

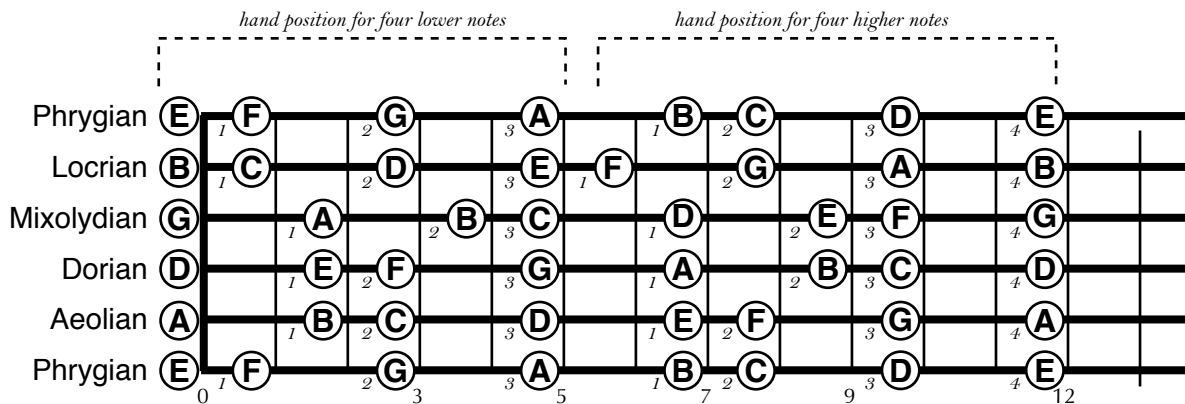
# MODES

Every key contains seven notes. The note for which a key is named is called the tonic. All the notes of a key in sequence from the tonic and ending on a tonic an octave higher is a major scale. In fact the major scale is one of seven modes of any key, based on each scale degree of the key.

The seven modes are;

I - Ionian, II - Dorian, III - Phrygian, IV - Lydian, V - Mixolydian, VI - Aeolian, VII - Locrian.

There are many ways to approach modes on the guitar. Probably the simplest method is to treat each string as a mode, starting with the note of the open string and ending on the 12th fret. The diagram below shows the natural tones. Play the first four notes of each mode from the open strings up to the 5th fret, then shift the hand and play the next four notes, one finger per note as indicated by the small italic numbers.



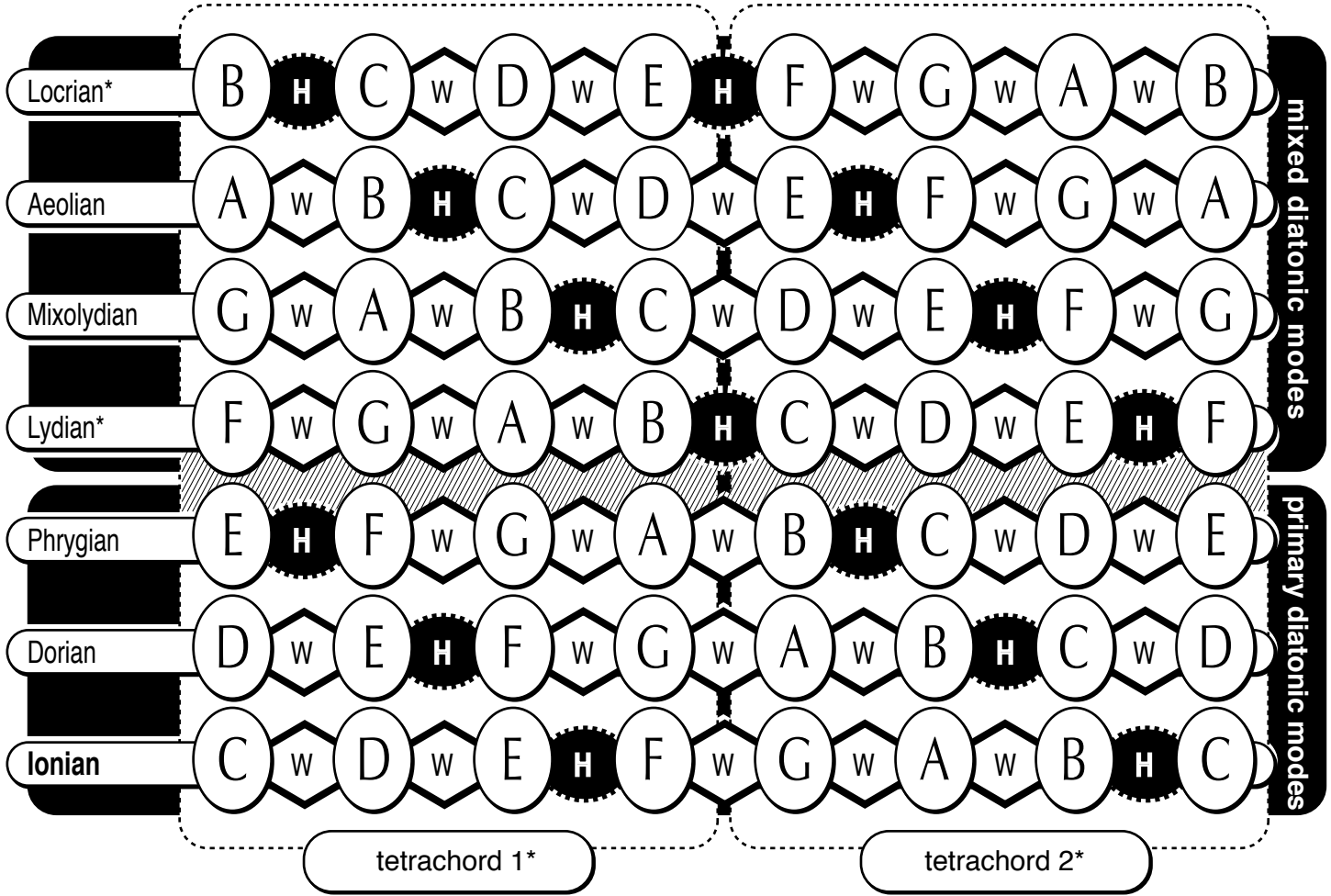
The natural tones on each string from the open strings to the 12th fret are five of the seven diatonic modes.

As shown on the next page, each mode has a unique structure. By dividing the modes into tetrachords we can see that the first three modes, Ionian - Dorian and Phrygian, are each made up of two identical tetrachords. I call these the 'primary modes'. The next four modes are mixed or hybrid modes in that they each have two dissimilar tetrachords. In addition, the Locrian and Lydian modes each have as one of their tetrachords a tritone or 'augmented tetrachord'\*. The extra halfstep is absorbed by reducing the interval between the tetrachords from a wholestep to a halfstep.

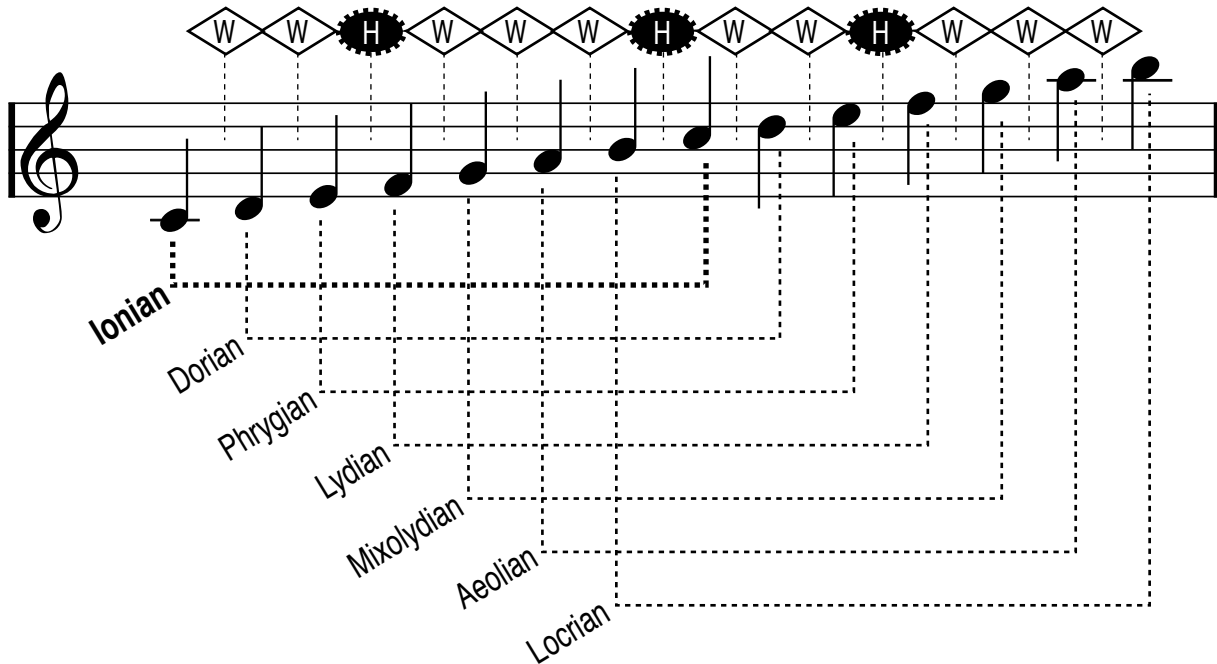
The practical application of modes is, in part, the creation of melodies which are not tied to the tonic. By playing riffs based on different modes you can expand your melodic and harmonic vocabulary. Practicing the modes in the five zones will enhance your technical ability. Becoming familiar with the tonal characteristics of each mode will help you recognize and reproduce music from a wider range of sources.

*\*The term 'augmented tetrachord' is used here to describe a tritone though the term 'tetrachord' is properly applied to a group of four notes spanning a perfect 4th. I accept the use of 'tetrachord' to describe any contiguous four note sequence in a key.*

DIAGRAM OF THE DIATONIC MODES - KEY OF C

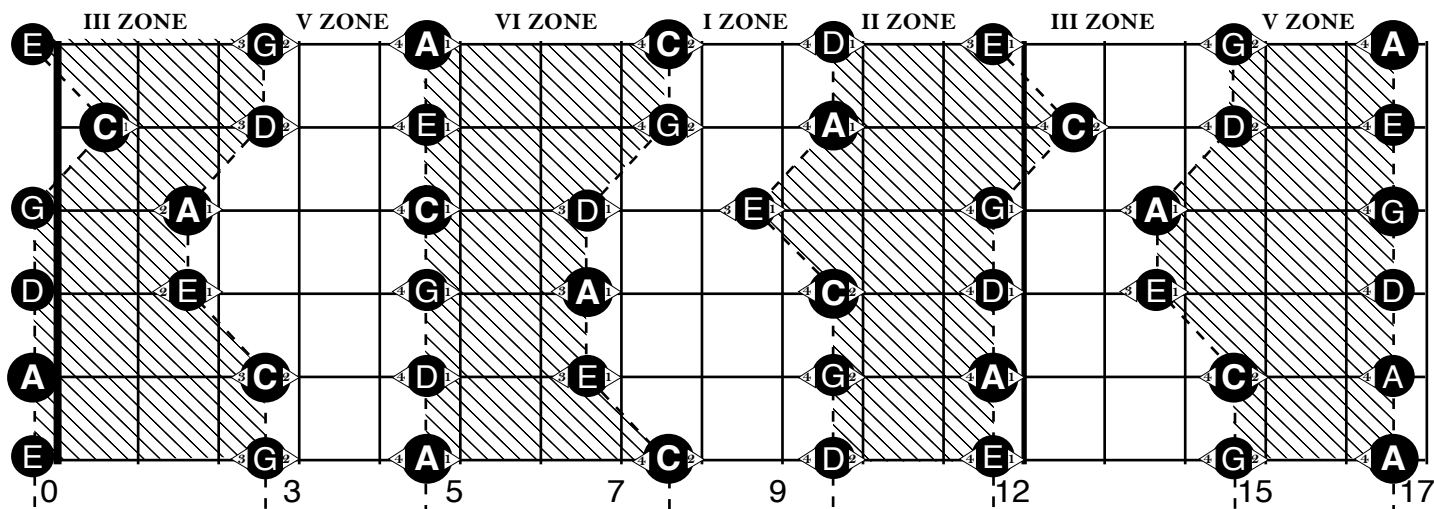


\* The Lydian mode has a tritone (Augmented 4th) in the first tetrachord position.  
 The Locrian mode has a tritone in the second tetrachord position



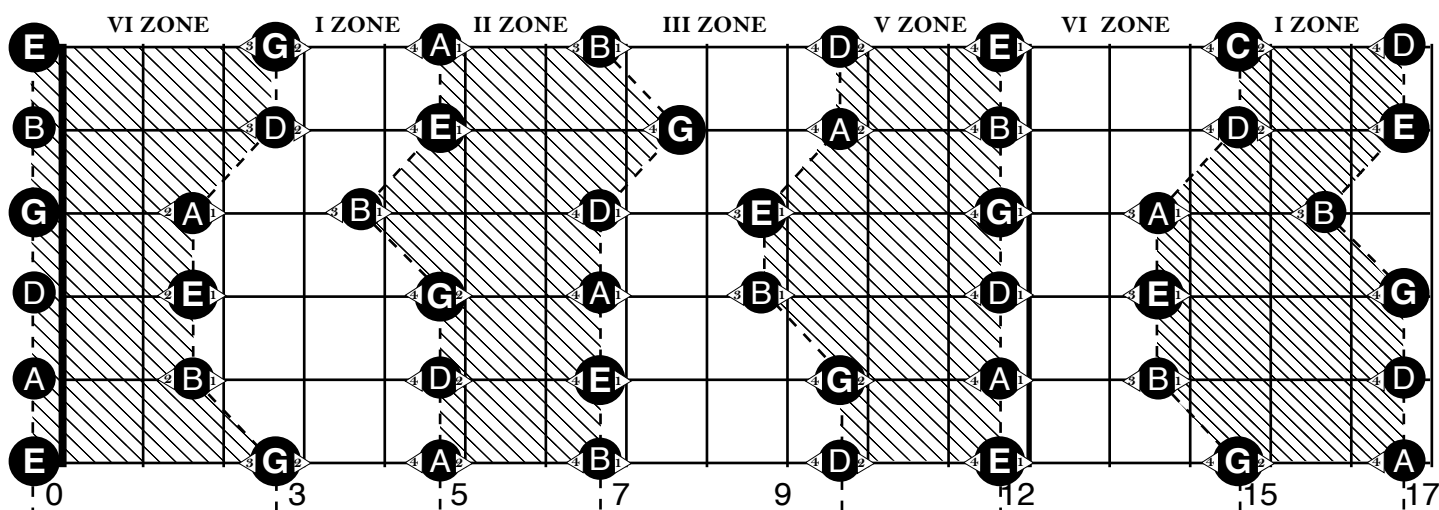
# PENTATONIC ZONES

Using the method of dividing the fingerboard into zones, we can organize the pentatonic scale as we did the diatonic. Each of the five zones is named for its lowest step relative to the major mode of the diatonic scale.



PENTATONIC ZONES - C MAJOR / A MINOR

Two keys are shown here to illustrate the concept that the zones can be applied to every key. As with all patterns on the fingerboard, shifting the forms laterally in either direction will move the scale from one key to another. Notice that the like named zones are the same shape in both keys shown.



PENTATONIC ZONES - G MAJOR / E MINOR

Finding symmetry within fingering patterns can make it easier to remember them. Notice that the 'V zone' and the 'VI zone' are connected by a line of notes on the same fret. I refer to this as the 'spine' of the key. It is a good place to start when learning the zones. The Vzone is perfectly symmetrical and so, easy to remember. The VI zone is offset, but symmetrical across the 2nd through 6th strings.

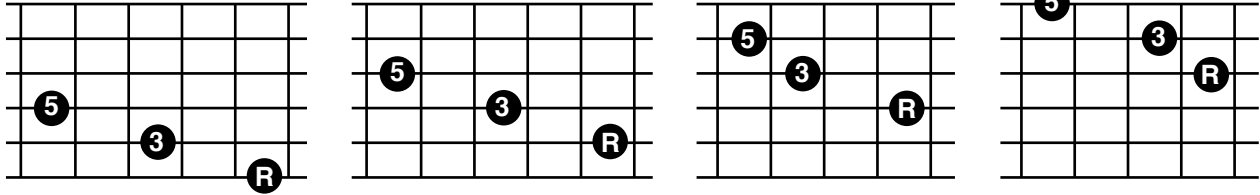
The diatonic intervals within an octave are shown here, along with some practical fingerings. All the fingerings shown place the intervals on two strings so the notes can be played either in sequence or simultaneously using the same fingerings.

	-or-		-or-	
TAB		TAB		TAB
8 4		8 5		8 6
Minor 2nd (halfstep) / <i>inverted maj 7th</i>		Major 2nd (wholestep) / <i>inverted min 7th</i>		Minor 3rd / <i>inverted maj 6th</i>
	-or-		-or-	
TAB		TAB		TAB
8 7		8 8		8 9
Major 3rd / <i>inverted min 6th</i>		Perfect 4th / <i>inverted perf 5th</i>		Augmented 4th (Diminished 5th) (Tritone)
	-or-		-or-	
TAB		TAB		TAB
8 10		8 11		8 7
Perfect 5th / <i>inverted perf 4th</i>		Augmented 5th (Minor 6th) / <i>inverted maj 3rd</i>		Major 6th / <i>inverted min 3rd</i>
	-or-		-or-	
TAB		TAB		TAB
8 8		8 9		8 10
Minor 7th (Dominant 7th) / <i>inverted maj 2nd</i>		Major 7th / <i>inverted min 2nd</i>		Octave

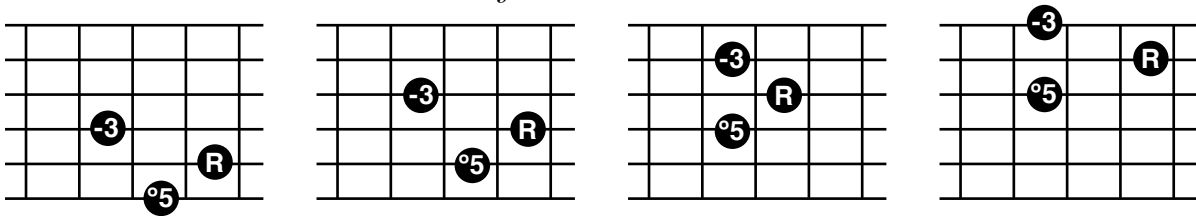
In addition to the major and minor triads, the diatonic system includes the diminished triad - which is made up of two minor 3rd intervals, and the augmented triad - which is made up of two major third intervals. The diminished triad is naturally based on the 7th scale degree, while the augmented triad requires the use of a note which is not part of the key.

DIMINISHED TRIADS

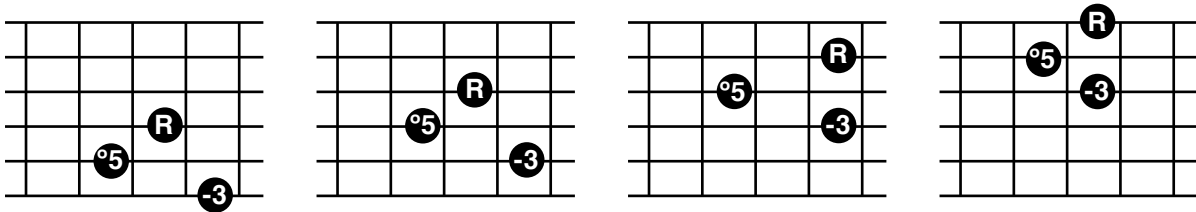
*root voicing*



*first inversion*

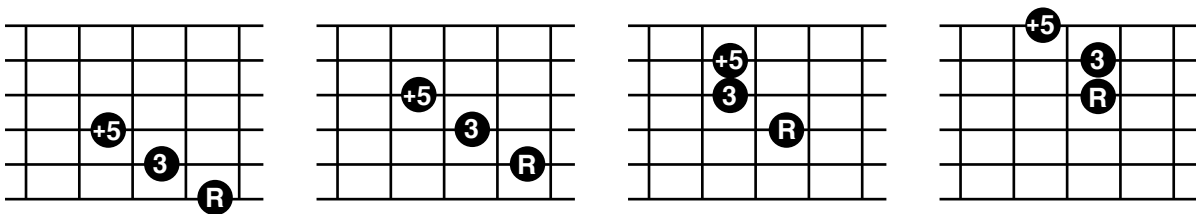


*second inversion*

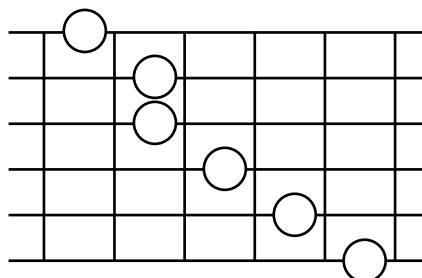


AUGMENTED TRIADS

*There are no inversions for augmented triads*



*The diagram below shows the pattern of augmented intervals across all six strings. Notice that it is simply a combination of the four 3-note voicings shown above. Any note in the pattern can be a root.*



	I	II	III	IV	V	VI	VII	I
Treble Clef	0 0 2 3	1 2 3 4	1 2 3 4	1 1 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
TAB	0 0 2 3	1 2 3 5	3 4 5 7	5 5 7 8	3 4 5	5 5 7	6 7 9	7 9 10

(B) H (C) W (D) W (E) H (F) W (G) W (A) W (B)  
 Major 3rd Minor 3rd Minor 3rd Major 3rd Minor 3rd Minor 3rd Major 3rd Major 3rd  
 (G) W (A) W (B) H (C) W (D) W (E) H (F) W (G)  
 Minor 3rd Major 3rd Major 3rd Minor 3rd Minor 3rd Major 3rd Minor 3rd Minor 3rd  
 (E) H (F) W (G) W (A) W (B) H (C) W (D) W (E)  
 Major 3rd Minor 3rd Minor 3rd Major 3rd Major 3rd Minor 3rd Minor 3rd Major 3rd  
 (C) W (D) W (E) H (F) W (G) W (A) W (B) H (C)  
 Major 7th Minor 7th Minor 7th Major 7th Dominant 7th Minor 7th Minor 7 flat 5 Major 7th

The diatonic 7th chords.

Shown on this page are seven fundamental 7th chord forms; Major 7th, Dominant 7th, minor 7th, minor 7 (flat 5), diminished 7th, minor/maj7th and augmented 7th. We have seen how the triad is formed by stacking two 3rd intervals. The 7th is formed by simply adding another 3rd interval on top of a triad. The first four types of seventh chords listed are derived from the natural intervals of the diatonic key, the last two contain notes not native to the key. Though these voicings are the simplest theoretical expression of these chords, most of them are very difficult to play on the guitar as written. The next page has some more practical voicings.

	A	B	C
Treble Clef	1 3 2 4	1 2 3 4	1 2 3 4
TAB	4 5 5 7	4 6 7 9	7 9 9 10

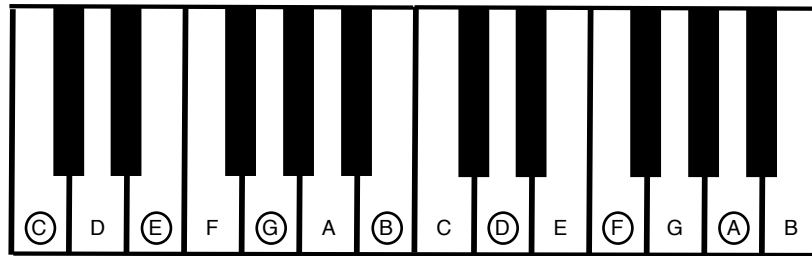
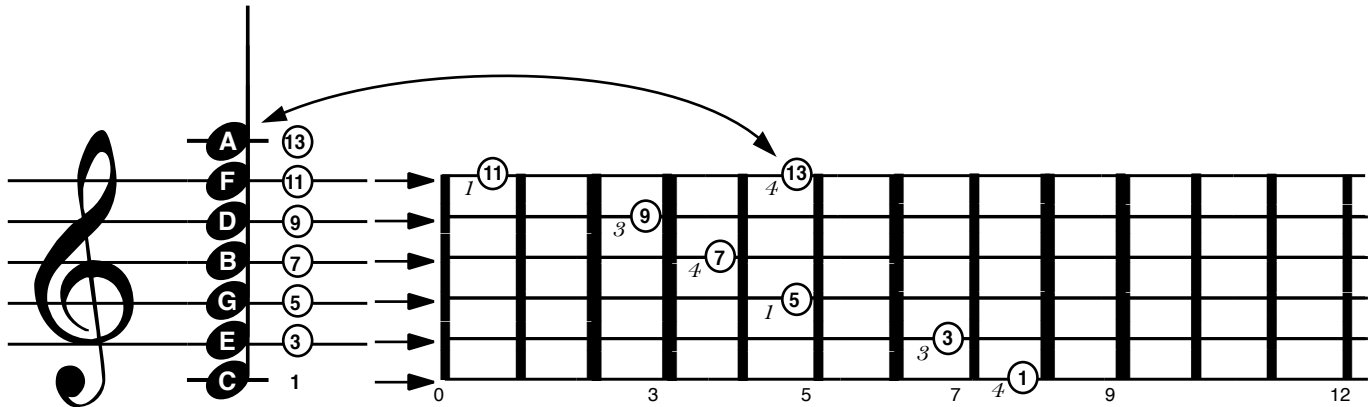
A Minor Major 7th B Diminished 7th C Augmented 7th

Non diatonic 7th chords.

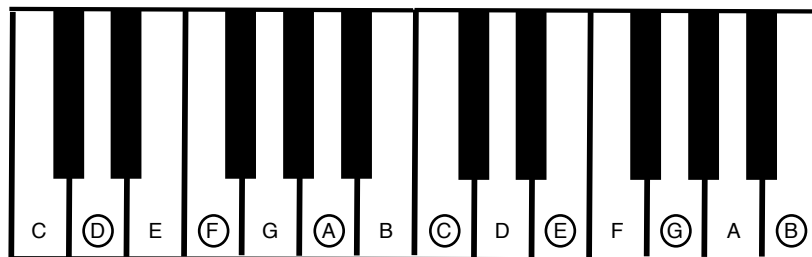
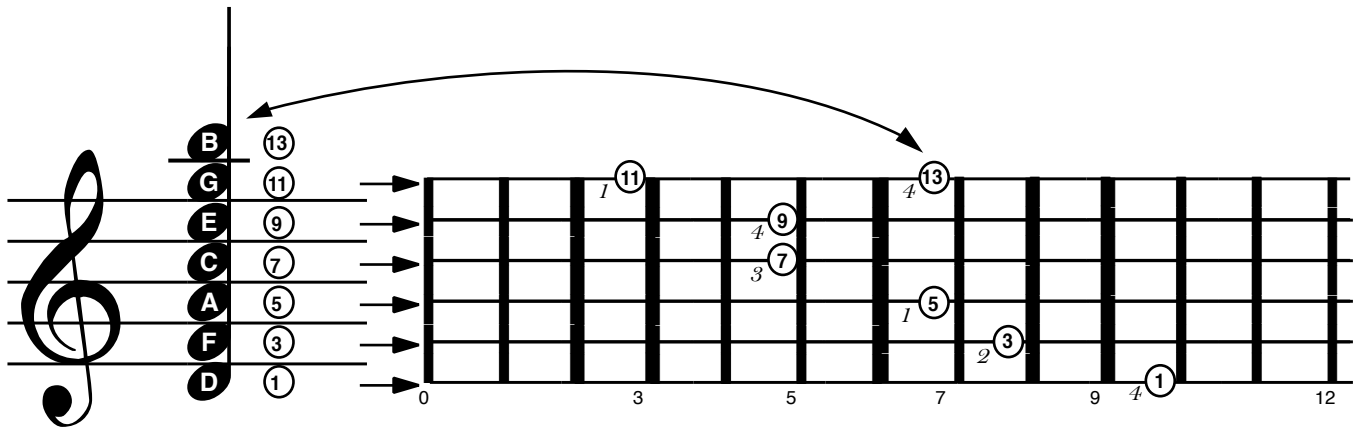
# THIRDS PATHS

Thirds are linked together in diagonal paths on the fingerboard. On this page are two examples of how the notes align along these paths in the key of C with suggested fingering. Try playing along these paths in ascending and descending order.

The staff is aligned with the fretboard to illustrate the relationship between the paths and the natural arrangement of notes on the lines and spaces. The circled numbers are the intervals relative to each root.



Natural thirds based on C



Natural thirds based on D