scale provides the beginning guitarist with a solid foundation for many aspects of learning guitar. Below are some examples:

**Tuning** Knowing the chromatic scale is essential when using a guitar tuner. Most guitar tuners are chromatic, meaning they are capable of identifying all twelve notes. When first attempting to tune a guitar, many beginners tend not to bother to look for sharp (‘#’) or flat (‘b’) symbols next to the letter note. If the bottom ‘E’ string is loose for example, a chromatic tuner may identify the note as either ‘Eb’ or ‘D#’. The guitarist who knows the chromatic scale will know that ‘Eb’ or ‘D#’ is a lower pitch than ‘E’ and will tighten the string to raise it to its correct pitch of ‘E’.

**Bass Notes** For all of the basic chords, the *bass note* of each chord will match the letter name of the chord. With a ‘G’ chord for example, the bass note is ‘G’ (*sixth string/third fret*). For a ‘C’ chord, the bass note is ‘C’ (*fifth string/third fret*). Knowing the correct bass note of a chord is essential in getting its proper sound. If there is any question as to which string of a chord is the proper bass note, simply verify that the bass note matches the letter name of the chord.

**Going Beyond the Basics** Regardless of what particular style of music one wishes to learn, the chromatic scale is must-know for every guitarist. Whether it is learning about soloing, songwriting, or improvising, the chromatic scale will continue to be the foundation when it comes to learning more about music theory.