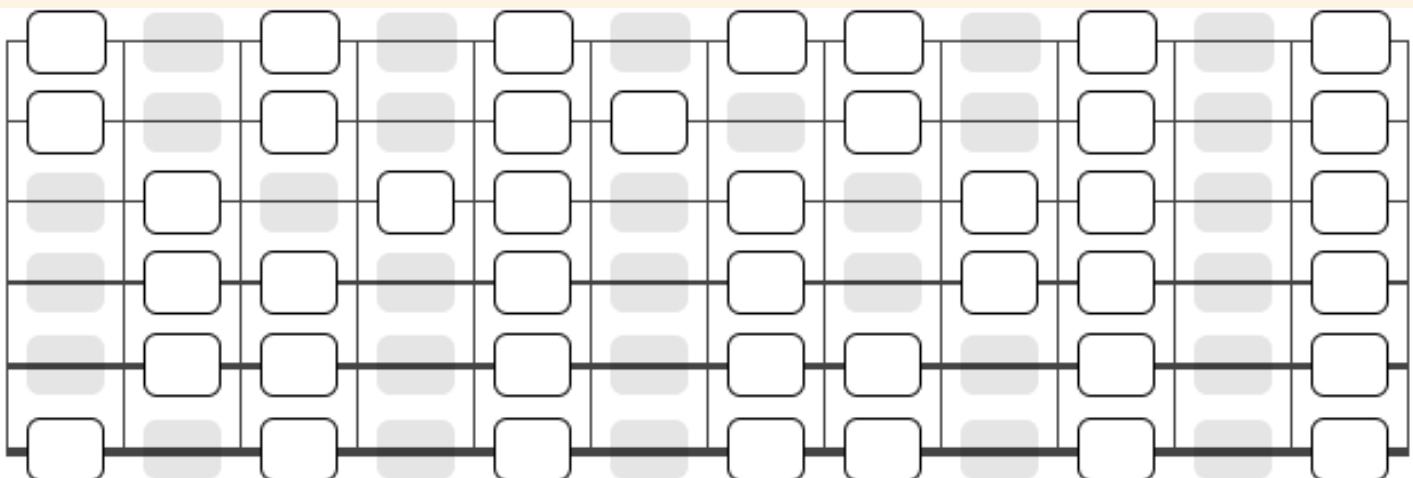




THE MAJOR SCALE MODES & ARPEGGIOS

GUITAR SHAPES GUIDE

By Mike Nelson



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PURPOSE OF THIS GUIDE

The Major scale is the **foundation of Western Music Theory** and is **essential to understanding how music works**. It will help you to analyze the music that you enjoy and to learn new ideas on the guitar. It contains **seven notes** and follows a specific sequence or **formula of whole and half tones**. The notes of the **C Major scale** are (1) **C**, (2) **D**, (3) **E**, (4) **F**, (5) **G**, (6) **A**, & (7) **B**.

This guide aims to explain music theory in terms that beginners to the subject can understand. Its purpose is to help students with **memorizing** the **Major scale**, its most commonly used **modes**; the **Natural Minor scale**, **Mixolydian mode**, and **Dorian mode**; and the **chords & arpeggios** relating to each. A chord occurs when three or more notes are played simultaneously. Arpeggios are chords that are played one note at a time in an ascending or descending order. Some arpeggios resemble chord shapes (all notes are located on separate strings, close enough together to be played simultaneously); whereas others use multiple notes per string, are spread out across the fretboard, and therefore their notes cannot be played simultaneously (as a chord).

The diagrams in this guide will show you where the notes are located, but not necessarily the order in which to play them. However, the *C Major Scale Patterns & Arpeggio Examples* section of this guide includes tablature of scale and arpeggio examples with instructions for the right and left hands. A video of these examples is available on [YouTube](#).

Understanding **fret and string relationships** will help to make sense of the alternative shapes that can be used to play the same scale, chord or arpeggio. Please be aware that this guide does not include every possible shape for each scale, chord, and arpeggio discussed, but it does provide many options.

We can **find neighboring notes** in the scale by **moving along the string** or by **moving to the adjacent string**. The **shapes** that **you decide** to use **will depend on how easy they are to play with your left hand**. Sometimes moving along the string requires our fingers to stretch further than we can reach. Other times moving to the adjacent string causes the same issue.

In addition to this, we need to consider how we are picking the notes with our right hand. **Some shapes will be easier on the right hand than others**. For example, if you use an alternate picking technique then you will probably prefer shapes that require less movement between strings and an even number of notes per string. If you use Hammer-Ons and Pull-Offs (“legato style”) then you may prefer “Three Note Per String” scale shapes. There is no wrong or right way. It comes down to personal preference and one’s facility (level of skill and ability) on the instrument.

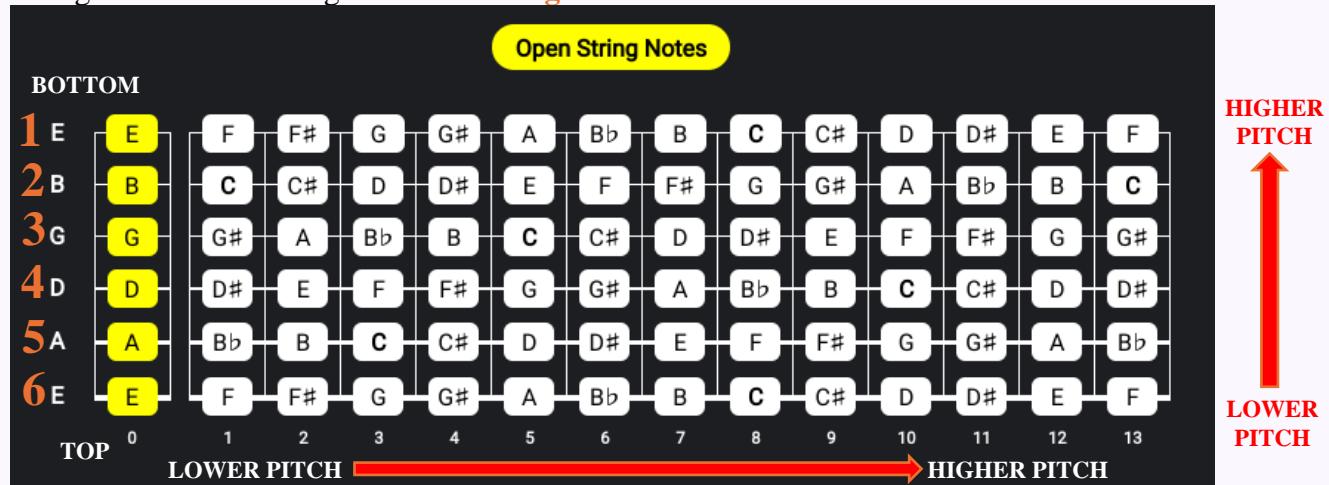
Remember that **shapes can be moved** along the fretboard. You are not just learning the C Major scale; you are learning structures that can transposed by moving left or right. For example, any C Major scale or Arpeggio shape can be moved two frets to the right to transpose it into a D Major shape. This is the purpose of the shape-based approach. **Shapes help us to find the notes that we wish to play**.

It is still important to know the names of the notes that you are playing but you do not always need to be thinking about this. In fact, knowing shapes and understanding the intervals that they are made up of will help you to know the location of notes on the fretboard anyway. These different perspectives (i.e. *knowing shapes vs “knowing the notes”*) are both valuable. Most of the diagrams in this guide include a version with note names and another with scale degrees/intervals to cover both of these perspectives.

UNDERSTANDING THE DIAGRAMS

STRING NUMBERING

This guide refers to string numbers. **Strings are numbered from 1 – 6:**

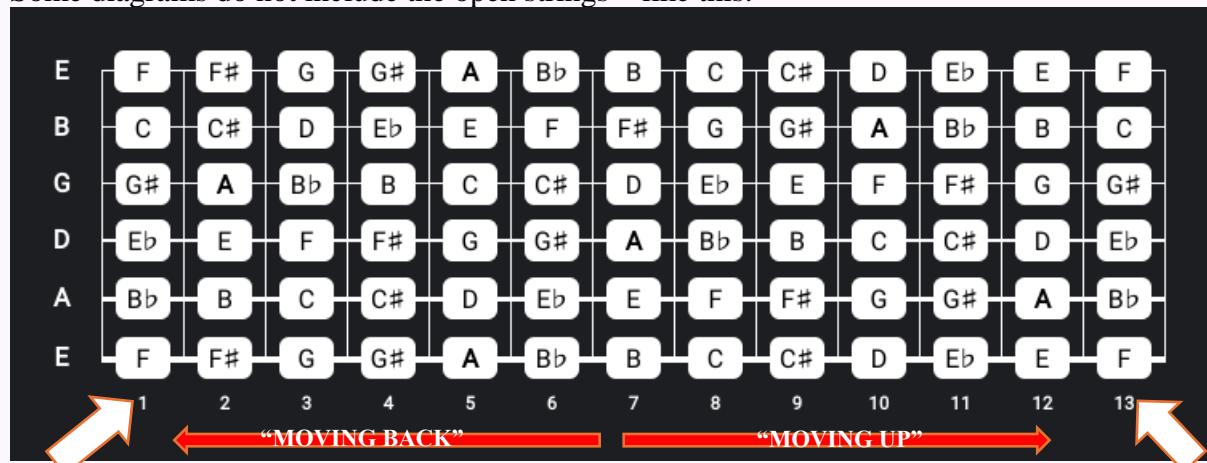


The top of the diagram is therefore the **bottom of the fretboard** (the side closest to the floor). Notes increase in pitch from left to right and from top to bottom (top of diagram).

- ⇒ The 1st string is often referred to as the “high E” and the 6th string as the “low E”.
- ⇒ The open strings are often referred to as “0” or “fret 0”.

FRET NUMBERING

Some diagrams do not include the open strings – like this:



Some diagrams begin and end with different frets to others. **Pay attention to the fret numbers.**

It is common to think of the guitar in terms of frets 1-12, as fret 12 is where the octaves of the open strings are located. However, this guide often uses diagrams that show frets 1 - 13. This is because an octave of C is located on the 13th fret of the B string and this guide is focused on the C Major scale.

- ⇒ Moving “up” the fretboard refers to moving to the right, e.g. moving from fret 1 to fret 5.
- ⇒ Moving “back” on the fretboard refers to moving to the left, e.g. moving from fret 5 to fret 1.
- ⇒ If you are left handed then left and right are reversed (and diagrams are mirror images).

BACKGROUND

Major Scale History

The **Major Scale** has deep roots in Western music, evolving over centuries as a **fundamental musical structure**. Its origins trace back to ancient Greece, where early theorists like Pythagoras explored the mathematical relationships of musical intervals, leading to the development of scales based on frequency ratios.

The Greeks identified “modes” that later influenced the structure of the Major scale. During the medieval period, European monks further developed musical modes, drawing from Greek theory to create a set of church modes for religious music.

The **Ionian mode**, which **corresponds to today's Major scale**, was formally recognized in the Renaissance (16th century) when composers like Palestrina began using it as a foundation for their works.

Today, the Major scale remains a **core element of music theory**, underpinning countless genres from classical to jazz, rock, and pop, and is **essential for understanding melody, harmony, and structure** in Western music.

Why We Learn the C Major Scale First

The C Major scale contains only “Natural” notes (the first 7 letters of the Alphabet). I.e. there are no sharps (#) or flats (b). The notes of the scale are **C, D, E, F, G, A, B**. This makes it easier to learn the scale and understand intervals and other relationships between notes and chords. Compare the C Major scale with, for example, the A Major scale (A, B, C#, D, E, F#, G#), and you'll see how the sharps (#) could make things confusing for someone that is new to the subject.

Major Scale Formula

The Major scale formula is a sequence of tones (also called whole tones) and semitones (also called half tones). A whole tone is two semitones, hence a semitone being called a “half”. There is a half tone between E & F and B & C.



The scale has **7 notes** and **repeats itself in octaves**. The diagram above includes the next octave of C to show that there is a half tone between the 7th note (B) and the Octave (C).

Octave 1							Octave 2						
C	Whole	D	Whole	E	Half	F	Whole	G	Whole	A	Whole	B	Half
1	2	3	4	5	6	7	1	2	3	4	5	6	7

Sometimes the **octave** of a note is labelled as “**8**” because it is the 8th note in the sequence of the Major scale.

Octave 1												Octave 2														
C	G	D	G	E	B	F	G	A	G	B	C	G	D	E	B	F	G	A	G	B	C					
1		2		3		4		5		6		8		1		2		3		4		5		6		8

Sometimes you will see **notes numbered continuously over two octaves**. This is part of where chords get their names from. If you’ve ever wondered why a chord has a number in its name (e.g. Em11) then this should give you a clue.

Octave 1												Octave 2														
C	G	D	G	E	B	F	G	A	G	B	C	G	D	E	B	F	G	A	G	B	C					
1		2		3		4		5		6		8		9		10		11		12		13		14		15

The number of octaves you can play depends on the instrument. An Acoustic Guitar has 19 frets which makes 3 octaves of C available. The lowest pitched C is on the 8th fret of the 6th (E) string and the 3rd fret of the 5th (A) string.

An Electric Guitar usually has 22 or more frets. This makes an extra octave of C available. A total of 4 octaves of C. The lowest note on the guitar is E (6th string played open). The 1st string is the note E that is two octaves higher than the open 6th string. The 24th fret of the 1st string is five octaves higher than the open 6th string. I.e. An electric guitar with 24 frets has 5 octaves of E. A detailed explanation of octaves is provided in the [Glossary of Terms and Symbols](#) section.

One of the fundamental differences between the guitar and the piano (and various other instruments) is that the same note is available in more than one place. E.g. as mentioned above, the lowest octave of C on the guitar can be located on the 6th and 5th strings. There is more information on this in the next section on [Fret And String Relationships](#).

The Major Scale Contains The “Natural” Minor Scale

The Major scale contains the Natural Minor scale, so don’t be confused into thinking that learning the Major scale only has applications for major keys or major chords. The C Major scale contains the A Natural Minor scale (**A, B, C, D, E, F, G**). They are relative scales. They can also be referred to as “modes” of each other. More information on relative Major and Minor scales is provided in the section on [Relative Major and Minor scales](#) of this guide.

There is more information on modes in the [Mixolydian Mode](#) and [Dorian Mode](#) sections.

The Chromatic Scale

These are all of the **12 notes** in western music (the chromatic scale). Notes are 1 semitone (s) apart. Only 7 of the notes are in the C Major scale. The other five notes can be named as either sharps (#) or flats (b). These other notes exist in other scales, e.g. a G Major scale includes F#.

1	2	3	4	5	6	7	8	9	10	11	12
C	C#/Db	D	D#/Eb	E	F	F#/Gb	G	G#/Ab	A	A#/Bb	B

The diagram below shows the Chromatic scale (# names) with reference to the C Major scale.

1	W	2	W	3	H	4	W	5	W	6	W	7	H	8										
C	s	C#	s	D	s	D#	s	E	s	F	s	F#	s	G	s	G#	s	A	s	A#	s	B	s	C

GLOSSARY OF TERMS AND SYMBOLS

This table will help you to understand the content of this guide. You may need to refer back to it as you progress through the sections. Likewise, the material in this guide will help you to understand the terms listed below. Terms are listed in logical order.

Term/Symbol	Description
b	The symbol for "flat". E.g. The note B flat is written as Bb.
#	The symbol for "sharp". E.g. the note C sharp is written as C#.
Semitone	The smallest interval used in Western music. Often called a " Half Tone ." A "Tone" is two semitones.
Interval	The distance between two pitches , measured in semitones (or tones). E.g. the interval of a "5 th " is 7 semitones or 3.5 tones. G is the 5 th of C because it is 7 semitones higher in pitch than C. A flattened interval, for example, a b3, does not mean that the note has "flat" in its name (e.g. Bb). It means it is flattened relative to what that interval would be in the Major scale. For example, the flat 3 rd of the A Minor scale is the note C. An interval of a b3 is three semitones higher than the 1 (root of the scale). C is 3 semitones higher than A, the root. We describe intervals as either or 1, 2, 3, etc, or 1 st , 2 nd , 3 rd , etc. The Major scale has a 1, 2, 3, 4, 5, 6, and 7 (1 st , 2 nd , 3 rd , 4 th , 5 th , 6 th , & 7 th).
Root	The first note of a chord or scale. Often called the "one" (1). It is the note that the chord is named after. E.g. the root note of an D Minor chord is D. It is usually the lowest pitched note in the chord. However, chords can be inverted so that the lowest note — called the bass note — is no longer the root note.
Major Second	The interval of a 2nd (2). It occurs in the Major scale, hence its name. It is 2 semitones above the root .
Major Third	The interval of a 3rd (3). It occurs in the Major scale, hence its name. It is 4 semitones above the root .
Perfect Fourth	The interval of a 4th (4). It occurs in the Major scale. It is 5 semitones above the root .
Perfect Fifth	The interval of a 5th (4). It occurs in the Major scale. It is 7 semitones above the root .
Major Sixth	The interval of a 6th (6). It occurs in the Major scale, hence its name. It is 9 semitones above the root .
Major Seventh	The interval of a 7th (7). It occurs in the Major scale, hence its name. It is 11 semitones above the root .
b2	The interval of a flat 2nd . It is flattened relative to a major 2 nd interval. Sometimes called a "minor 2nd". It is 3 semitones above (higher in pitch) the root .
b3	The interval of a flat 3rd . It is flattened relative to a major third interval. Sometimes called a "minor third". It is 3 semitones above (higher in pitch) the root .

b5	The interval of a flat 5th . It is flattened relative to the 5 th interval in the Major scale. i.e. it is one semitone less than a 5 th would be in the Major scale. It is 6 semitones above the root . It is the same as a “sharp 4” (#4).
b6	The interval of a flat 6th . It is flattened relative to the 6th interval in the Major scale. i.e. it is one semitone less than a 6th would be in the Major scale. Sometimes called minor 6th, as the Natural Minor scale contains a b6. It is 8 semitones above the root .
b7	The interval of a flat 7th . It is flattened relative to the 7th interval in the Major scale. i.e. it is one semitone less than a 7th would be in the Major scale. It is 10 semitones above the root .
Octave	<p>The interval between one musical pitch and another with double or half its frequency. There are 12 semitones between each octave. Sometimes numbered as “8” as it is the 8th note in the Major Scale.</p> <p>Sometimes you will see notes labelled with a number after the letter. These numbers tell you the octave that the note is in.</p> <ul style="list-style-type: none"> ⇒ The first octave begins with the note C0 and ends with the note B0; the 2nd octave begins with C1 and ends with B1, and so on. ⇒ The lowest pitch humans can hear is just above a D0 (2 semitones above C0) and the highest is approximately an Eb10. ⇒ The lowest note on a piano is an A0 (7 semitones above D0). The highest note is a C7. ⇒ The lowest note on a 4 string bass guitar is an E1. ⇒ E2 is the 3rd octave of E. It is the lowest pitch available on a guitar in standard tuning. ⇒ A guitar in standard tuning has its strings tuned to the following notes: (6) E2, (5) A2, (4) D3, (3) G3, (2) B3, (1) E4. ⇒ The frequency of a note can be measured in Hertz (Hz). C0 is 16.352 Hz and C1 is double that frequency (32.703 Hz). This doubling of frequency is what makes octaves of the same note have the feeling of being the same despite their difference in pitch.
Scale	A series of notes arranged in order of pitch.
Key	The key is the group of pitches or scale that forms the basis of a musical composition. E.g. the key of C Major is based on the C Major scale.
Tonal Centre	The tonal centre is the note of the scale that gives the strongest feeling of rest . It is the target toward which other notes lead. It is the root note of the key. E.g. The key of C Major is based on the C Major scale and its tonal centre is the note C. The tonal centre of the key of A Minor is the note A.
Transpose	To move a collection of notes (pitches) up or down by a constant interval . E.g. transposing a C Major chord up 2 semitones produces a D Major chord. Compositions can also be transposed into different keys.
Mode	Modes are rotational variations of scales . A scale has a set pattern of tones or pitches. Every Scale has a mode for each of its scale degrees . Each mode retains the sequence tones and semitones of its base scale but it begins with a different note from the scale.. For example, the Mixolydian mode starts on the 5th note of the Major scale. The 5th note becomes the 1, the 6th note becomes the 2, the 7th note becomes the 3 etc.

	<p>The Major scale is sometimes called the “Ionian” mode. It is the mode of the Major scale that begins with the 1st note of the Major scale.</p> <p>C Ionian mode: (1) C, (2) D, (3) E, (4) F, (5) G, (6) A, (7) B</p> <p>G Mixolydian mode: (1) G, (2) A, (3) B, (4) C, (5) D, (6) E, (7) F</p>
	<p>The Major scale has 7 notes (scale degrees) and therefore it has 7 modes. Each note is a different starting point and produces a different set of intervals. Refer to this Table for more information on modes and their intervals.</p>
Natural Minor scale	<p>A Mode of the Major scale starting on the 6th note. E.g. the 6th note of the C Major scale is A and It produces the A Natural Minor scale. Sometimes called the “Aeolian” mode.</p>
Arpeggio	<p>A “broken chord” in which the notes are individually sounded/played in a progressive ascending or descending order, as opposed to sounding all of the notes simultaneously (e.g. strumming a chord on the guitar). Picking individual strings of chords is often called “arpeggiating” chords.</p>
Chord	<p>A combination of three or more notes played simultaneously.</p>
Chord Progression	<p>A pattern of chords played in a sequence in a piece of music. Often chord progressions use chord numbers that are based on the chord’s number relative to the key of the piece of music. For example, a 2 – 5 – 1 progression in the key of C Major uses the chords D Minor (2), G Major (5), and C Major (1).</p>
Triad	<p>A three note chord containing a root, 3rd, and 5th. These are the most simple chords, and the first ones to learn.</p>
Major Chord	<p>A triad containing a Root, Major 3rd, and 5th. The word “major” is often omitted from the chord name. e.g. a “C Chord” implies a C Major chord.</p>
Minor Chord	<p>A triad containing a Root, Minor 3rd (b3), and 5th. Abbreviated to “m.”</p>
Diminished Chord	<p>A triad containing a Root, Minor 3rd (b3), and flat 5th (b5). Abbreviated to “dim” or “°”, e.g. B diminished can be written as Bdim or B°.</p>
7th Chord	<p>Chords that contain 4 notes: A Root, 3rd, 5th, and a 7th.</p>
Major 7 Chord	<p>A chord containing a Root, Major 3rd, 5th, and Major 7th. Abbreviated to “maj7.”</p>
Dominant 7 Chord	<p>A chord containing a Root, Major 3rd, 5th, and flat 7th (b7). Often just called 7 chord. E.g. G Dominant 7 is called G7. Abbreviated to “7.”</p>
Minor 7 Chord	<p>A chord containing a Root, Minor 3rd (b3), 5th, and flat 7th (b7). Abbreviated to “m7.”</p>
Minor 7 b5 Chord	<p>A chord containing a Root, Minor 3rd (b3), flat 5th (b5), and flat 7th (b7). Sometimes called a “half diminished” chord. Abbreviated to “m7b5” or “ø”, e.g. B Minor 7 b5 can be written as Bm7b5 or Bø.</p>
Alternate Picking	<p>A guitar technique that involves alternating between downward and upward strokes to play notes.</p>
Economy Picking	<p>A guitar technique that combines alternate and sweep picking to increase picking efficiency.</p>
Sweep Picking	<p>A guitar technique. The guitarist plays single notes on consecutive strings with a 'sweeping' motion of the pick from one string to the adjacent string.</p>

SCOPE OF THIS GUIDE

This guide only includes scales/modes that are built from the Major scale. Be aware that other scales (and modes of those scales) exist. They are there for you to explore after mastering the Major scale. Examples of other scales include Harmonic Minor and Melodic Minor; both commonly used in Jazz.

1. MODES OF THE MAJOR SCALE

Each note of the scale has a mode. This guide covers **4** of the **7 Major Scale modes** in detail. The other **3** modes are included at the end of this guide but are not covered in as much depth.

- (1) **Ionian** – This is the **Major scale**. **C Ionian** is the 1st mode of the C Major scale.
- (2) **Dorian** – **D Dorian** is the 2nd mode of the C Major scale.
- (3) **Phrygian** – **E Phrygian** is the 3rd mode of the C Major scale.
- (4) **Lydian** – **F Lydian** is the 4th mode of the C Major scale.
- (5) **Mixolydian** – **G Mixolydian** is the 5th mode of the C Major scale.
- (6) **Aeolian** – This is the **Natural Minor scale**. **A Aeolian** is the 6th mode of the C Major scale.
- (7) **Locrian** – **B Locrian** is the 7th mode of the C Major scale.

The application of the **Lydian**, **Phrygian** and **Locrian** modes is more advanced and therefore it is best to focus on the other four. However, you can experiment with the “sound” of these modes by playing the C Major scale over the third, fourth, and seventh chords produced by the C Major scale. Playing the scale over different chords from the scale changes the “tonal centre.”

The **third chord**, E Minor (or Em7), gives a Phrygian sound when played against the C Major scale because it makes E the tonal centre.

The **fourth chord**, F Major (or Fmaj7), gives a Lydian sound when played against the C Major scale because it makes F the tonal centre.

The **seventh chord**, B Diminished (or Bm7b5), gives a Locrian sound when played against the C Major scale because it makes B the tonal centre.

The other notes in these chords also contribute to creating the “sound” of the mode.

Refer to the Chords of the Major Scale section of this guide for an explanation as to where these chords come from and how they relate to the C Major scale.

2. CHORDS & ARPEGGIOS OF THE MAJOR SCALE

This guide includes **Major**, **Minor**, **maj7**, **m7**, **7 (Dominant 7)**, and **m7b5** chords and arpeggios. Any other arpeggios of the scale (e.g. 9, 11, and 13 chords) are excluded. These other chords/arpeggios are more advanced and are best to be learned at a later date. All chords/arpeggios are in the key of C Major (with the exceptions of Cm, Cm7, C Diminished and Cm7b5, which are only included to provide a comparison with C Major and Cmaj7).

3. PENTATONIC SCALES

These are **five note scales**. They are often the first scales guitarists learn as their shapes are easy to remember. They are also easy to play as the shapes use two notes per string and each note is either two or three frets apart. This guide only includes the Major and Minor Pentatonic scales, and their shared **five shapes**. These two scales are derived from the Major scale. Other types of Pentatonic scales do exist but they are not included in this guide.

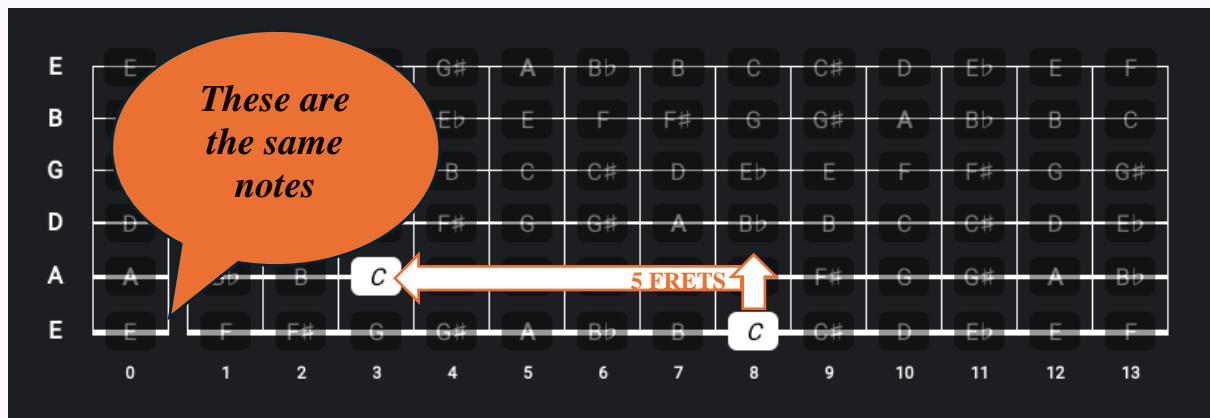
FRET AND STRING RELATIONSHIPS

All adjacent pairs of strings on the guitar are 5 semitones apart (interval of a 4), except for the G and the B string which are 4 semitones apart. To compensate for this, intervals from the G string to the B string are found one fret further to the right. Notes on the high E string are also one fret higher relative to the G string (*refer to examples 3, 4, and 5 on pages 16 -17.*).

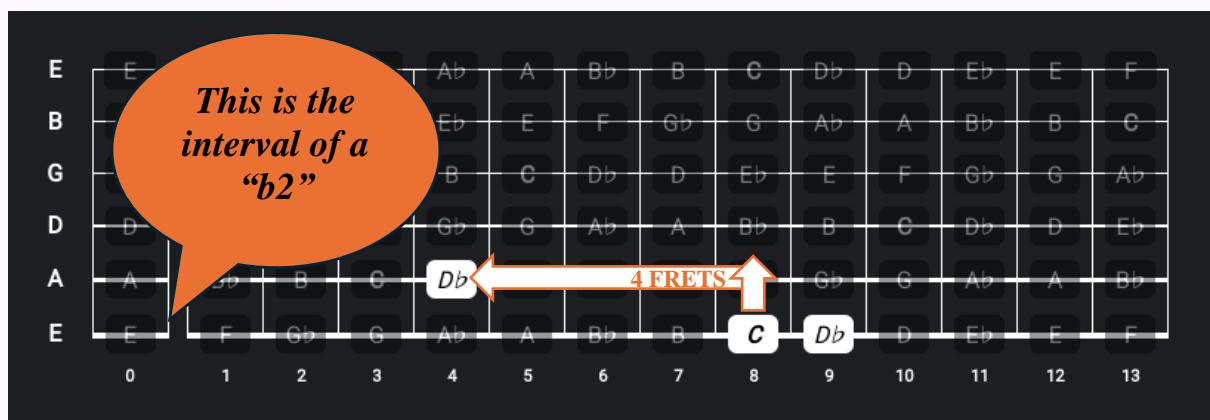
The following rules apply to **moving between pairs of adjacent strings**, *except for when those strings are the 3rd and 2nd strings; G and B.*

- (1) The **same note** can be located on the **string below** and **back 5 frets**

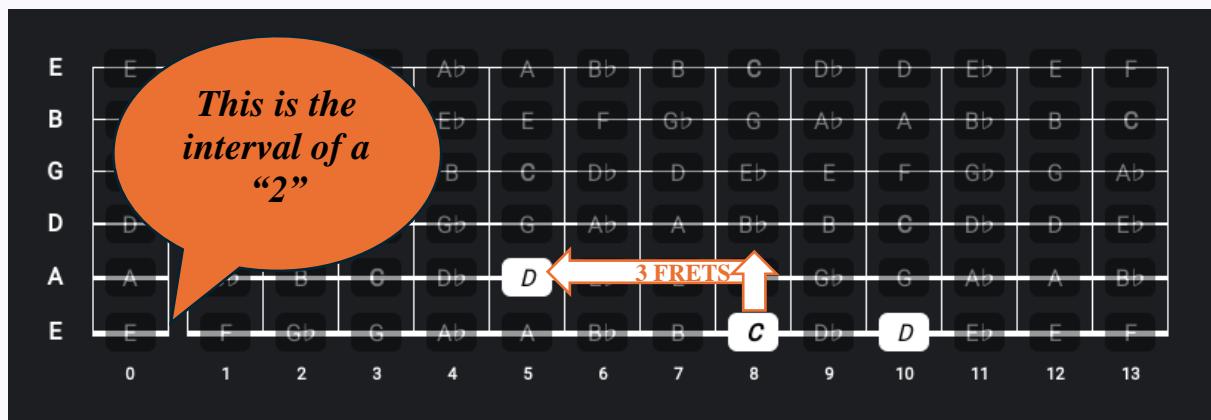
These notes are the same because they are both the same octave of C: "C3".



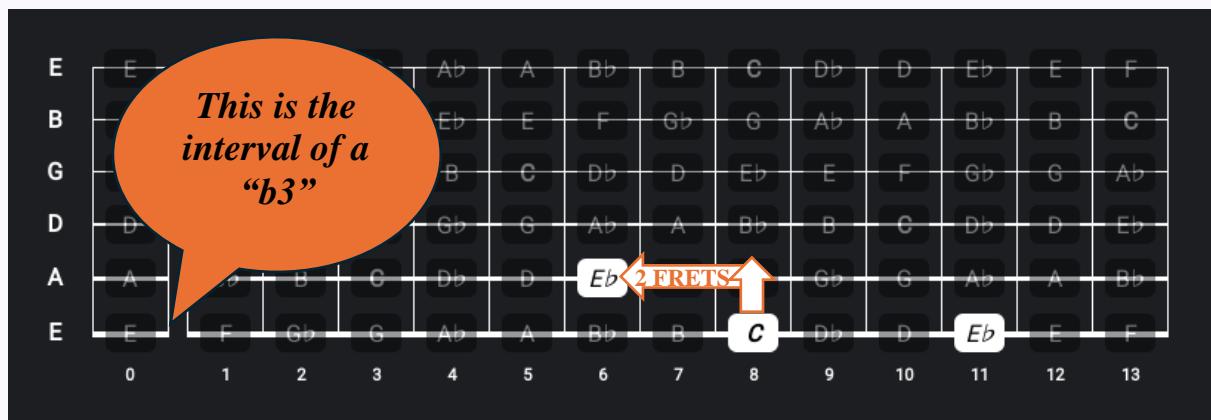
- (2) Moving **up 1 fret** on a string is **the same** as moving to the **string below** and **back 4 frets**



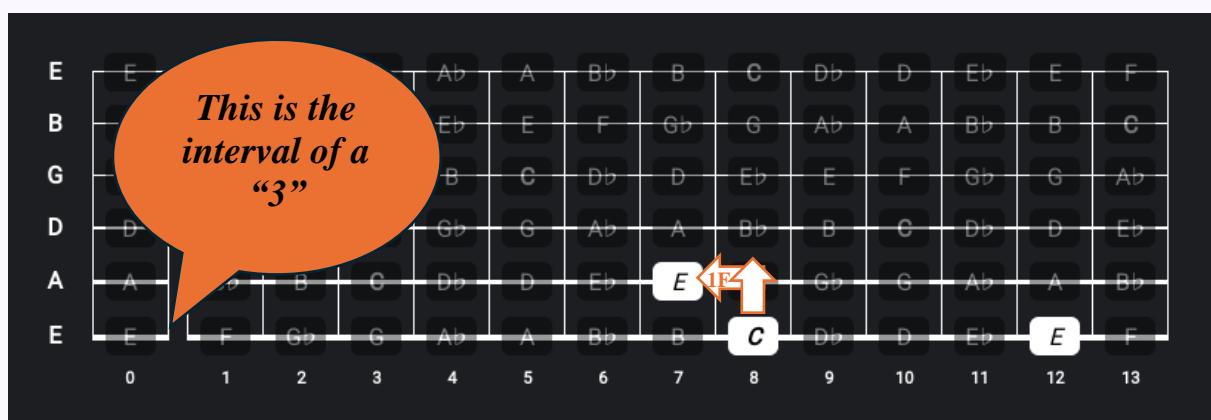
(3) Moving **up 2 frets** on a string is **the same** as moving to the **string below** and **back 3 frets**



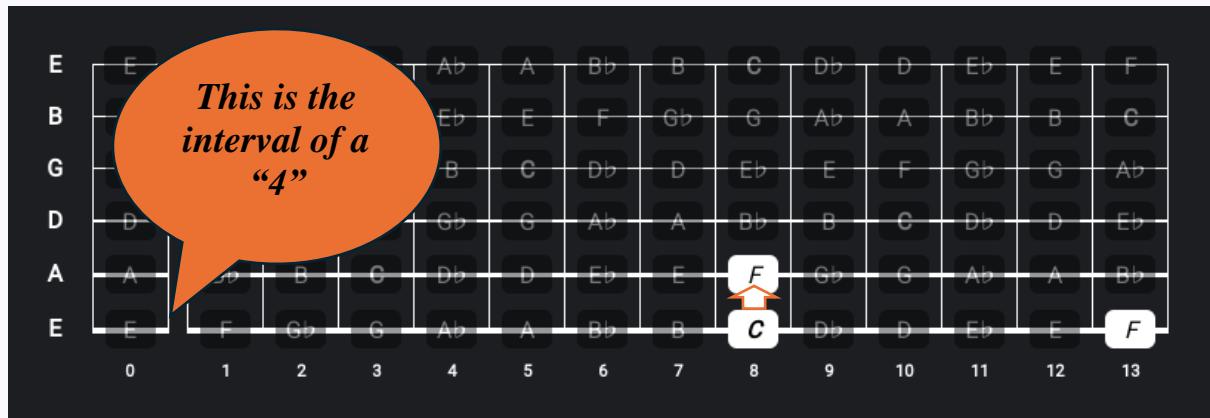
(4) Moving **up 3 frets** on a string is **the same** as moving to the **string below** and **back 2 frets**



(5) Moving **up 4 frets** on a string is **the same** as moving to the **string below** and **back 1 fret**



(6) Moving **up 5 frets** on a string is **the same** as moving to the **string below**, **on the same fret**

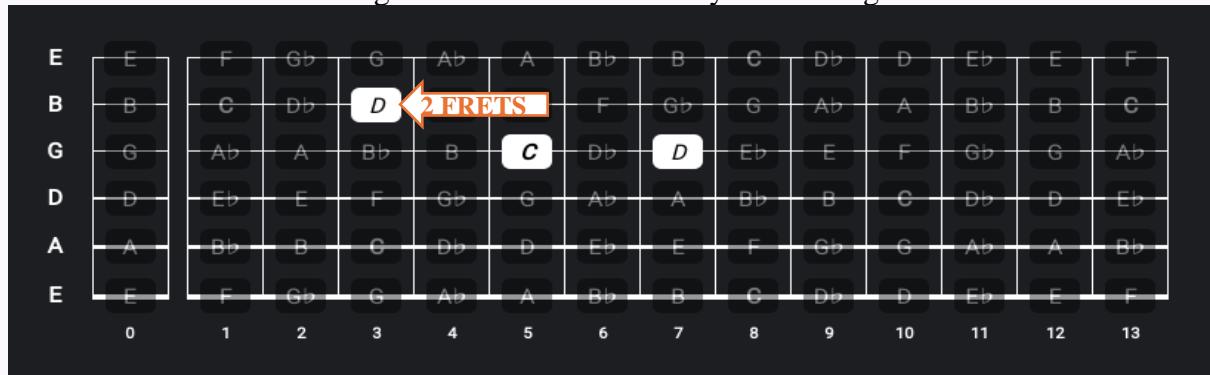


⇒ THE B STRING RULE: MOVE ONE FRET FURTHER TO THE RIGHT

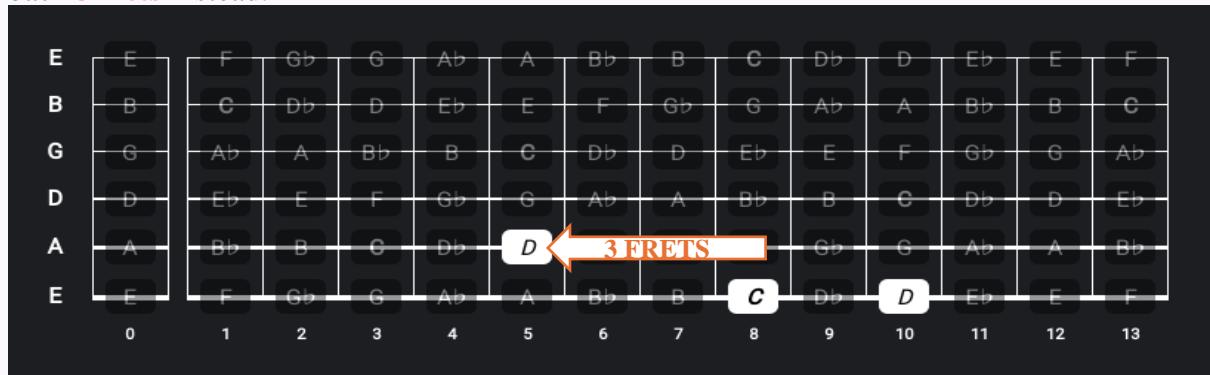
Intervals are located one fret further to the right than they would be on any other string.

EXAMPLE 1

To move from the note **C** on the **G string** to the note **D** on the **B string** we move back **2 frets**. That is 1 fret further to the right than it would be on any other string.



Compare this with the **C** on the **E string** and **D** on the **A string** and you will see that we move back **3 frets** instead.



EXAMPLE 2: Here are the notes **C** and **E** on each pair of strings. Notice that the **G and B string pair is different**. The note **E** is located **1 fret higher (1 F)** than it is relative to its position on the other strings.

	G and B String		Other String Pairs												
E	E		F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
B	B		C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C
G	G		Ab	A	Bb	B	Db	D	E _b	F	Gb	G	Ab	Bb	C
D	D		E _b	E	F	G _b	G	Ad	A	B _b	B	C	D _b	D	E _b
A	A		B _b	B	C	D _b	D	E _b	F	G _b	G	Ab	A	B _b	
E	E		F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	

This is important because it means we can **memorize shapes that do not use the B string** and adjust them when required (when the shape uses the B string). This is where knowing one octave shapes is useful. If we learn the shapes with the root on the E (6th) or A (5th) strings, then we can simply adjust them to accommodate the B string. This applies to both scales and arpeggios.

EXAMPLE 3: Applying the B String Rule to a C Major Scale Shape

Strings: A, D, G

E	E	G _b	G	A _b	A	B _b
B	B	D _b	D	E _b	E	F
G	G	A	Bb	B	C	D _b
D	D	E	F	G _b	G	Ab
A	A	B	C	D _b	D	E _b
E	E	G _b	G	A _b	A	B _b
	0	2	3	4	5	6

This is a 5th string ("A" string) root shape.
This shape doesn't use the B string. It uses the strings **(A), (D), and (G)**.

Strings: D, G, B

E	E	D _b	D	E _b	E	F
B	B	A	Bb	B	C	D _b
G	G	E	F	G _b	G	Ab
D	D	C	D _b	D	E _b	F
A	A	B	C	A _b	A	B _b
E	E	D _b	D	E _b	E	F
	0	9	10	11	12	13

This shape uses the B string.

The Notes A, B, and C are **1 fret higher** (to the right).

Strings: G, B, E

E	E	A	Bb	B	C	
B	B	E	F	G _b	G	
G	G	C	D _b	D	E _b	
D	D	B	C	A _b	A	B _b
A	A	D _b	D	E _b	E	F
E	E	A _b	A	B _b	B	C
	0	4	5	6	7	8

Here is another shape that uses the B string.

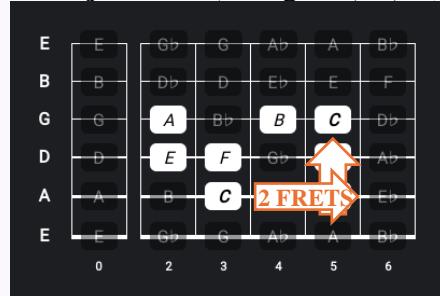
Notice that the notes also move **1 fret higher** on the **high E string**.

The next example shows more information on how the high E string is affected by the B string.

EXAMPLE 4: A higher **octave** is located **two strings below** and **two frets to the right**, except for when the octave is on the **B or the high E string** (1st string). Octaves on the **B** and **high E** strings are one fret further to the right (three frets as opposed to two).

C Major scale (Strings: A, D, G))

This octave doesn't use the **B string** or **high E string**. The octave of C is on the G string.



2 FRETS TO THE RIGHT

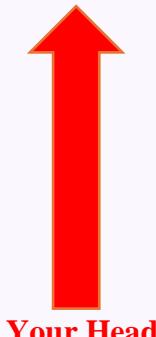
C Major scale (Strings: D, G, B))



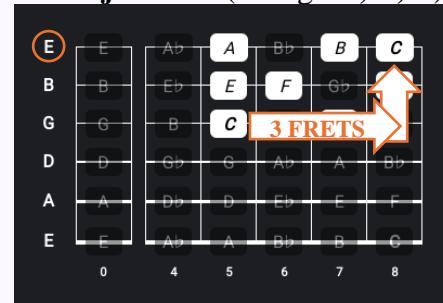
3 FRETS TO THE RIGHT

This octave uses the **B string**.

The Floor



C Major scale (Strings G, B, E)



3 FRETS TO THE RIGHT

This octave uses the **high E string**.

Remember that the top of a diagram is actually the bottom of the fretboard (closest to the floor) so when a movement is described as "below" it will appear as "above" on the diagram. Try to imagine yourself looking from underneath the diagrams as if you are looking down on your guitar towards to floor. An arrow pointing from "your head" to "the floor" has been included next to these diagrams to remind you of this.

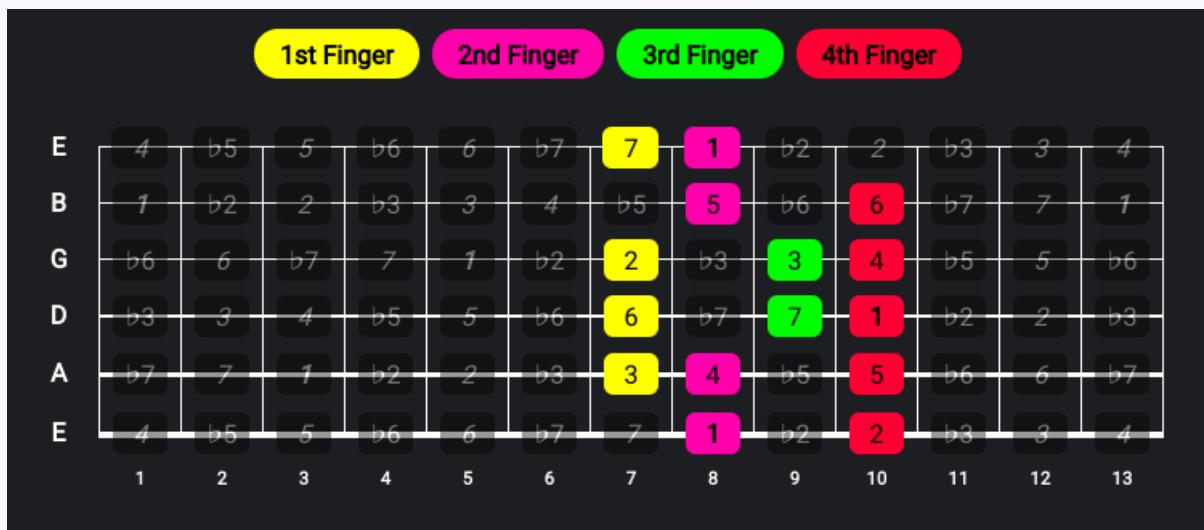
EXAMPLE 5: C Major Triads On Different String Sets

Strings E, A, D	Strings A, D, G	Strings D, G, B	Strings G, B, E
<p>These two shapes are the same because they don't use the B or high E strings.</p> <p>Compare where the notes E and G are relative to C for each shape. Notes are <u>1 fret</u> further to the right on the B and high E strings compared to the two shapes that don't use these strings.</p>			

LEFT HAND FINGERING OF SCALES AND ARPEGGIOS

This guide includes the left hand fingering in specific sections. However, many of the diagrams do not include this information. This section provides some principles for efficient fingering.

1. **Avoid shifting a finger left or right unless you are “shifting positions”.** Shifting positions is when all of our fingers (the whole hand) need to move left or right to play the next set of notes, e.g. moving from frets 8 – 12 to frets 10 – 13.
2. Where possible, **assign one finger per fret**. E.g. Whenever fret 10 is used you use your 4th finger.
3. Where possible, **avoid large stretching between fingers**. If you can move to the adjacent string (directly above or below the string you are on) with less stretching than moving to that note on the same string then this is likely to be the most efficient option. Remember that we have different options to play the same notes on the guitar, as explained in the [Fret and String Relationships](#) section. Don’t avoid using your 4th finger as it can stretch the furthest from your 1st finger the most comfortably. It is common for people to use their 3rd finger when they could be using their 4th finger. It is also common for people to use their 2nd finger in place of their 3rd finger. Most of the time the **one finger per fret** principle will help to avoid unnecessarily stretching.
4. **To move to the same fret on a string directly above or below, barre the finger you are using.**



The diagram above shows a two octave C Major Scale. The position covers frets 8 – 10.

The numbers in the diagram are the scale degrees. If we play this scale from the first note (8th fret on 6th string) to the last note (8th fret on 1st string) then these numbers tell us the order in which to play the notes.

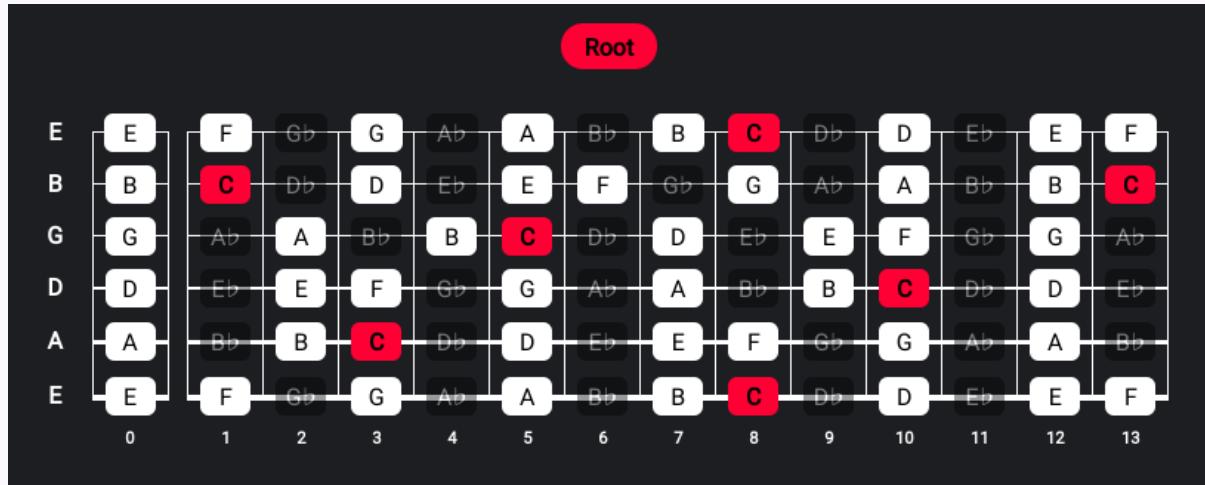
Notice in the diagram that we begin the scale with our 2nd finger otherwise our 1st finger would have to shift back a fret to the left to play the third note in the scale, therefore, breaking **principle 1**. Shifting the 1st finger would also break **principle 2**. Large stretching is avoided by using one finger per fret (**principle 3**). **Principle 4** does not apply to the above example as there are no instances where we need to move to the same fret on a string below (or above, if playing the scale backwards). Examples of barred fingering are included in the *Three Octave Arpeggios* sections of this guide.

THE “C” MAJOR SCALE

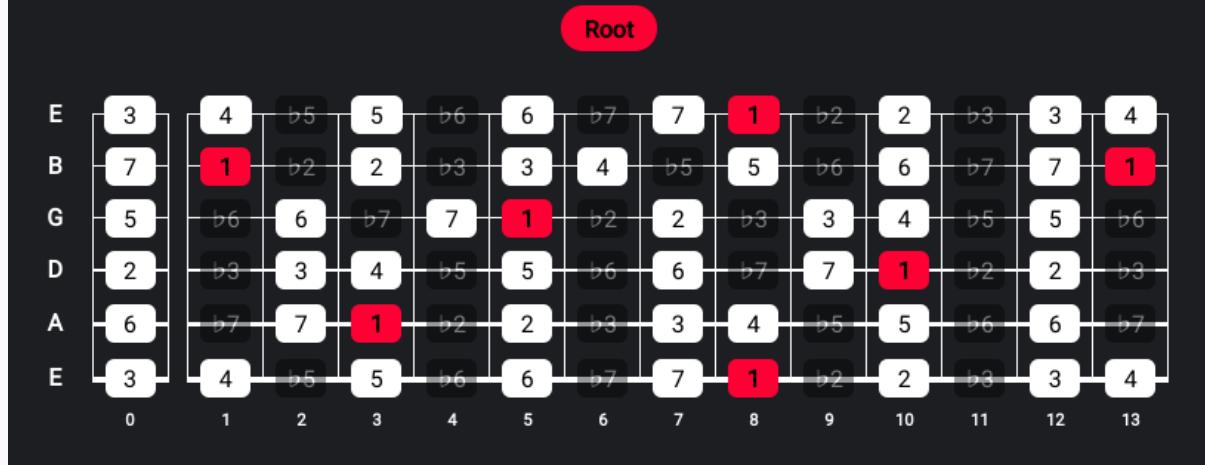
C Major Scale - Frets 0 - 13

Frets 0 – 13 are displayed as there is an octave of C on the 13th fret of the B string. Remember that the pattern of notes between 0 and 12 repeat on frets 13 - 24. This is why we do not need to show the full fretboard. *Pay attention to the fret numbers in the diagrams in this document.* Some of the diagrams show frets beyond 13 if the scale or arpeggio begins on higher frets.

Note Names

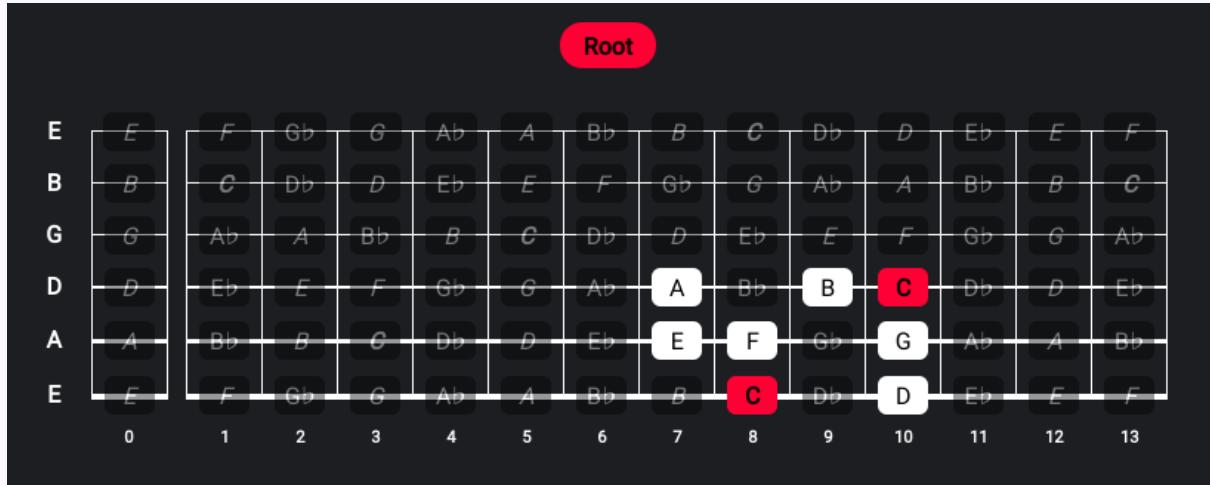


Scale Degrees

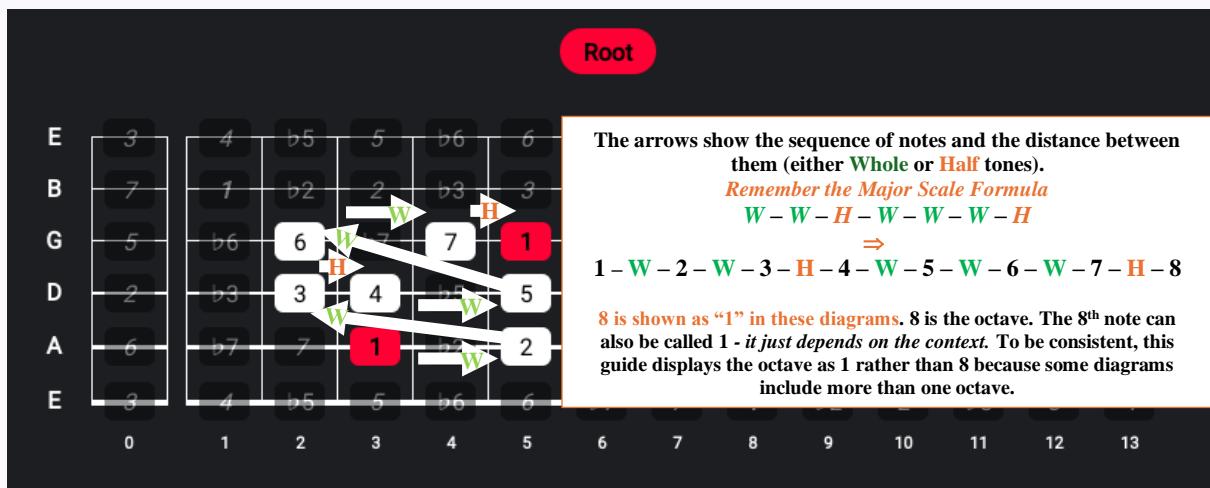


ONE OCTAVE SHAPES

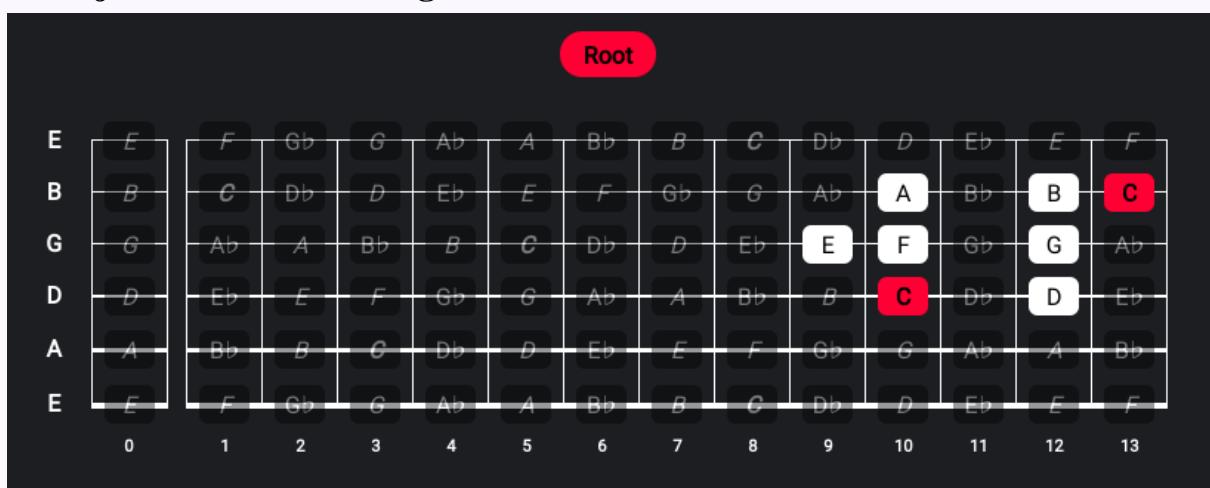
C Major Scale – 6th String Root – One Octave



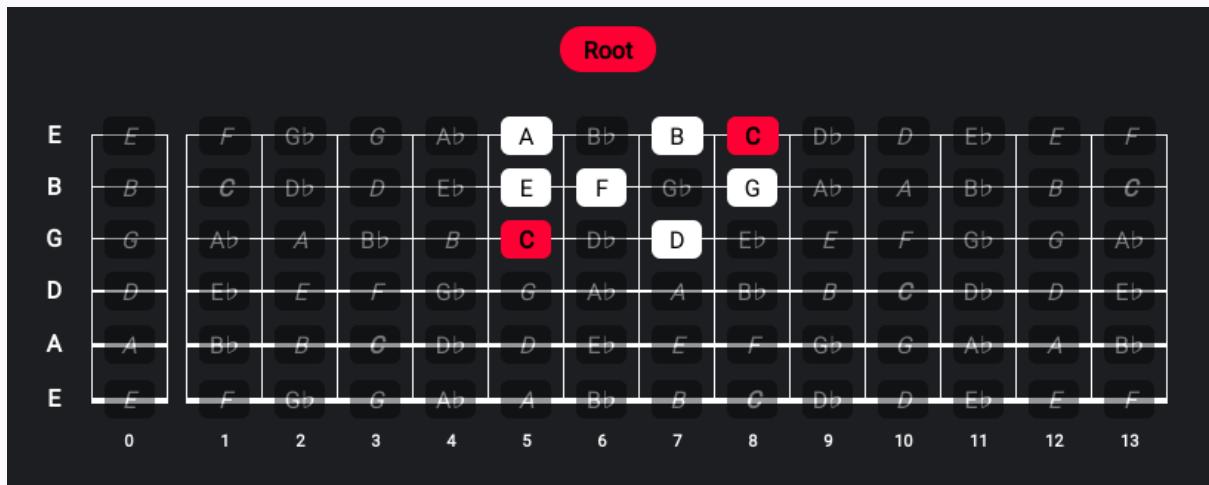
C Major Scale – 5th String Root – One Octave



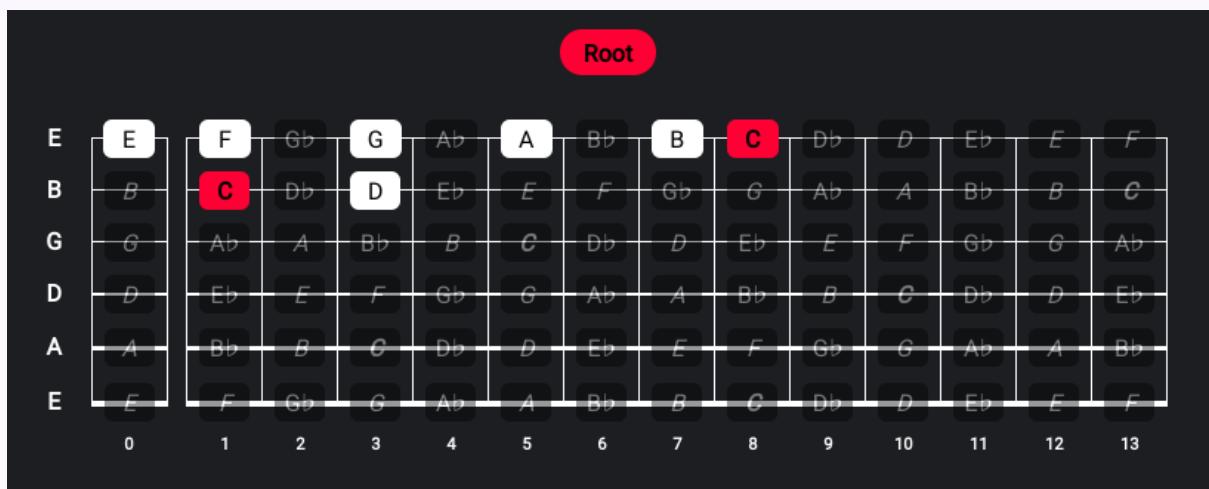
C Major Scale – 4th String Root – One Octave



C Major Scale – 3rd String Root – One Octave



C Major Scale – 2nd String Root – One Octave



C Major Scale – 1st String Root (All On One String)

Learning a scale on one string is a great way to **visualize the intervals of the scale**. Moving one fret (left or right) on the guitar is equal to one semitone (a “half tone”). Moving two frets is equal to two semitones (a “whole tone”). Remember the [Major Scale Formula](#) and you will understand the pattern of notes and intervals. Whole tones (**W**) and half tones (**H**) are included on the first diagram.

Note Names

		Root																				
		E	B	G	D	A	E	B	G	D	A	E	B	G	D	A	E	B	G	D	A	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
E		E	H	W	W	W	H	W	W	H	W	W	W	W	W	W	H	W	W	H	C	
B		B	C	D	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	G	
G		G	Ab	A	B	B	C	D	D	E	F	G	A	B	B	C	D	E	F	G	G	
D		D	Eb	E	F	Gb	G	Ab	A	Bb	C	D	Eb	E	F	Gb	G	Ab	A	Bb	D	
A		A	Bb	B	C	Db	D	Eb	F	Gb	G	Ab	A	Bb	B	C	D	Eb	E	F	F	
E		E	F	Gb	G	Ab	A	Bb	B	C	Db	D	Eb	E	F	Gb	G	Ab	A	Bb	G	

Scale Degrees

		Root																				
		E	B	G	D	A	E	B	G	D	A	E	B	G	D	A	E	B	G	D	A	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
E		3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	
B		7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	
G		5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	b3	
D		2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	b7	
A		6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	4	
E		3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	

C Major Scale – 6th String Root (All On One String)

Same as 1st string (both are turned to the note E)

		Root																				
		E	B	G	D	A	E	B	G	D	A	E	B	G	D	A	E	B	G	D	A	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
E		3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	
B		7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	
G		5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	b3	
D		2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	b7	
A		6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	4	
E		3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	

TWO OCTAVE SHAPES

C Major Scale – 6th String Root – 2 Octaves (Close Shape)

Root

A close shape stays in one position.
Your left hand does not need to shift.

0 1 2 3 4 5 6 7 8 9 10 11 12 13

C Major Scale – 6th String Root – 2 Octaves (Wide Shape)

Root

Wide shapes are two “one octave” shapes joined together. They require your left hand to shift position to play the second shape.

Here the first one octave shape begins on the 8th fret of the low E string and the second one octave shape begins on the 10th fret of the D string.

0 1 2 3 4 5 6 7 8 9 10 11 12 13

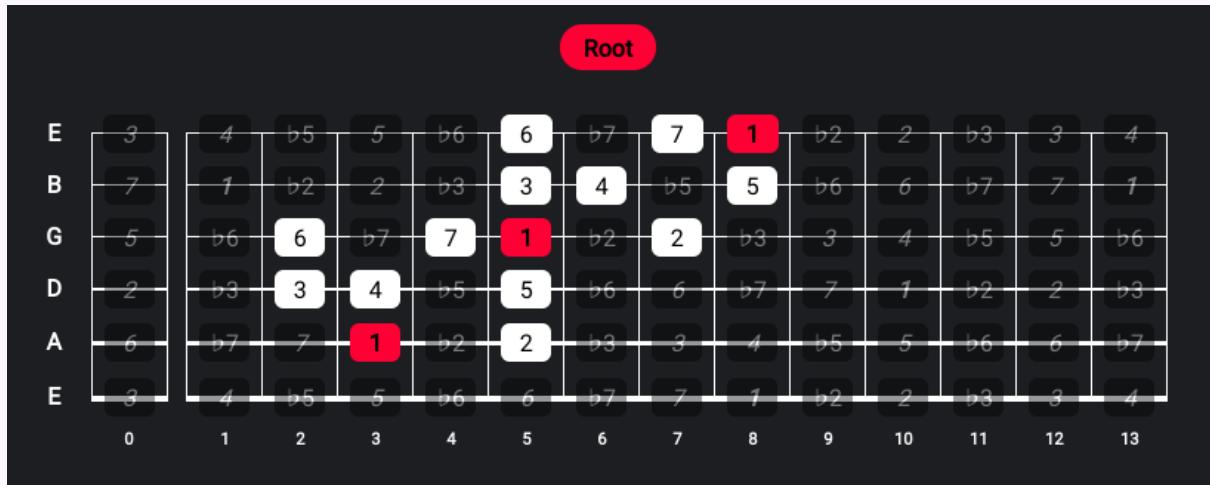
C Major Scale - 5th String Root – 2 Octaves (Close Shape)

Root

To complete the second octave this shape requires a shift in position on the high E string. However, it is still mostly a “close” shape.

0 1 2 3 4 5 6 7 8 9 10 11 12 13

C Major Scale – 5th String Root – 2 Octaves (Wide Shape)

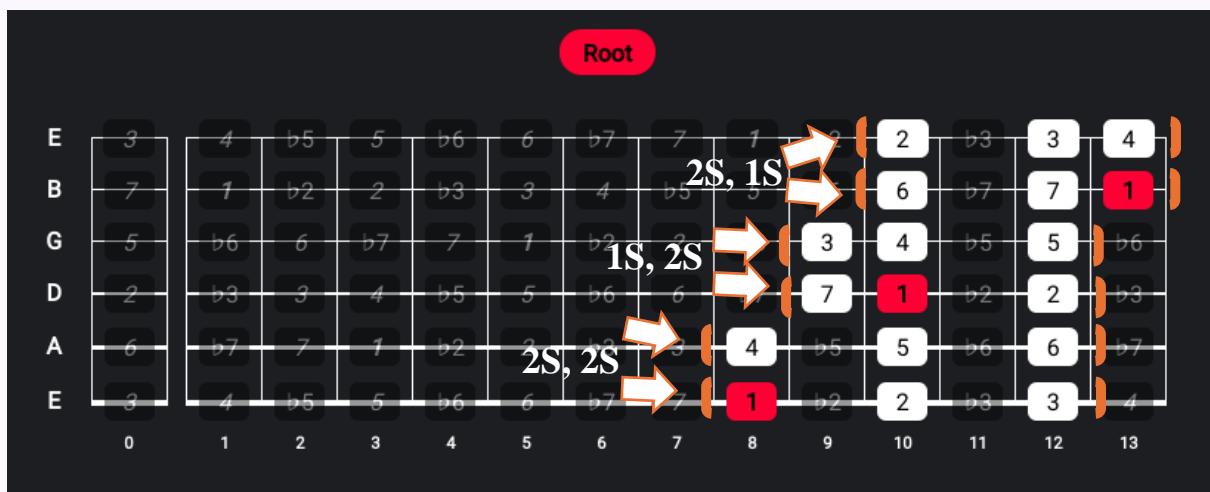


C Major Scale – “3 Notes Per String” Shape – 6th String Root

Three notes per string shapes are useful because they **have a consistent number of notes per string**. This can make picking easier for some people. They are also arguably easier to visualize and remember. These shapes also lend themselves well to playing triplet rhythms because the shape divides notes into groups of three. The 1st note on each string is always played by the 1st finger on the left hand.

Three note per string shapes contain only three types of patterns on each string:

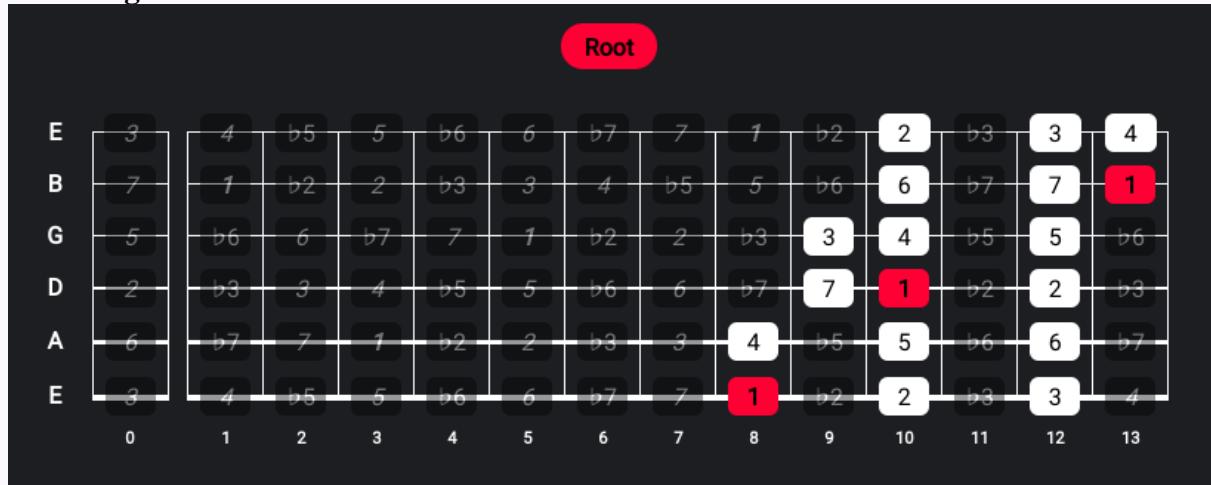
- ⇒ 2 semitones followed by 2 semitones (**2S, 2S**)
- ⇒ 1 semitone followed by 2 semitones (**1S, 2S**)
- ⇒ 2 semitones followed by 1 semitone (**2S, 1S**)



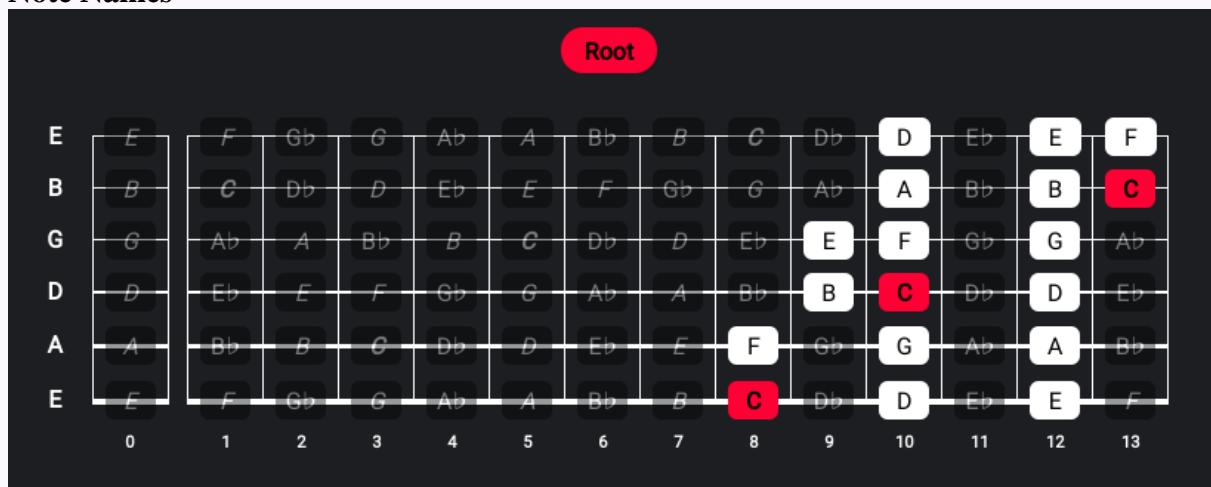
This shape begins with a (**2S, 2S**) pattern on the 6th string and then uses the same pattern on the 5th string. Strings 4 and 3 use the (**1S, 2S**) pattern. Strings 2 and 1 use the (**2S, 1S**) pattern.

Remember that 1 fret = 1 semitone (1S) and 2 frets = 2 semitones (2S).

Scale Degrees

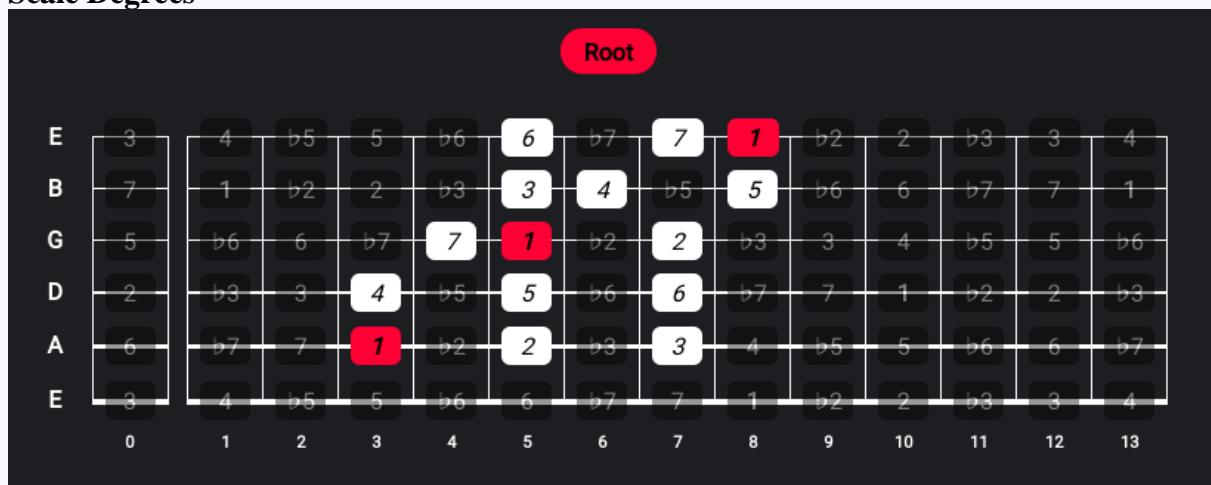


Note Names



C Major Scale – “3 Notes Per String” Shape – 5th String Root

Scale Degrees

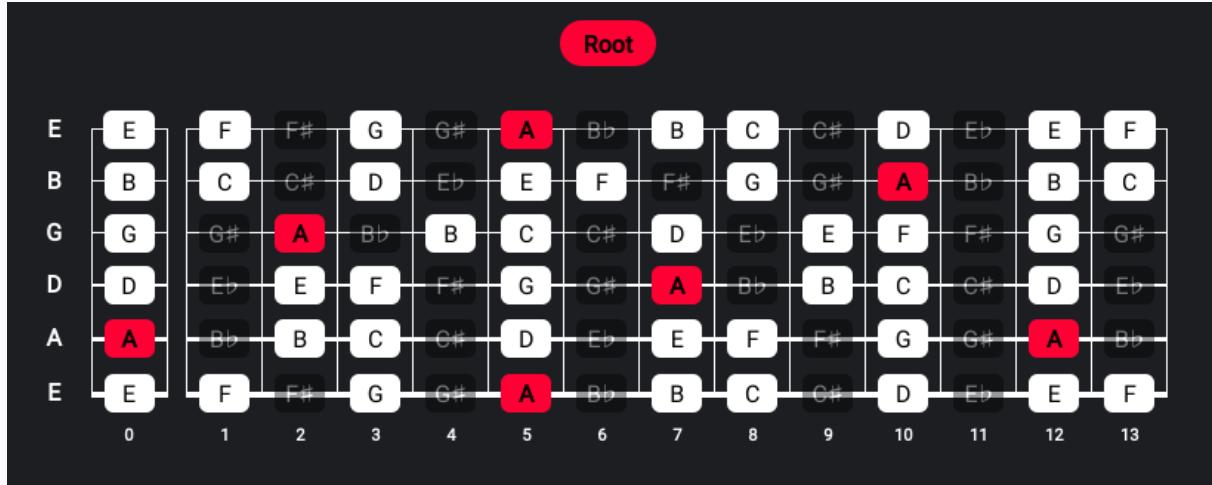


THE “A” NATURAL MINOR SCALE

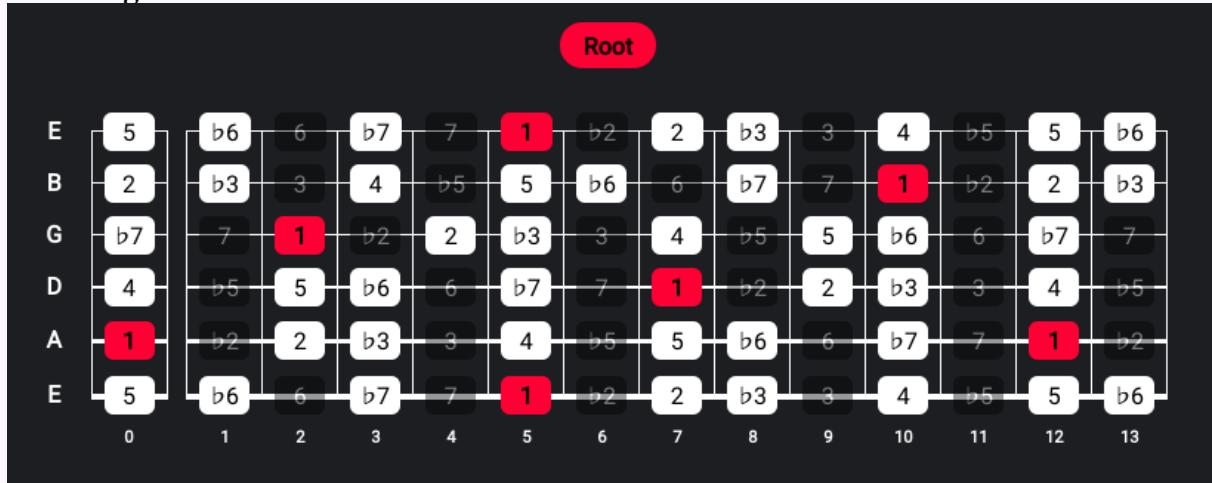
Referred to from here on as the A Minor scale. Frets 0 -13 are shown for most of the diagrams to be consistent with the diagrams provided for the C Major scale in the previous section.

A Minor Scale - Frets 0 - 13

Note Names

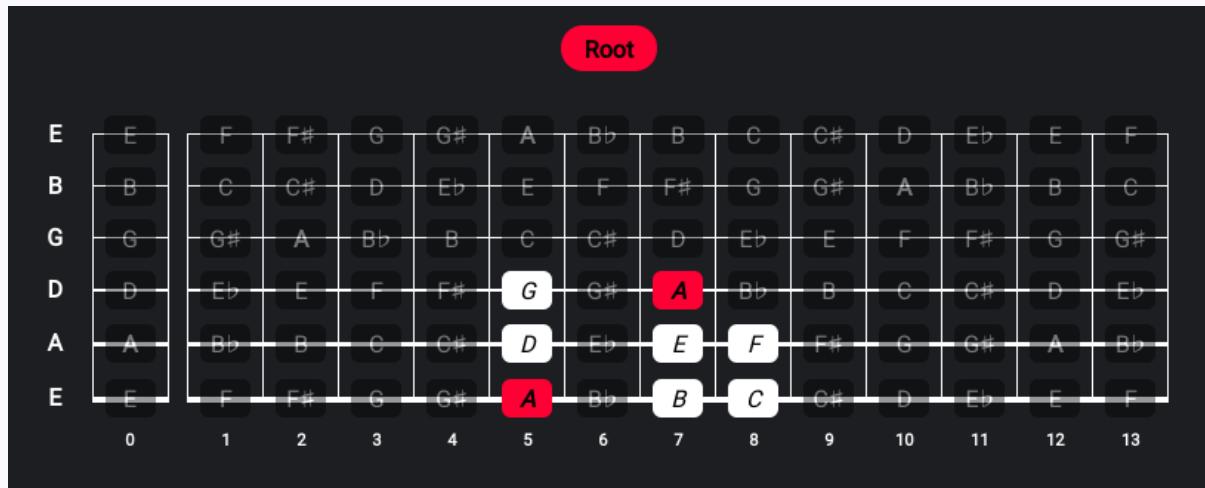


Scale Degrees

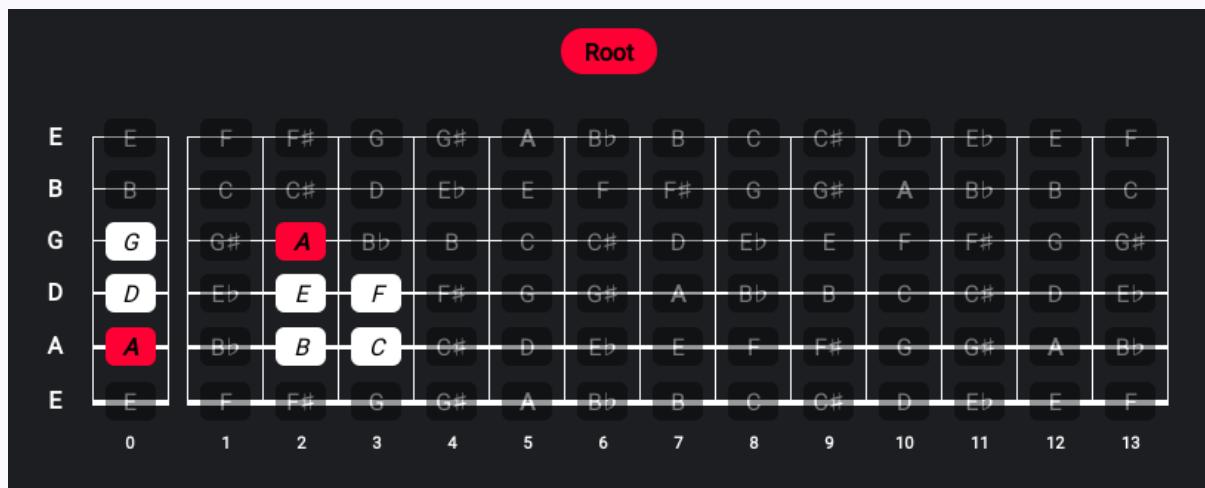


ONE OCTAVE SHAPES

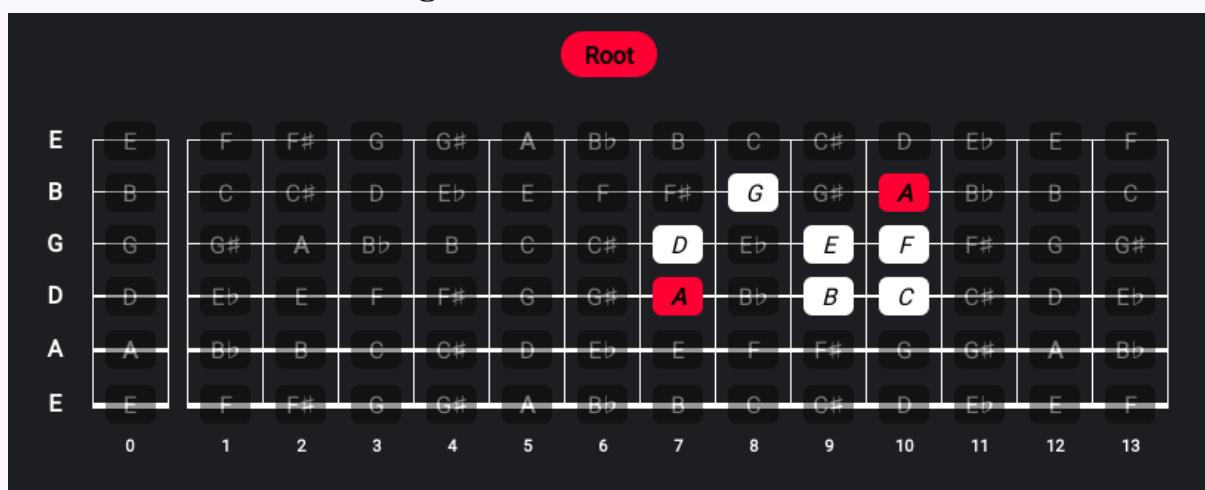
A Minor Scale – 6th String Root – One Octave



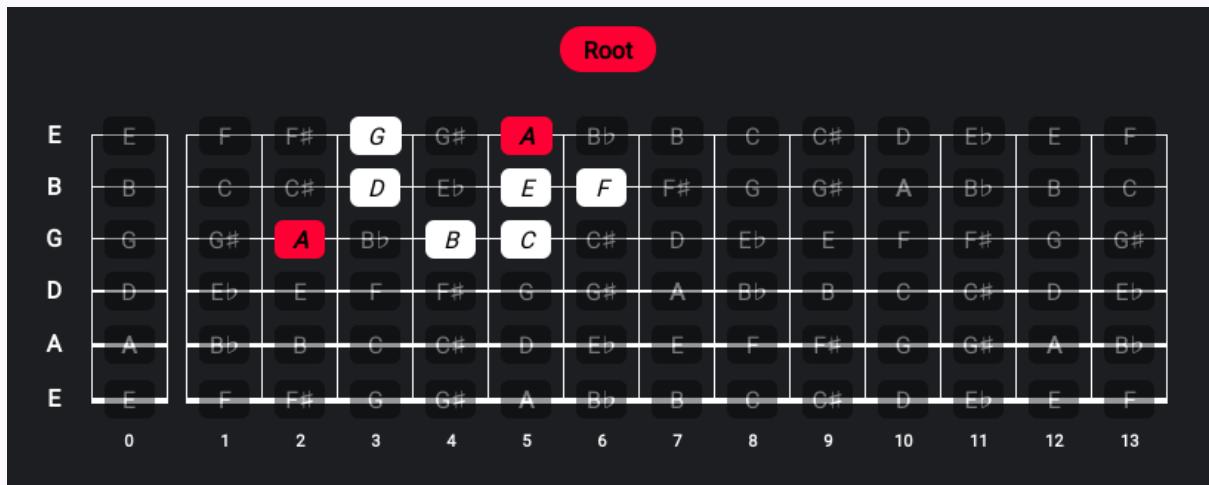
A Minor Scale – 5th String Root – One Octave



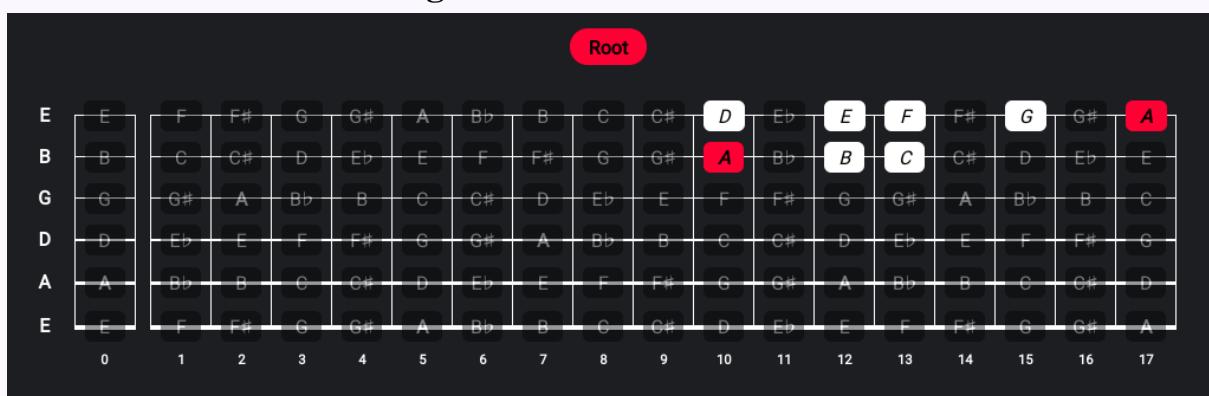
A Minor Scale – 4th String Root – One Octave



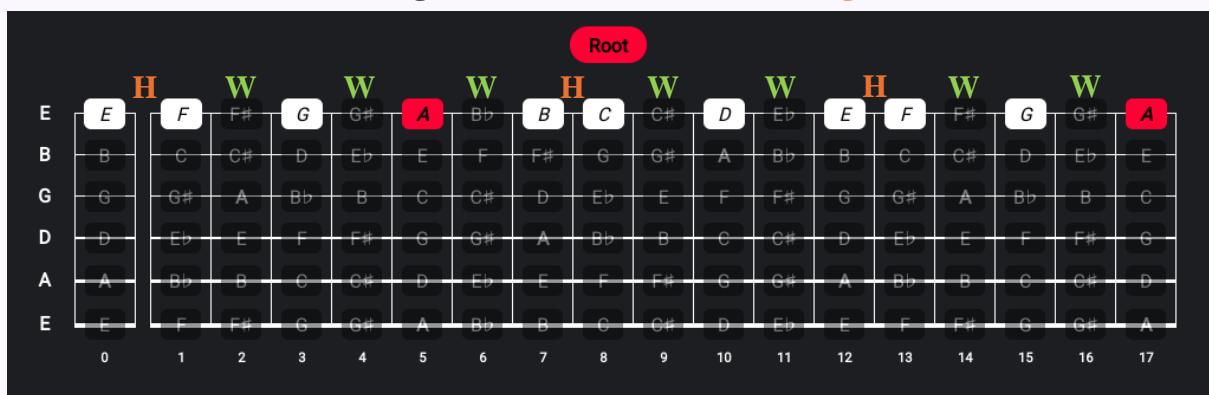
A Minor Scale – 3rd String Root – One Octave



A Minor Scale – 2nd String Root – One Octave



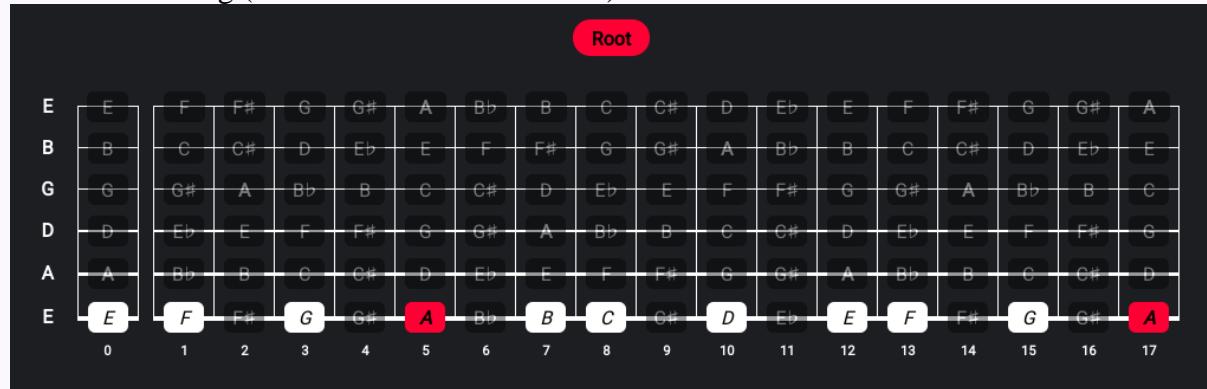
A Minor Scale – 1st String Root – (All On One String)



Remember the pattern of whole and half tones.

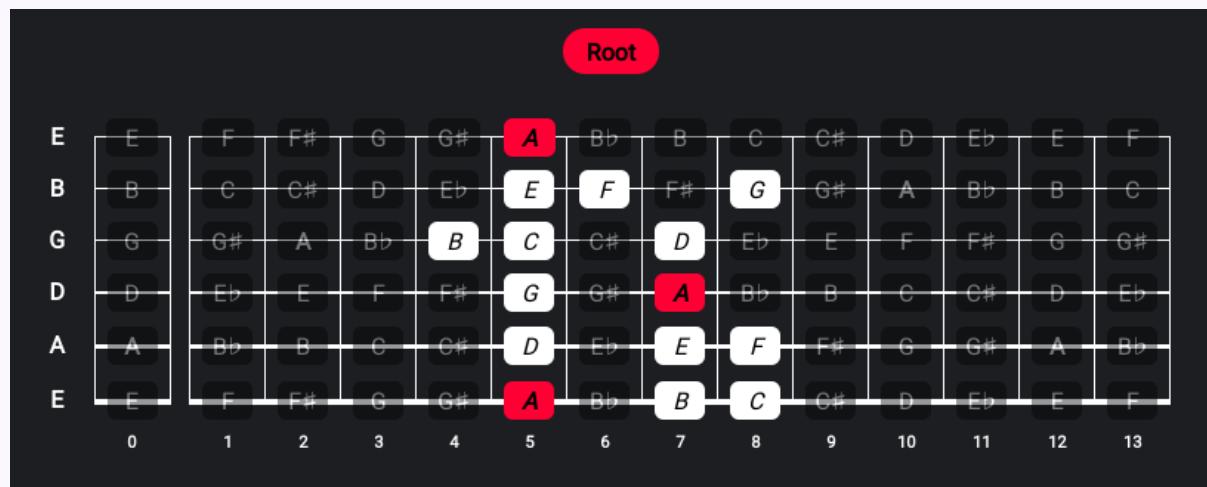
A Minor Scale – 6th String Root – (All On One String)

Same as 1st string (both are tuned to the note E)

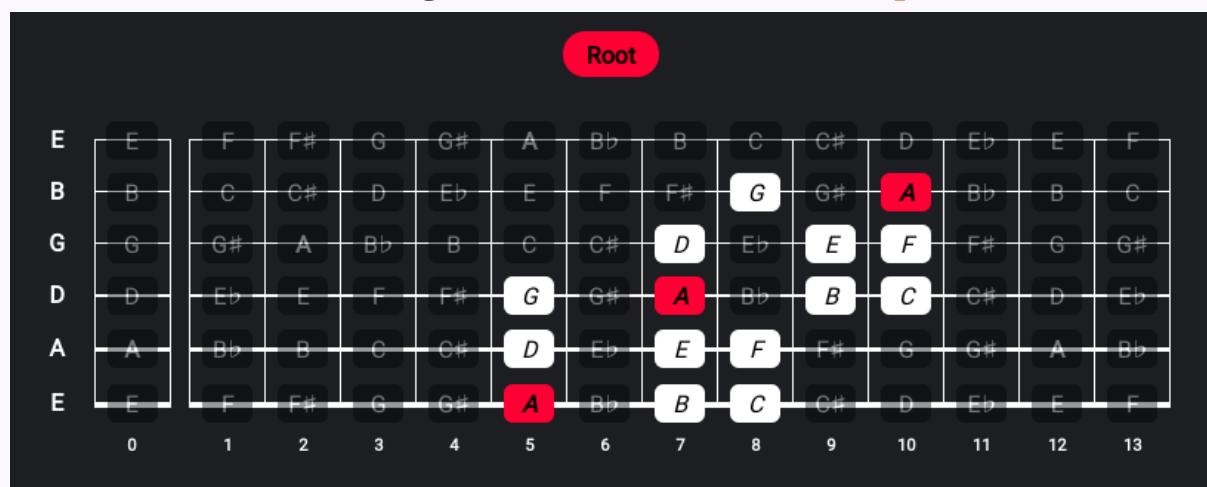


TWO OCTAVE SHAPES

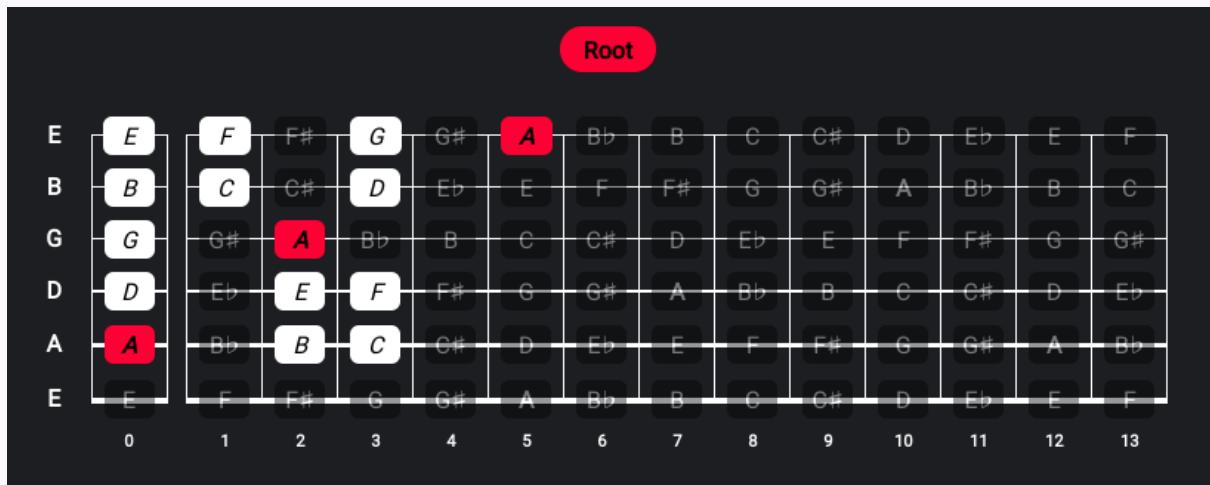
A Minor Scale – 6th String Root – 2 Octaves (Close Shape)



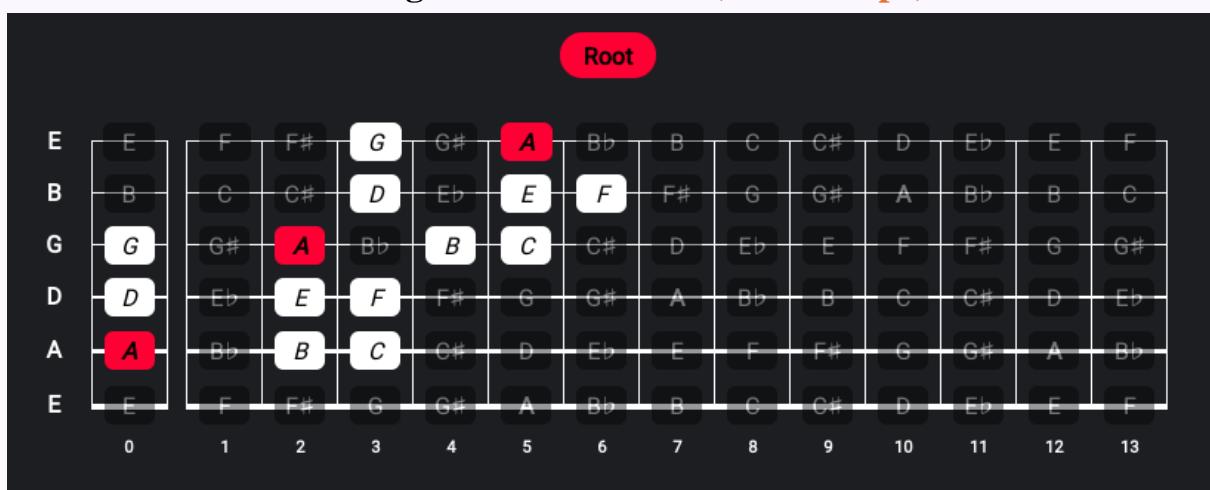
A Minor Scale – 6th String Root – 2 Octaves (Wide Shape)



A Minor Scale – 5th String Root – 2 Octaves (Close Shape)

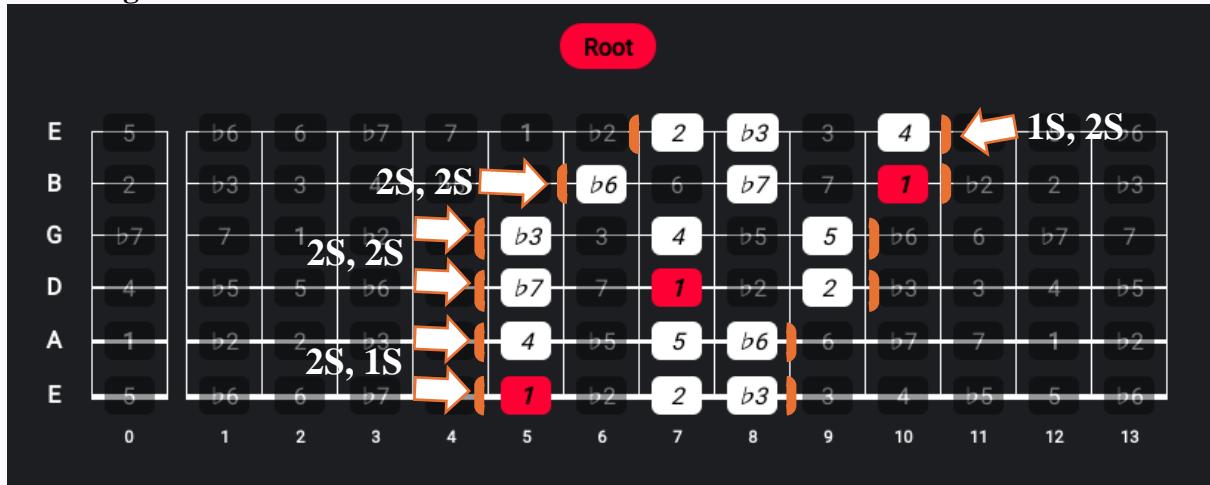


A Minor Scale – 5th String Root – 2 Octaves (Wide Shape)



A Minor Scale – “3 Notes Per String” Shape – 6th String Root

Scale Degrees

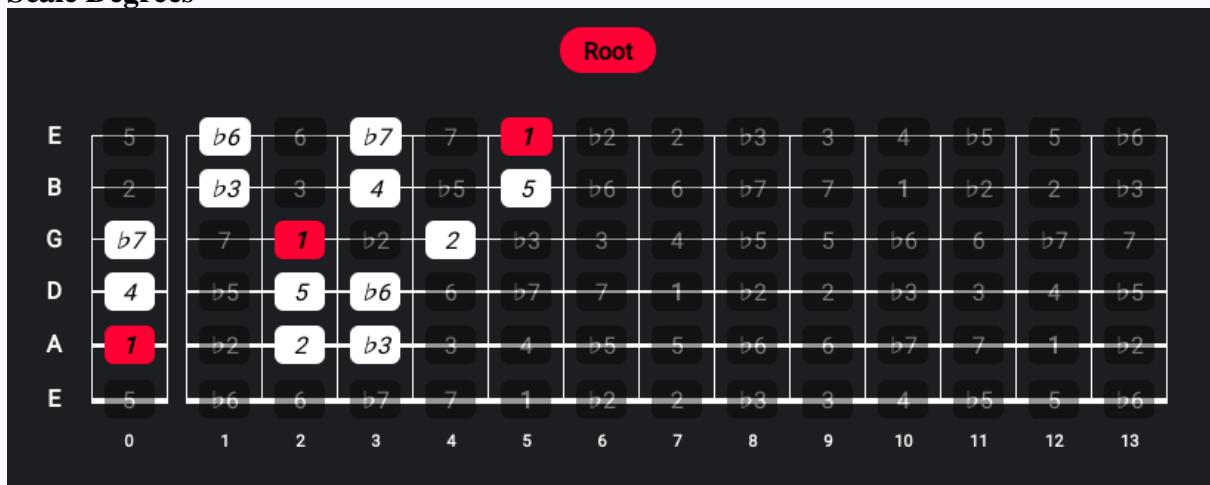


Notice in the diagram above that we begin with a (2S, 1S) pattern on the 6th string. This pattern is then played on the 5th string. Strings 4 – 2 use the (2S, 2S) patterns. String 1 uses (1S, 2S).

Remember that 1 fret = 1 semitone (1S) and 2 frets = 2 semitones (2S).

A Minor Scale – “3 Notes Per String” Shape – 5th String Root

Scale Degrees

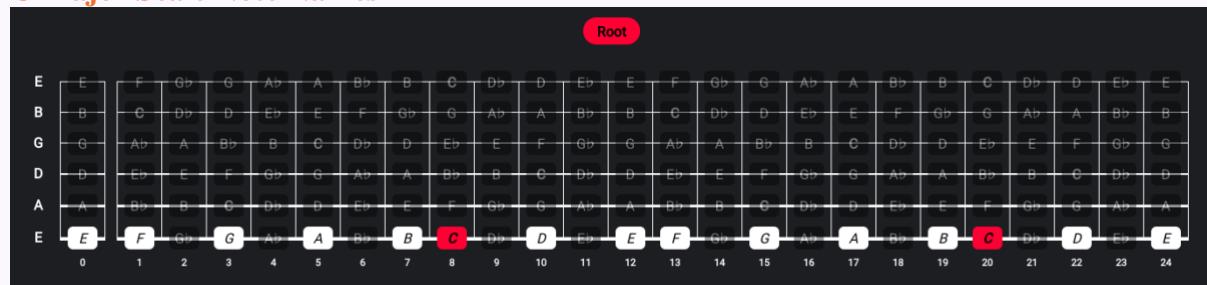


MAJOR AND MINOR SCALE INTERVALS COMPARISON

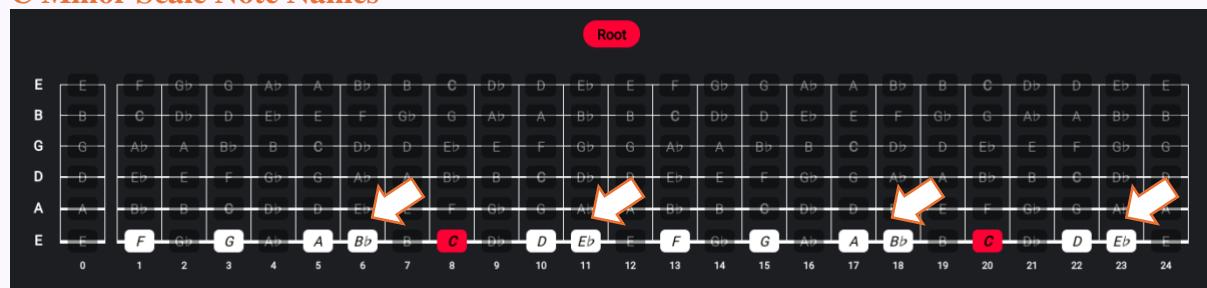
C MAJOR AND C MINOR SCALES ALL ON ONE STRING

To help with visualizing the differences between the Major and Natural Minor scales it is useful to compare each on one string. Notice that we are comparing C Major and C Minor because these scales have the same root note. These diagrams show each scale on the 6th string (E). The note C is located on the 8th and 20th frets. Remember that notes repeat in higher octaves every 12 frets. Notice that the **Minor scale has a b3 and b7 compared with the Major scale.**

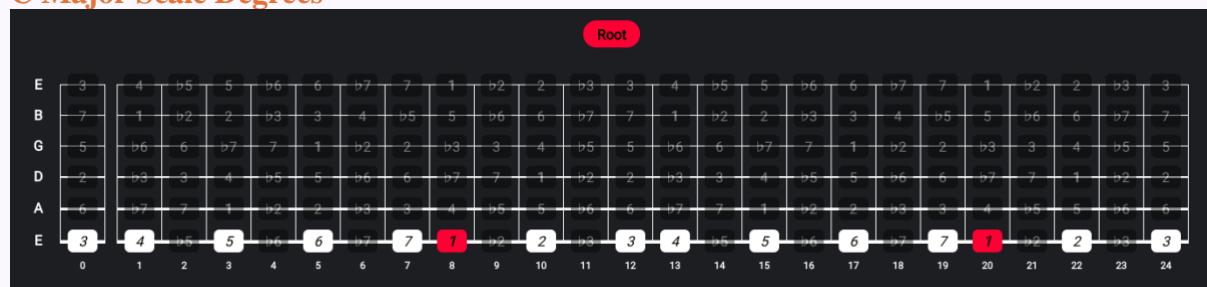
C Major Scale Note Names



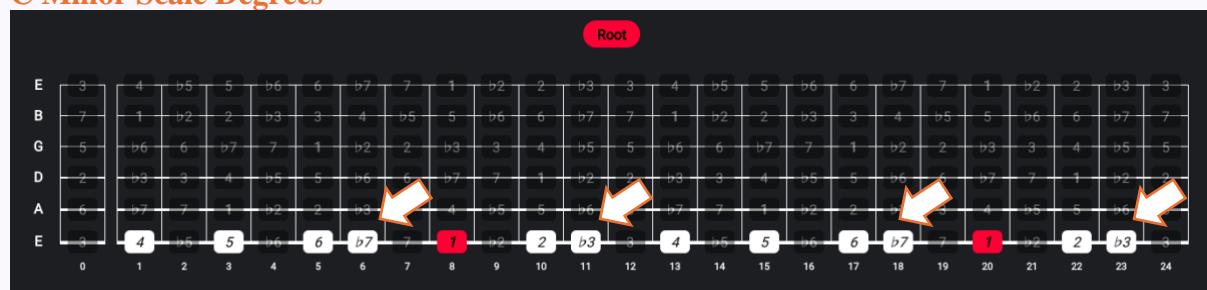
C Minor Scale Note Names



C Major Scale Degrees



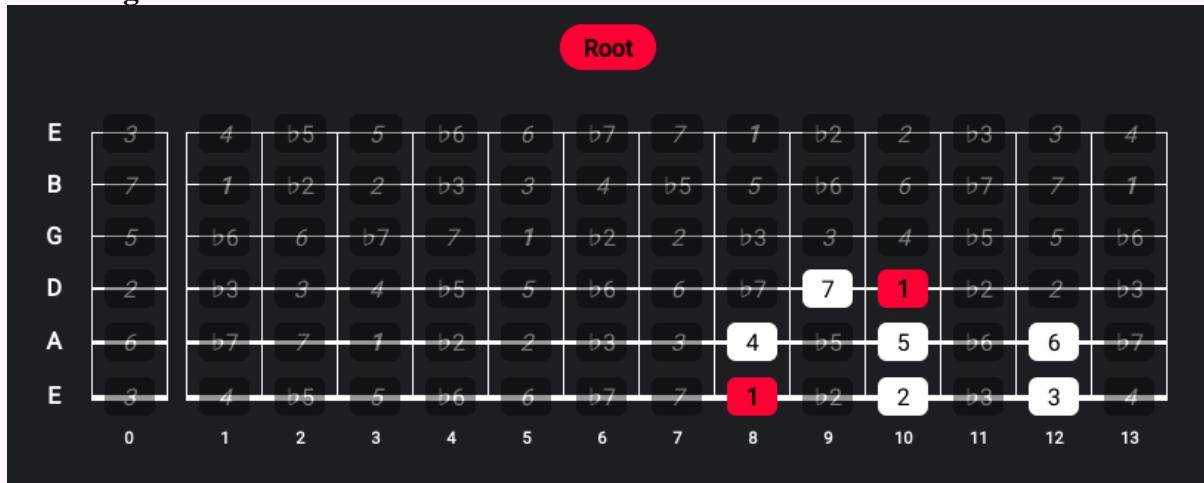
C Minor Scale Degrees



The Diagrams below Compare One Octave shapes for the C Major and C Minor scales.

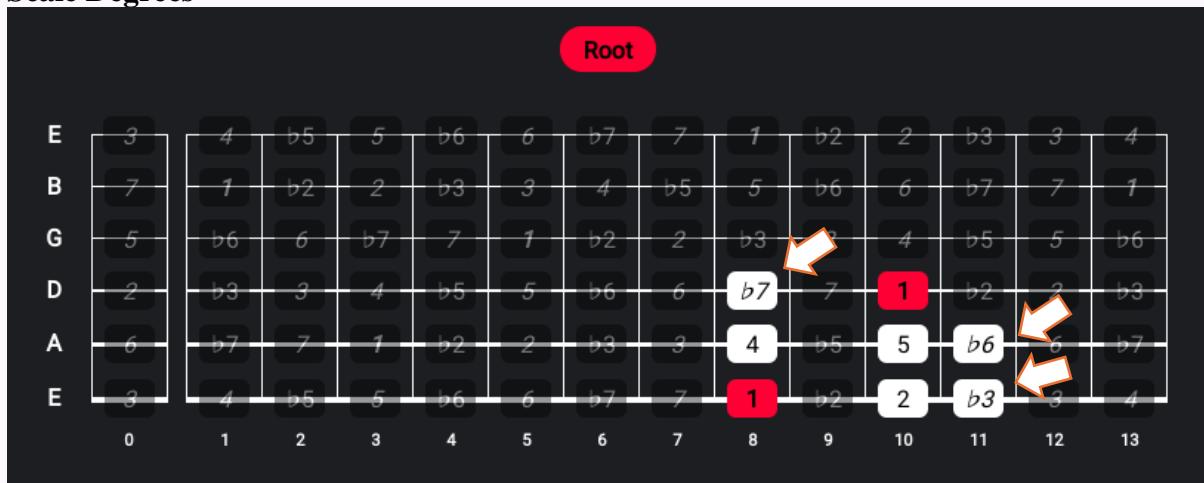
C Major Scale

Scale Degrees



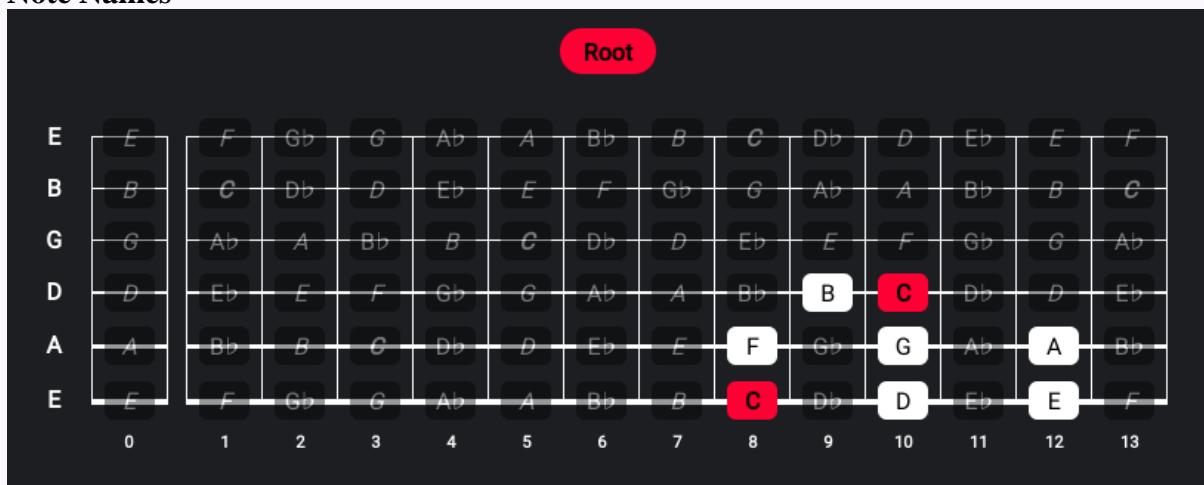
C Minor Scale

Scale Degrees



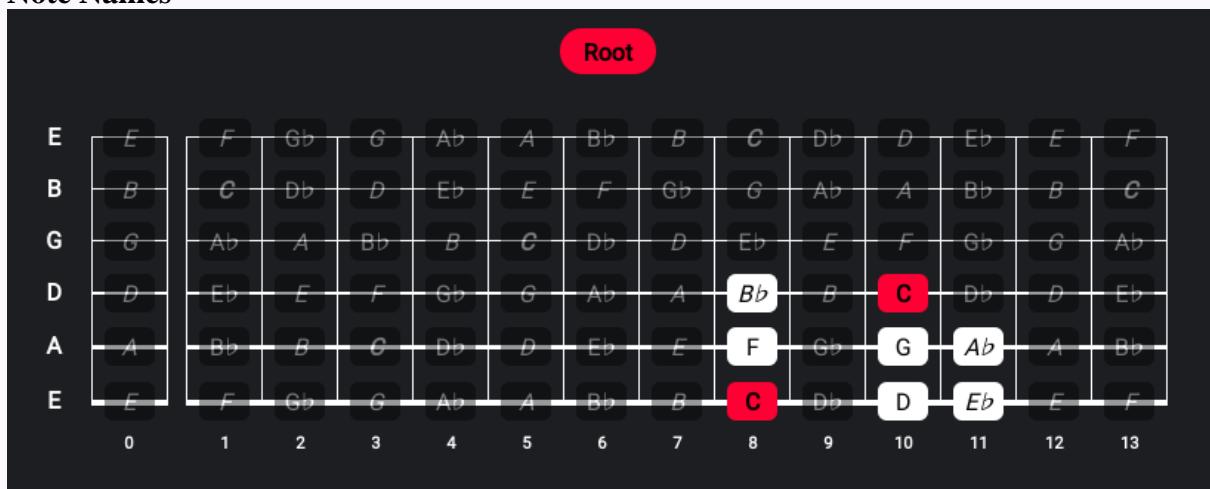
C Major Scale

Note Names

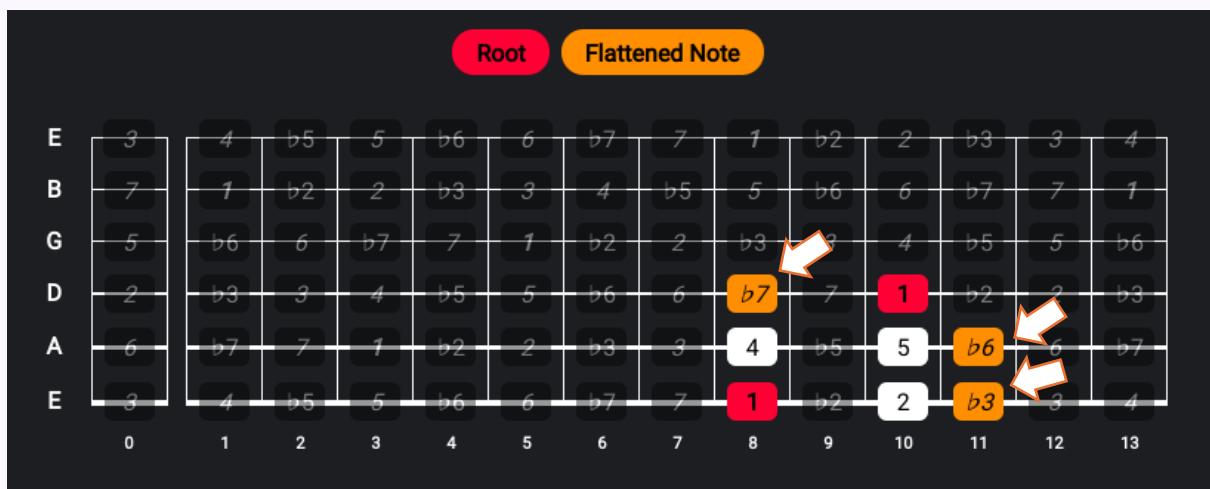


C Minor Scale

Note Names



The 3rd, 6th, and 7th degrees of the Major scale are **flattened** (moved down a semitone) to arrive at the Minor scale.



To visualise the difference between different scales and modes it is useful to compare one octave shapes like we have done so above. In Music Theory, the Major scale is used as a reference for other scales. *This is one of the reasons that it is so important to learn the Major scale.* When an interval is described as “flat” or “sharp” this means relative to the major scale. The Natural Minor scale has a b3 and a b7. All of its other intervals are the same as the Major scale.

RELATIVE MAJOR AND MINOR SCALES

Relative Major and Minor scales share the same notes. They are modes of each other. For example, C Major and A Minor are relative Major and Minor scales. They both contain the notes **A, B, C, D, E, F, G**. The only difference is that C Major starts on the note C, i.e. **C, D, E, F, G, A, B**.

- ⇒ The Relative Minor scale is the begins with the 6th note of the Major scale. A is the 6th note of the C Major scale.
- ⇒ The Relative **Major scale** is three semitones (three frets on the guitar) **above** its Relative **Minor scale**. E.g. C is 3 semitones above A.
- ⇒ Looking at it from the opposite direction, the Relative **Minor scale** is 3 semitones **below** its Relative **Major**. E.g. A is 3 semitones below C.
- ⇒ Remember that **1 semitone equals 1 fret on the guitar**. Therefore, **relative Major and Minor scales are 3 frets apart** (moving along one string).

Here are all the Relative Major and Minor scales:

RELATIVES		
<u>MINOR</u>	3 SEMITONES	<u>MAJOR</u>
A		C
A#/Bb		C#/Db
B		D
C		D#/Eb
C#/Db		E
D		F
D#/Eb		F#/Gb
E		G
F		G#/Ab
F#/Gb		A
G		A#/Bb
G#/Ab		B

There are 12 Major Scales and 12 Minor Scales. Remember the “Chromatic scale”.

The Chromatic scale includes all of the 12 notes used in Western Music.

Ordered alphabetically these 12 notes are: A, A#, B, C, C#, D, D#, E, F, F#, G, G# (named using sharps) or A, Bb, B, C, Db, D, Eb, E, F, Gb, G, Ab (named using flats). Each note is 1 semitone apart. We can create a Major or Minor scale from each of the 12 notes.

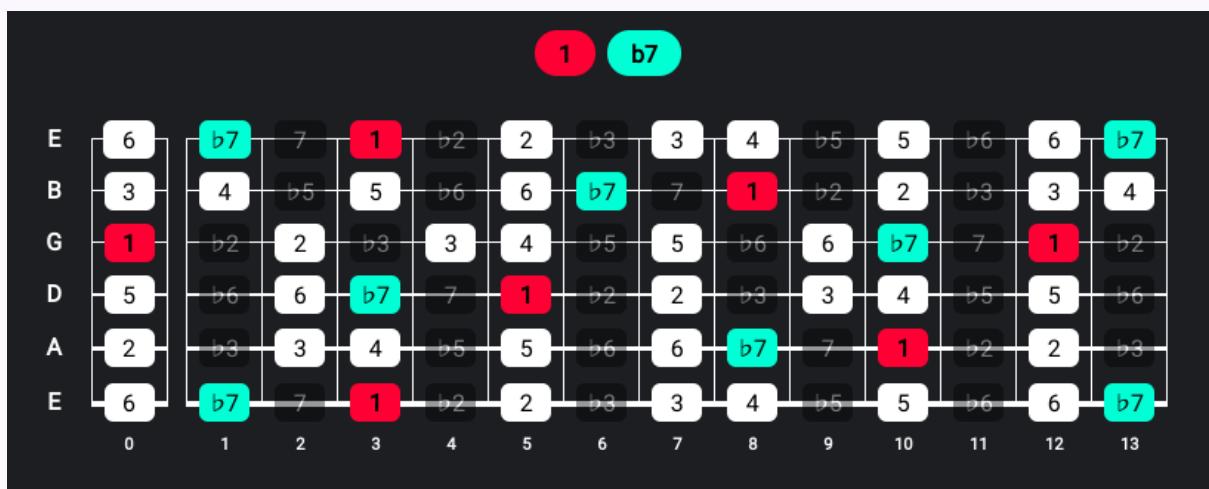
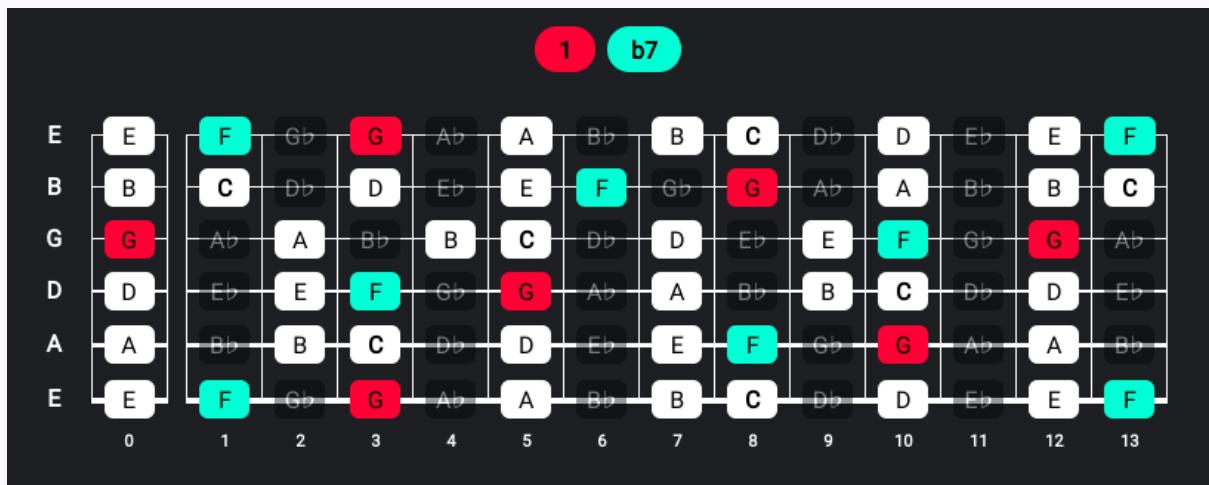
Every Major scale has a relative Minor scale, as shown in the table above.

THE MIXOLYDIAN MODE

A scale (often called a **mode**) built from the 5th of the Major scale. For example, the 5th of C Major is the note G. Its sequence of notes is **G, A, B, C, D, E, F**. It's very **similar to the Major scale except that it has a flattened 7th (b7)**.

The root and b7 have been highlighted in the diagrams below.

The Mixolydian mode works well over **Dominant 7 chords**. e.g. G Mixolydian scale over a G7 chord, or C# Mixolydian scale over C#7, etc.



G Mixolydian – 6th String Root - One Octave

The diagram shows a guitar neck with six strings (E, B, G, D, A, E) and 13 frets. The root note G is at the 6th fret of the 6th string. The mode is G Mixolydian, which has notes G, A, B, C, D, E, and B♭. The 7th degree (B♭) is highlighted in red. The 1st and 7th frets are marked with red circles labeled "1" and "b7". A callout box compares G Mixolydian with G Major, noting that G Major has an F# (also called Gb) while G Mixolydian has an F. The F# in G Major is highlighted in red, and the F in G Mixolydian is also highlighted in red.

G Mixolydian – 6th String Root – Two Octaves

This diagram extends the G Mixolydian scale from the first octave to the second octave. The root note G is at the 6th fret of the 6th string. The mode consists of notes G, A, B, C, D, E, B♭, G, A, B, C, D, E, and F. The 7th degree (B♭) is highlighted in red. The 1st and 7th frets are marked with red circles labeled "1" and "b7". The diagram shows the repeating pattern of the mode across two octaves.

G Mixolydian – 3 Notes Per String

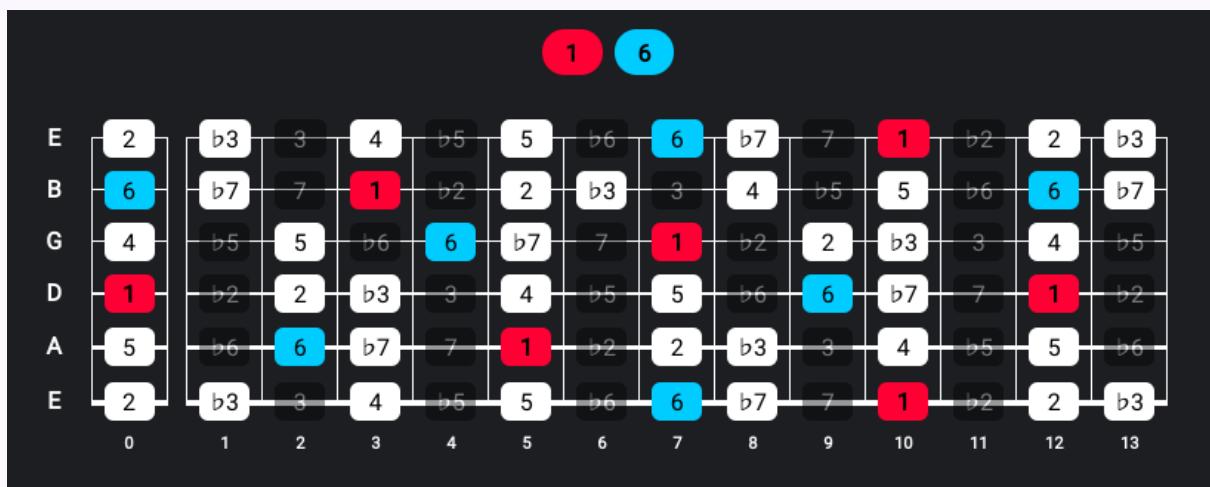
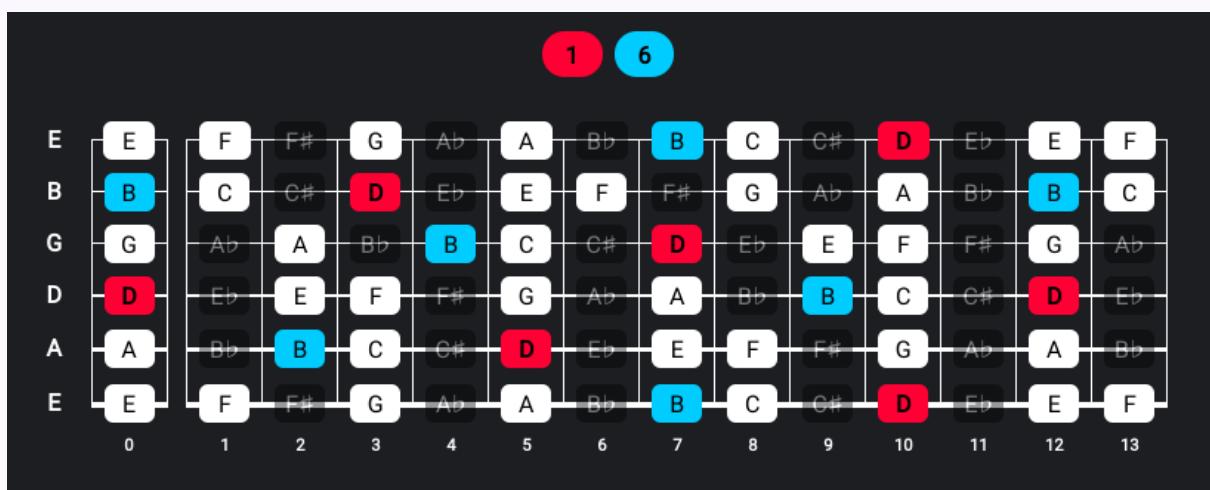
This diagram illustrates the G Mixolydian mode using three notes per string. The root note G is at the 6th fret of the 6th string. The mode consists of notes G, A, B, C, D, E, B♭, G, A, B, C, D, E, and F. The 7th degree (B♭) is highlighted in red. The 1st and 7th frets are marked with red circles labeled "1" and "b7". This representation shows how the mode can be played using only three notes per string, though it requires shifting between different positions on the neck.

THE DORIAN MODE

A scale (often called a **mode**) built from the 2nd of the Major scale. For example, the 2nd note of C Major is the note D. Its sequence of notes is **D, E, F, G, A, B, C**. It's very **similar to the Natural Minor scale except that it has a raised 6th degree** compared with the b6 of the Natural Minor scale.

The root and 6 have been highlighted. The 6 is the only interval that differs from the Natural Minor scale.

It can be used over **Minor** or **Minor 7 chords**. However, if the chord contains the note that is the b6, then the 6 of the Dorian scale will clash. You will likely be able to hear when the note clashes.



D Dorian – 6th String Root - One Octave

1 6

E Notice the difference between D Dorian and the D Minor Scale:

B The only difference is the 6th note. D Minor has a **B**.

G D Dorian has a **Bb**.

D **B** is “raised” compared to **Bb** (1 semitone higher).

A

E

B	C	C#	D	Eb	E	F
F#	G	Ab	A	Bb	B	C
D	Eb	E	F	F#	G	Ad
A	Bb	B	C	C#	D	Eb
E	F	F#	G	Ab	A	Bb
B	C	C#	D	Eb	E	F

D Dorian – 6th String Root – Two Octaves

The diagram illustrates a guitar neck with 18 frets. Frets 10, 12, and 13 are highlighted in red, while the other frets are black. The strings are labeled E, B, G, D, A, and E from bottom to top. The diagram shows various notes and their corresponding fret positions.

D Dorian– 3 Notes Per String

A diagram showing a 16-note chromatic scale on a guitar neck. The notes are labeled from 0 to 15. A red circle highlights note 1 (F#), and a blue circle highlights note 6 (B).

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
E	E	F	F#	G	A _b	A	B _b	B	C	C#	D	E _b	E	F	F#	G
B	B	C	C#	D	E _b	E	F	F#	G	A _b	A	B _b	B	C	C#	D
G	G	Ab	A	B _b	B	C	C#	D	E _b	E	F	F#	G	A _b	A	B _b
D	D	E _b	E	F	F#	G	A _b	A	B _b	B	C	C#	D	E _b	E	F
A	A	B _b	B	C	C#	D	E _b	E	F	F#	G	A _b	A	B _b	B	C
E	E	F	F#	G	A _b	A	B _b	B	C	C#	D	E _b	E	F	F#	G

CHORDS OF THE MAJOR SCALE

Remember, an **Arpeggio** is just a **Chord** where each note is **played separately**, one after the other, rather than at the same time.

The Major scale has 7 Notes. We can **build chords** using these notes **by adding notes** that are **a third apart**. E.g. if D is the root note (the “1”) then we can add the note a 3rd above it and the note a 5th above it to make a D minor chord: D, F, A. You can also think of it as **selecting a root note** and **adding notes by skipping every other note**. Select the note D, skip the note E, select the note F, skip the note G, select the note A, etc. Each note is the 3rd note above the note before it. 3 is the 3rd note relative to 1; 5 is the third note relative to 3; 7 is the third note relative to 5.

The notes in chords are often called **“stacked thirds”** for this reason. The easiest way to visualise this is to **label the root note as “1.”**

Refer to the [Table](#) at the end of this guide to understand how each interval is calculated. Intervals are defined by the number of semitones that a particular note is from the root note. For example, a 3 is four semitones from the root. A b3 is three semitones from the root.

CHORDS OF THE C MAJOR SCALE

1	2	3	4	5	6	7
C	D	E	F	G	A	B
TRIADS						
C Major	D Minor	E Minor	F Major	G Major	A Minor	B Diminished
1 C	1 D	1 E	1 F	1 G	1 A	1 B
3 E	b3 F	b3 G	3 A	3 B	b3 C	b3 D
5 G	5 A	5 B	5 C	5 D	5 E	b5 F
7TH CHORDS						
C Major 7	D Minor 7	E Minor 7	F Major 7	G Dominant 7	A Minor 7	B Minor 7 b5
1 C	1 D	1 E	1 F	1 G	1 A	1 B
3 E	b3 F	b3 G	3 A	3 B	b3 C	b3 D
5 G	5 A	5 B	5 C	5 D	5 E	b5 F
7 B	b7 C	b7 D	7 E	b7 F	b7 G	b7 A

The sequence of “**TRIADS**” (chords with a **1st**, **3rd**, and **5th**) is:

(1) Major, (2) Minor, (3) Minor, (4) Major, (5) Major, (6) Minor, (7) Diminished

The sequence of “**7TH CHORDS**” (chords with a **1st**, **3rd**, **5th** and **7th**) is:

(1) Major 7, (2) Minor 7, (3) Minor 7, (4) Major 7, (5) Dominant 7, (6) Minor 7, (7) Minor 7 b5

Other chord types such as 9, 11, 13, sus2, sus4, and more, **can be produced from the Major scale**.

However, to keep things simple, these are not included in this guide. 9, 11, and 13 chords contain additional stacked 3rds on top of a 7th chord. Suspended (sus) chords replace the 3rd with a 2 or a 4.

WHAT IS A KEY?

The key is the **group of pitches, or scale**, that **forms the basis of a musical composition**. For example, the key of C Major is based on the C Major scale. The key of A Minor is based on the A Minor scale . Keys can be Major or Minor. Sometimes a piece of music adheres strictly to a key and sometimes there are notes and chords that are used that are “outside” of the key. Jazz uses notes that are outside of the key a lot, and this is part of the reason that some people say that it sounds “weird” or “wrong.” It is often these notes that are outside of the key that add interesting moments to a piece of music. However, this doesn’t mean that the concept of a key isn’t important or useful. Rather, think of a key as a starting point or a framework.

If C Major and A Minor share the same notes then why are there songs that are in the key of A Minor? Isn’t this just the Key of C Major? The Answer is no. The difference is that a song in the key of A Minor has a tonal centre of A, whereas the key of C Major has a tonal centre of C. **The tonal centre is the note of the scale that gives the strongest feeling of rest.** It is the target toward which other notes lead. Sometimes this tonal centre and its associated chord are referred to as “home.” Home is our resting place.

Be aware that it is common for the **5th chord in a Minor key** to be **substituted for a Major chord or a Dominant 7 chord**. For example, in the key of A Minor the 5th chord produced by the A Minor scale should be E Minor, but an E Major chord (or E7) is used often instead. This is because it provides stronger resolution to the 1st chord. This originates from the Harmonic Minor scale. The 5th triad of the Harmonic Minor scale is Major (and its 7th chord is a Dominant 7) .

A few examples of different keys and their triads (the most basic three note chords) are provided on the next page. These are not all the keys that exist. Take notice of the consistent pattern of chord types for each key type.

	KEY	CHORDS (TRIADS) OF THE KEY						
Examples of MAJOR KEYS	C Major	(1) C Major	(2) D Minor	(3) E Minor	(4) F Major	(5) G Major	(6) A Minor	(7) B Diminished
	D Major	(1) D Major	(2) E Minor	(3) F# Minor	(4) G Major	(5) A Major	(6) B Minor	(7) C# Diminished
	E Major	(1) E Major	(2) F# Major	(3) G# Major	(4) A Major	(5) B Major	(6) C# Minor	(7) D# Diminished
	Bb Major	(1) Bb Major	(2) C Minor	(3) D Minor	(1) Eb Major	(5) F Major	(6) G Minor	(7) A Diminished
	G Major	(1) G Major	(2) A Minor	(3) B Minor	(4) C Major	(5) D Major	(6) E Minor	(7) F# Diminished
Examples of MINOR KEYS	A Minor	(1) A Minor	(2) B Diminished	(3) C Major	(4) D Minor	(5) E Minor	(6) F Major	(7) G Major
	B Minor	(1) B Minor	(2) C# Diminished	(3) D Major	(4) E Minor	(5) F# Minor	(6) G Major	(7) A Major
	C# Minor	(1) C# Minor	(2) D# Diminished	(3) E Major	(4) F# Minor	(5) G# Minor	(6) A Major	(7) B Major
	E Minor	(1) E Minor	(2) F# Diminished	(3) G Major	(4) A Minor	(5) B Minor	(6) C Major	(7) D Major
	G Minor	(1) G Minor	(2) A Diminished	(3) Bb Major	(4) C Minor	(5) D Minor	(6) Eb Major	(7) F Major

Similar to a key; music can also be based on a mode when that note of the scale is the tonal centre. For example, a song that uses a chord progression of Dm – G – Am - Dm is a D Dorian based progression as D feels like the “home chord” and all chords use notes from the D Dorian mode. The key is still technically C Major/A Minor from a theoretical perspective.

TRIADS

There are four types of triads. Major, Minor, Diminished, and Augmented. The Major Scale contains three of these types. *It does not contain any augmented triads.*

The Major scale contains three Major triads

The C Major scale includes C Major, F Major, and G Major triads.

The Major scale contains three Minor triads

The C Major scale includes D Minor, E Minor, and A Minor triads.

The Major scale contains one Diminished triad

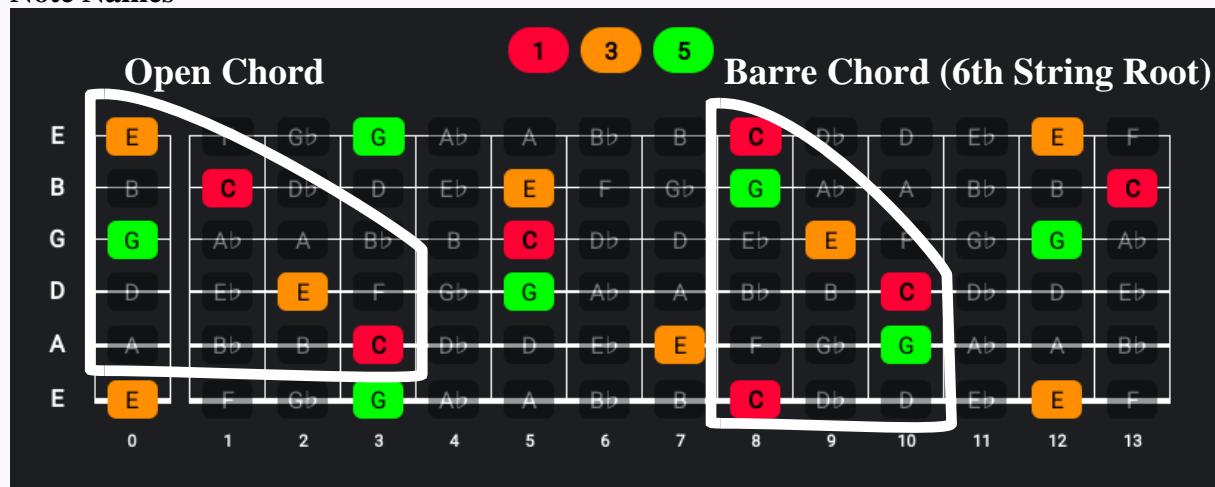
The C Major scale includes the B Diminished triad.

This guide includes diagrams for each type of triad; Major, Minor, and Diminished; in the key of C Major. This is because you can learn the shapes for each type and transpose them. For example, if you learn the C Major triad shapes you can move them up 5 frets and they will become F Major triads. Triads can be played as arpeggios.

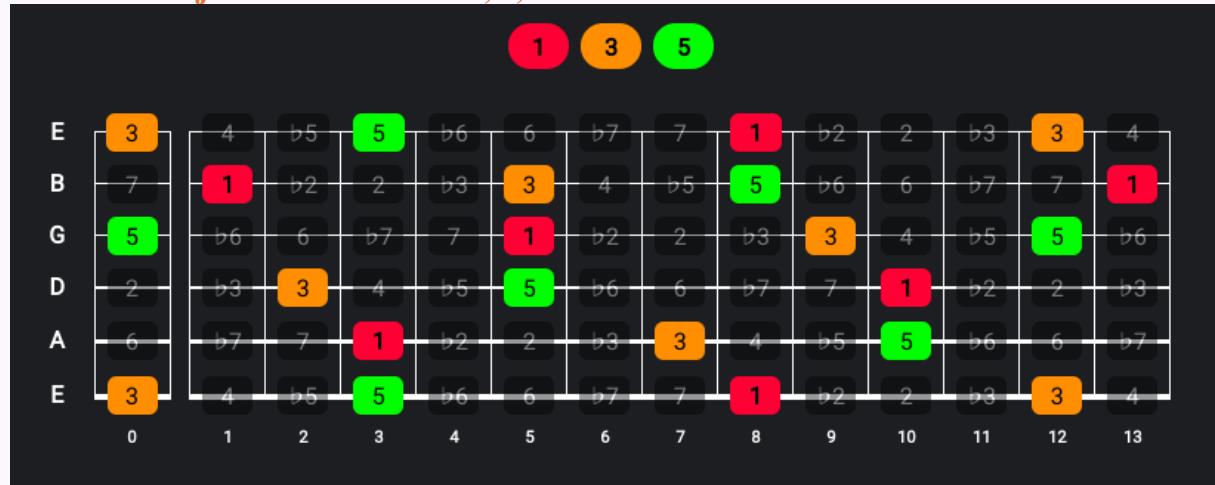
C MAJOR TRIADS

The C Major open and 6th string root barre chords have been outlined. You may recognise other C Major chord shapes that you already know within the diagram.

Note Names



Intervals: Major triads contain a 1, 3, and 5.



C Major Triads (Strings 6 - 4)

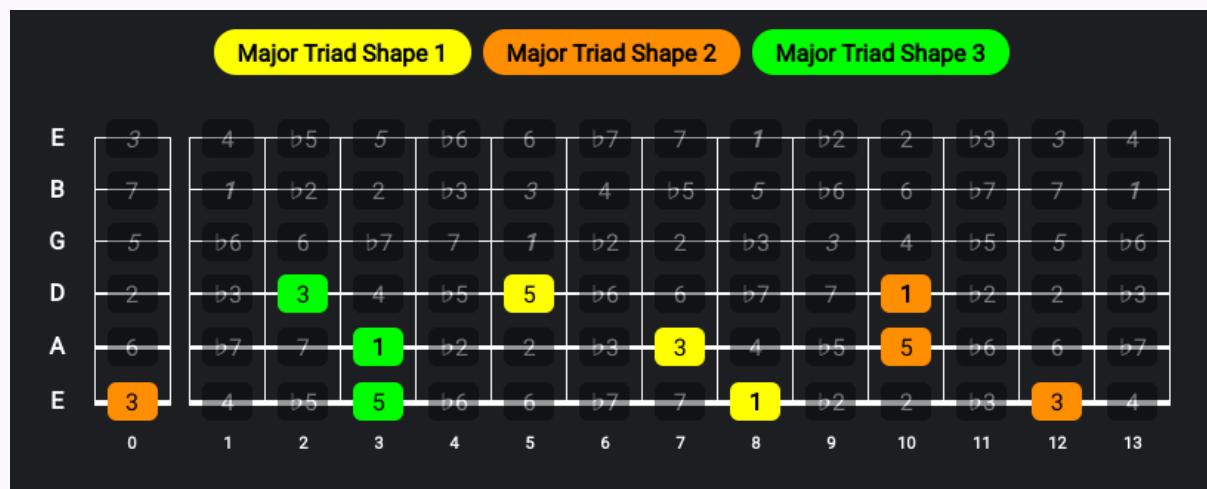
Notice that **there is a pattern of shapes from left to right**. Each shape is the same chord as it includes the same three notes, just in a different order. These are called “inversions.” Also notice that the pattern continues 12 frets up. You will notice that some of the shapes at the start and end of the diagrams are incomplete. For example, the first diagram below includes part of shape 2 (the open 6th string), but as the other notes of this shape are lower in pitch, they are not available for us to play.

Shape 1: The order of notes from the 6th string to the 4th string is **1, 3, 5**.

Shape 2: The order of notes from the 6th string to the 4th string is **3, 5, 1** (1st inversion triads).

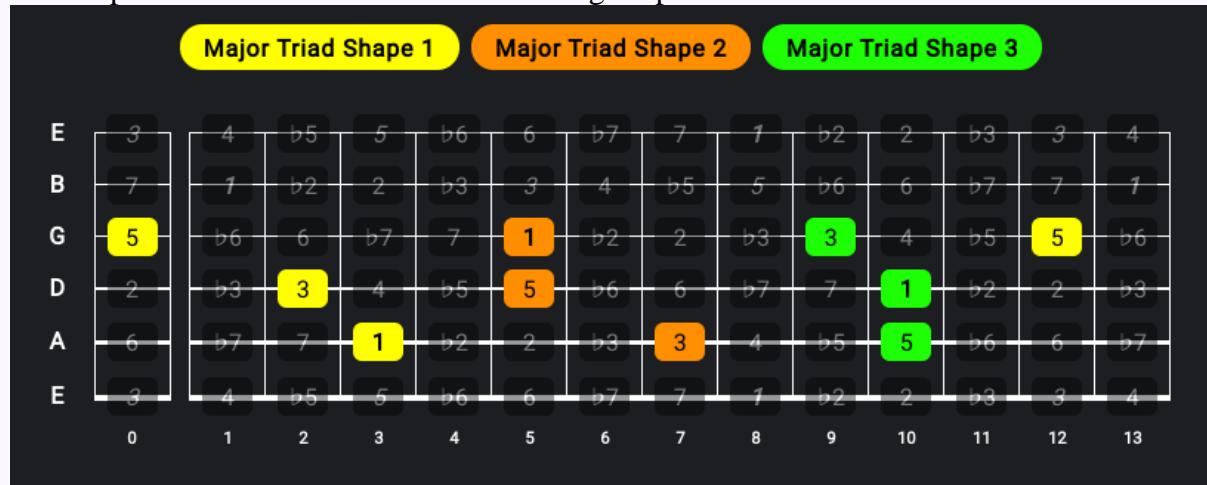
Shape 3: The order of notes from the 6th string to the 4th string is **5, 1, 3** (2nd inversion triads).

These triad shapes can be played as chords because the notes are on separate strings.



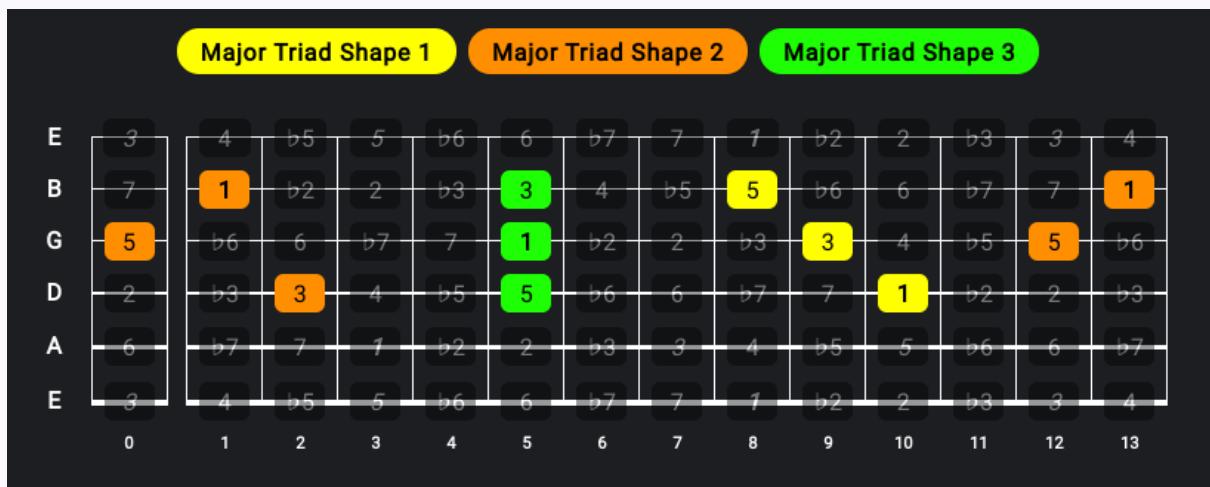
C Major Triads (Strings 5 – 3)

The shapes are the same as the 6th – 4th string shapes.



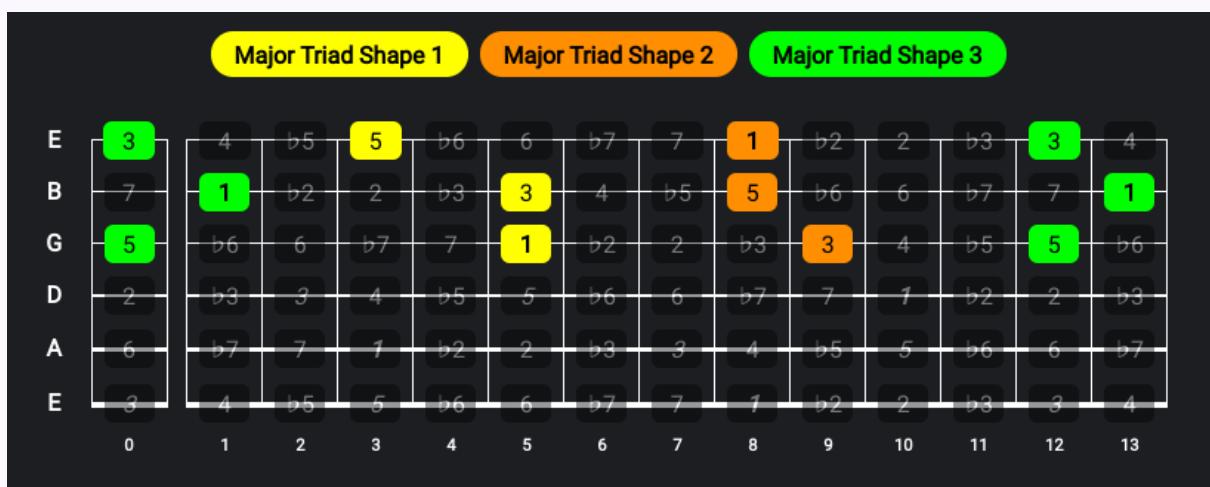
C Major Triads (Strings 4 – 2)

Again, notice the pattern and repetition. Compare the shapes to the 4-6 string shapes and you will see that the [B String Rule](#) applies. This is covered in the [Fret and String Relationships section](#). Again, Shape 2 is a 1st inversion triad and shape 3 is a 2nd inversion triad (counting from strings 4 – 2).



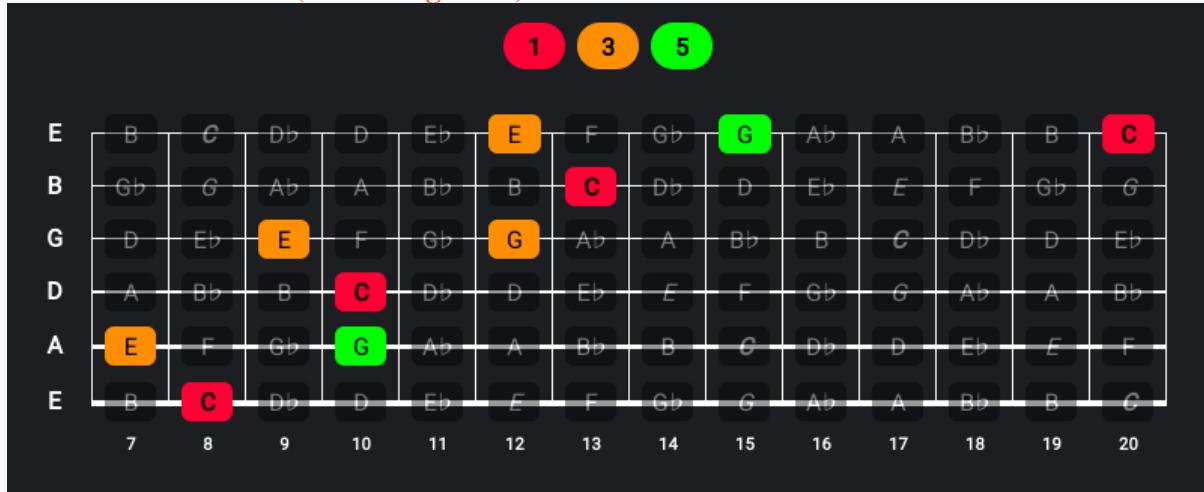
C Major Triads (Strings 3 - 1)

You will notice that **this diagram shows two of Major Triad Shape 3**. This is because shape 3 occupies frets 0 (open string) & 1, and our diagram goes up to fret 13. Shapes repeat themselves every 12 frets. This one repeats on frets 12 to 13 ($0+12=12$, $1+12=13$).



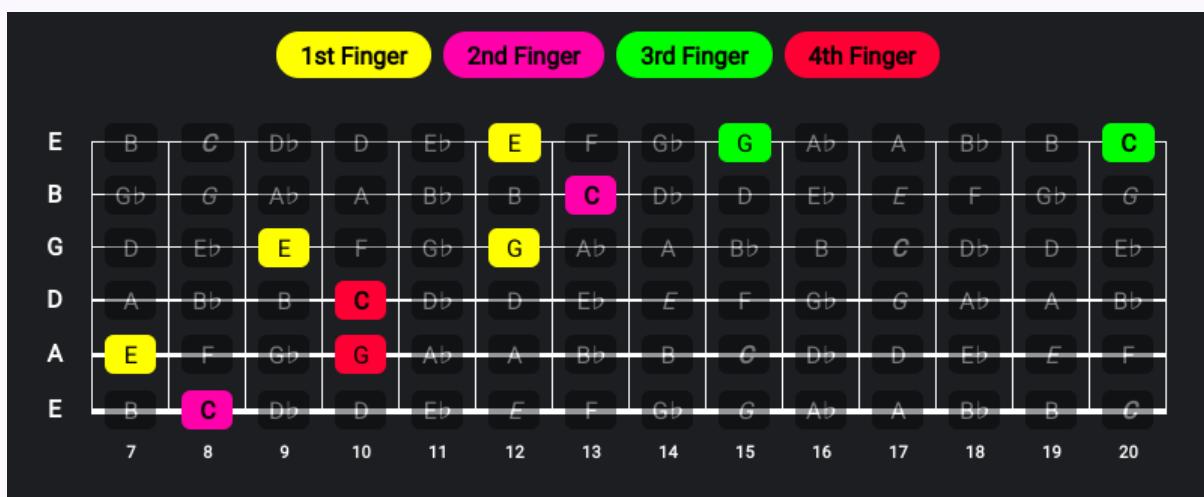
Three Octave C Major Arpeggios

C MAJOR TRIADS (6th String Root)



LEFT HAND FINGERING (C Major Triads)

This shape requires the 4th finger to be barred across the A and D strings. It also requires the 1st finger to shift along the G string, and the 3rd finger to shift along the E string (1st string).

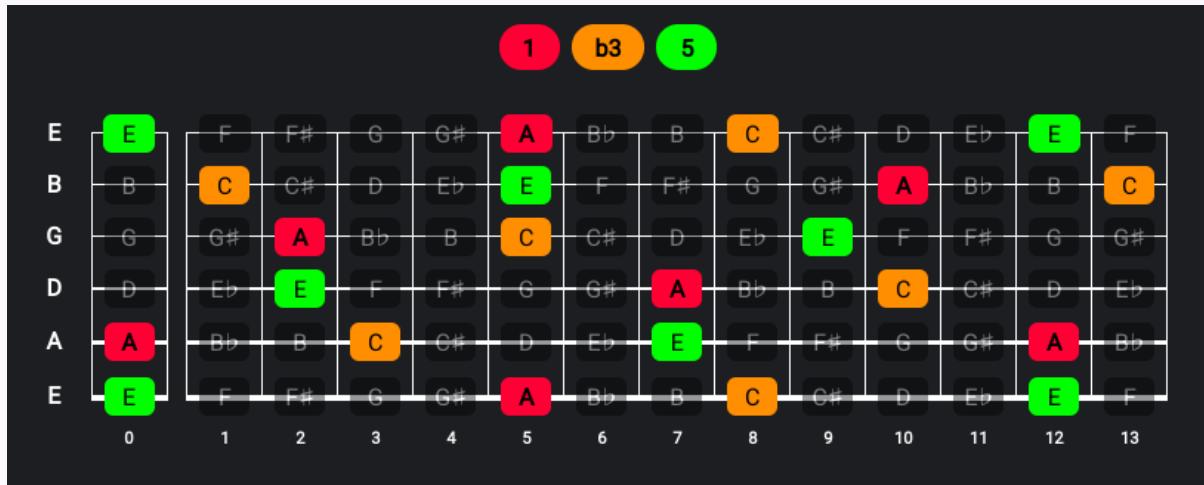


This arpeggio cannot be played as a chord because some of the strings have multiple notes, and the notes span too many frets. This is true of all other arpeggios in this guide unless otherwise stated (that the arpeggio can be played as a chord).

A MINOR TRIADS

See if you can recognize the A Minor chord shapes that you already know in the diagram.

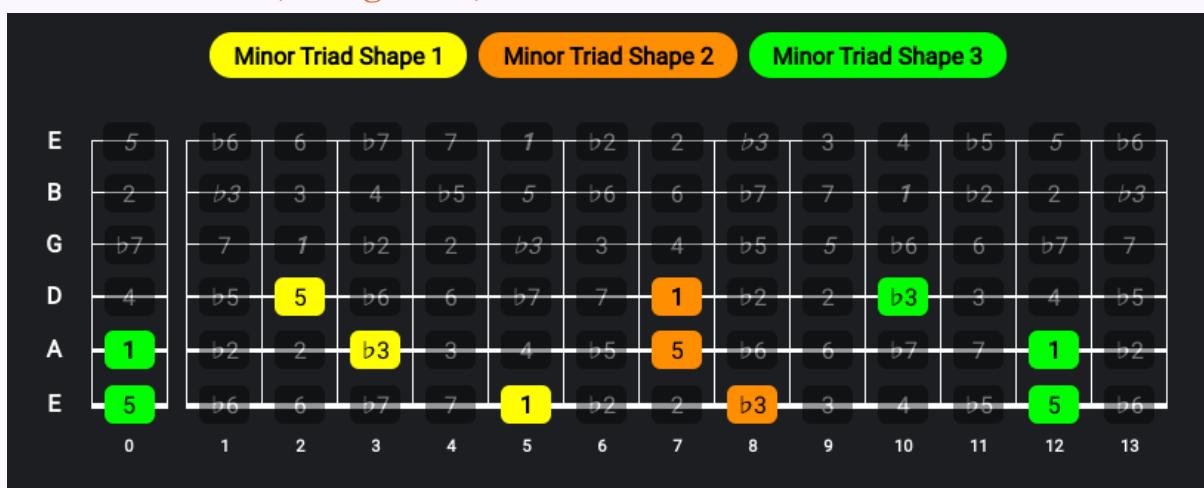
Note Names



Intervals: Minor triads contain a 1, b3, and 5.



A Minor Triads (Strings 6 - 4)



A Minor Triads (Strings 5 – 3)

Shapes are the same as the 6th to 4th string shapes because the shapes do not use the B string.

	Minor Triad Shape 1			Minor Triad Shape 2			Minor Triad Shape 3							
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6

A Minor Triads (Strings 4 – 2)

The notes on the B string are one fret further to the right than they would be if the B string was not used.

	Minor Triad Shape 1			Minor Triad Shape 2			Minor Triad Shape 3							
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6

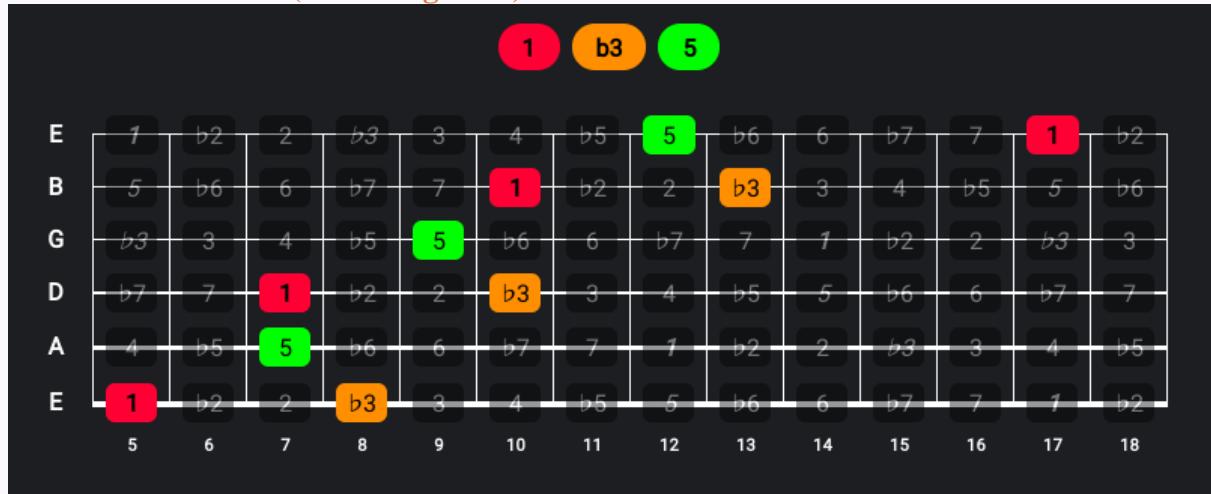
A Minor Triads (Strings 3 – 1)

The notes on the B string and E string are one fret further to the right than they are compared with the 6 – 3 and 5 – 2 string shapes.

	Minor Triad Shape 1			Minor Triad Shape 2			Minor Triad Shape 3							
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6

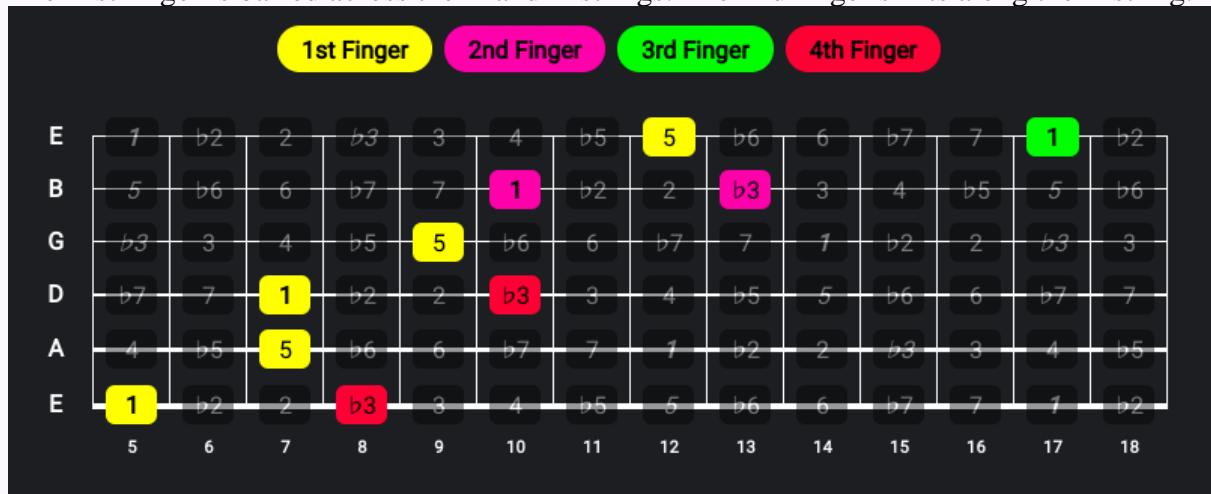
Three Octave A Minor Arpeggios

A MINOR TRIADS (6th String Root)



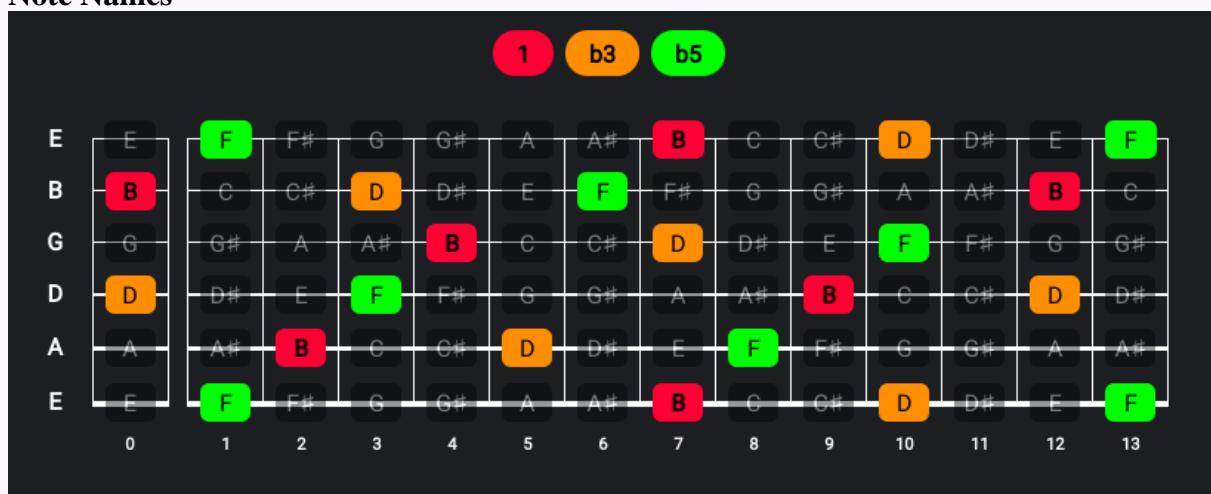
LEFT HAND FINGERING (A Minor Triads)

The first finger is barred across the A and D strings. The 2nd finger shifts along the B string.

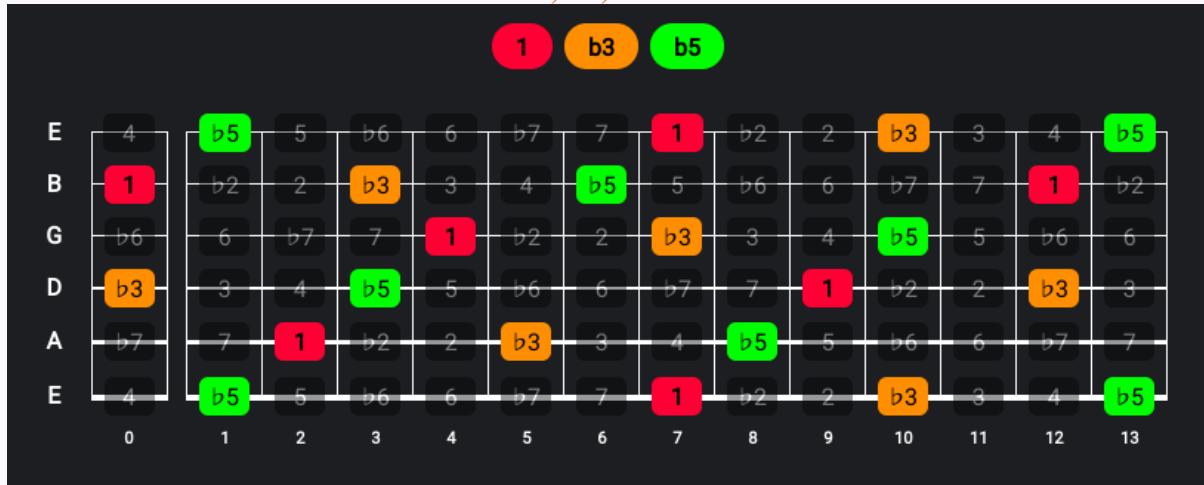


B DIMINISHED TRIADS

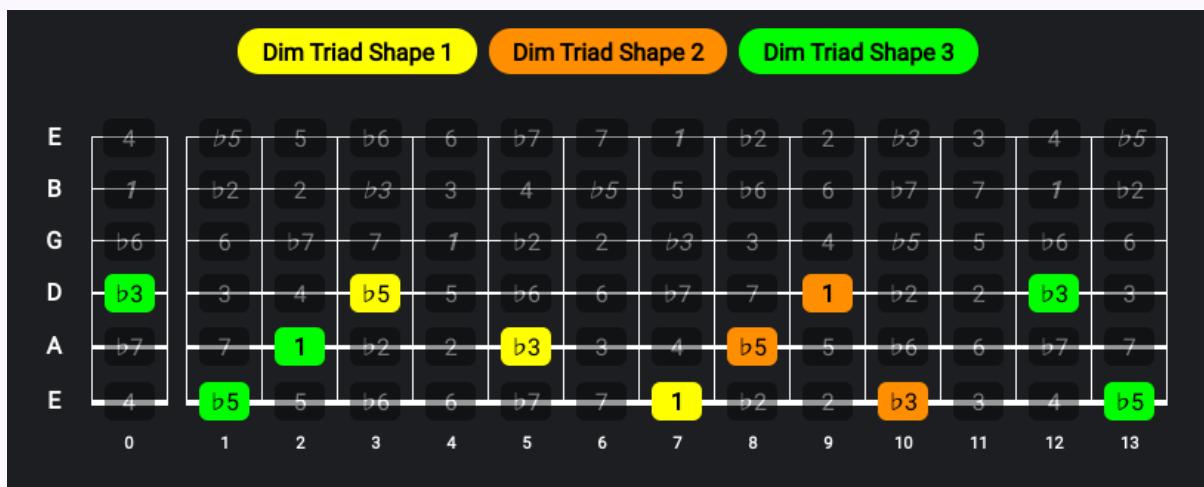
Note Names



Intervals: Diminished triads contain a 1, b3, and b5.

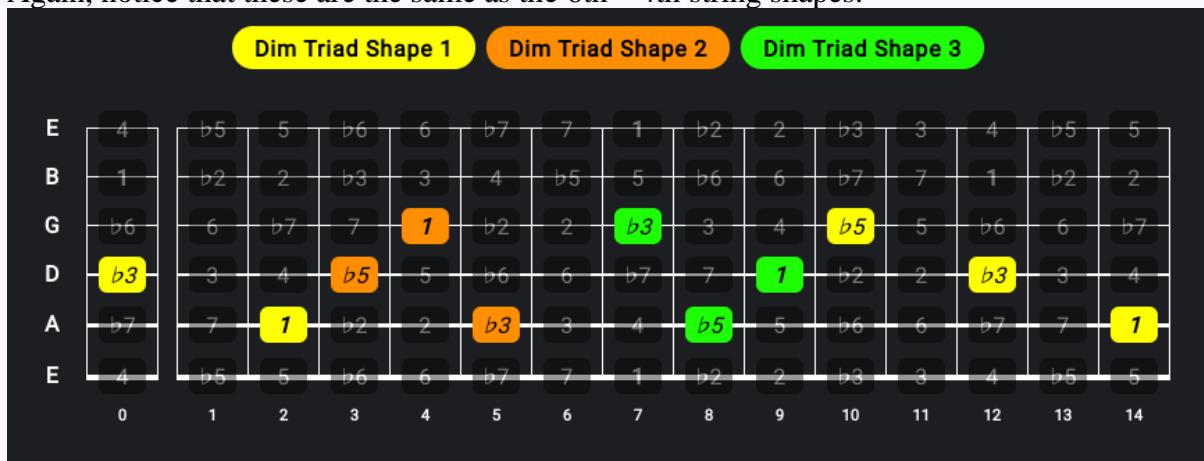


B Diminished Triads (Strings 6 - 4)



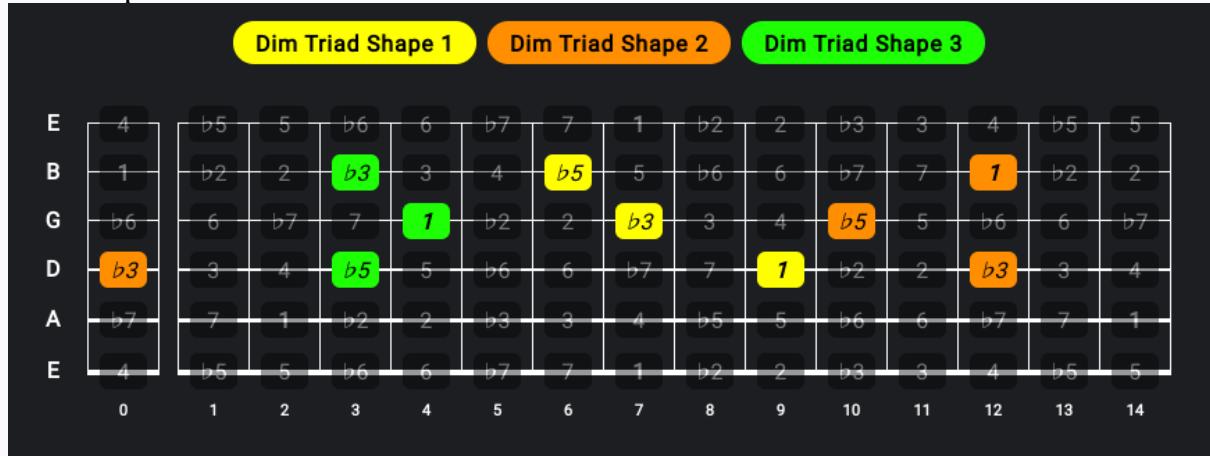
B Diminished Triads (Strings 5 – 3)

Again, notice that these are the same as the 6th – 4th string shapes.



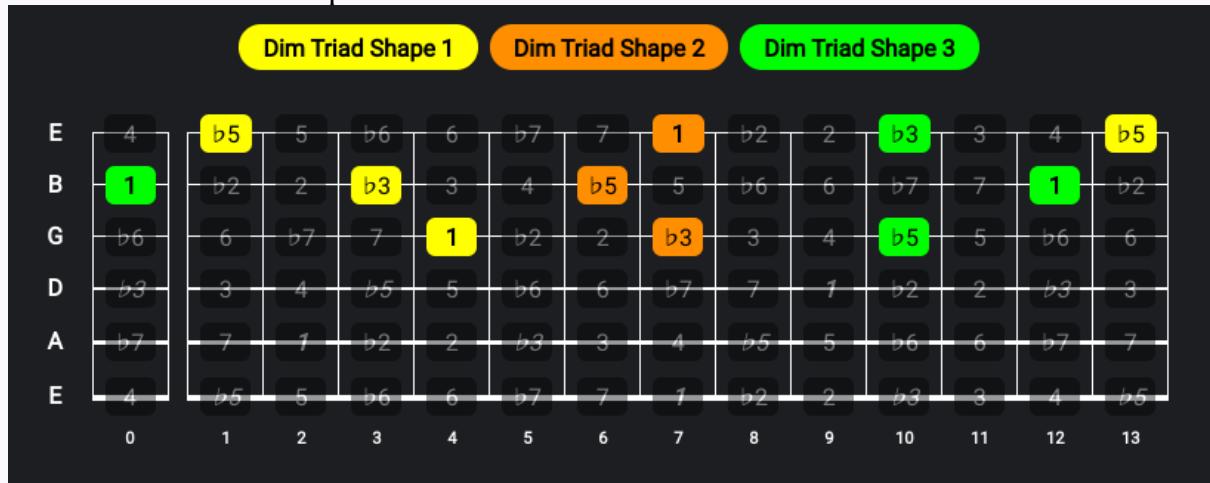
B Diminished Triads (Strings 4 – 2)

Again, notice that the notes on the B string are one fret further to the right compared to the other shapes.



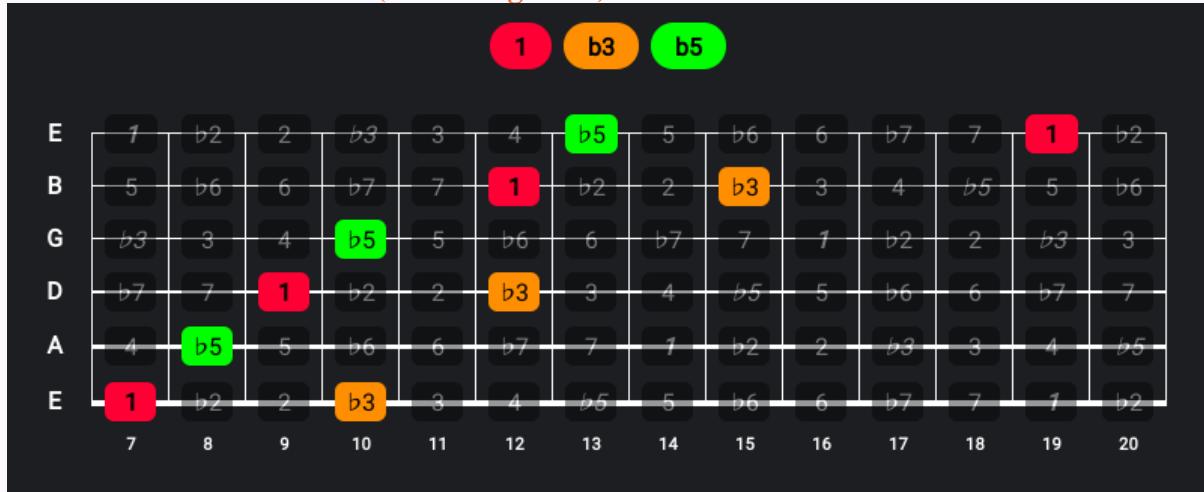
B Diminished Triads (Strings 3 – 1)

Again, notice that the notes on the B and E strings are one fret further to the right compared to the 6 – 4 and 5 – 2 shapes.



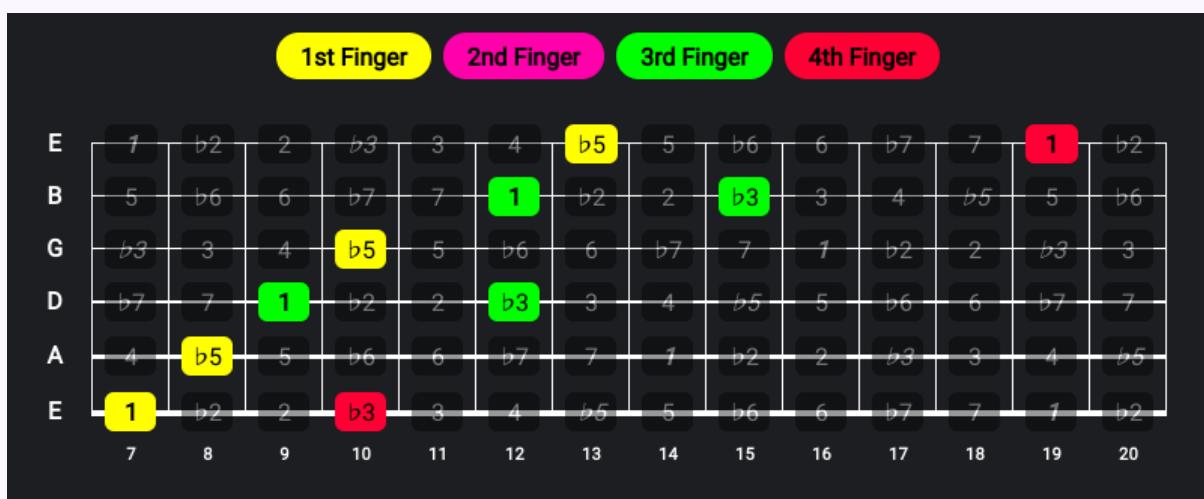
Three Octave B Diminished Arpeggios

B DIMINISHED TRIADS (6th String Root)



LEFT HAND FINGERING (B Diminished Triads)

The third finger shifts along the D and B strings.



COMPARISON OF MAJOR, MINOR, AND DIMINISHED TRIADS

C Major, C Minor and C Diminished triads are displayed to provide a comparison between the three types of triads. These triads all have the same root note, C. **The Minor triad shares the 5th of C Major, G, but it has a flattened third, Eb.** **The Diminished triad has a flattened 3rd and flattened 5th, Gb.**

C Major Triads Strings 1-3

		Major Triad Shape 1			Major Triad Shape 2			Major Triad Shape 3						
		F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
E	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
B	B	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C
G	G	A _b	A	B _b	B	C	D _b	D	E _b	F	G _b	G	A _b	A
D	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b
A	A	B _b	B	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b
E	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
	0	1	2	3	4	5	6	7	8	9	10	11	12	13

C Minor Triads Strings 1-3

		Minor Triad Shape 1			Minor Triad Shape 2			Minor Triad Shape 3						
		F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
E	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
B	B	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C
G	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F	G _b	G	A _b
D	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b
A	A	B _b	B	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b
E	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
	0	1	2	3	4	5	6	7	8	9	10	11	12	13

C Diminished Triads Strings 1-3

		Dim Triad Shape 1			Dim Triad Shape 2			Dim Triad Shape 3						
		F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
E	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
B	B	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C
G	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F	G _b	G	A _b
D	D	E _b	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b
A	A	B _b	B	C	D _b	D	E _b	E	F	G _b	G	A _b	A	B _b
E	E	F	G _b	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F
	0	1	2	3	4	5	6	7	8	9	10	11	12	13

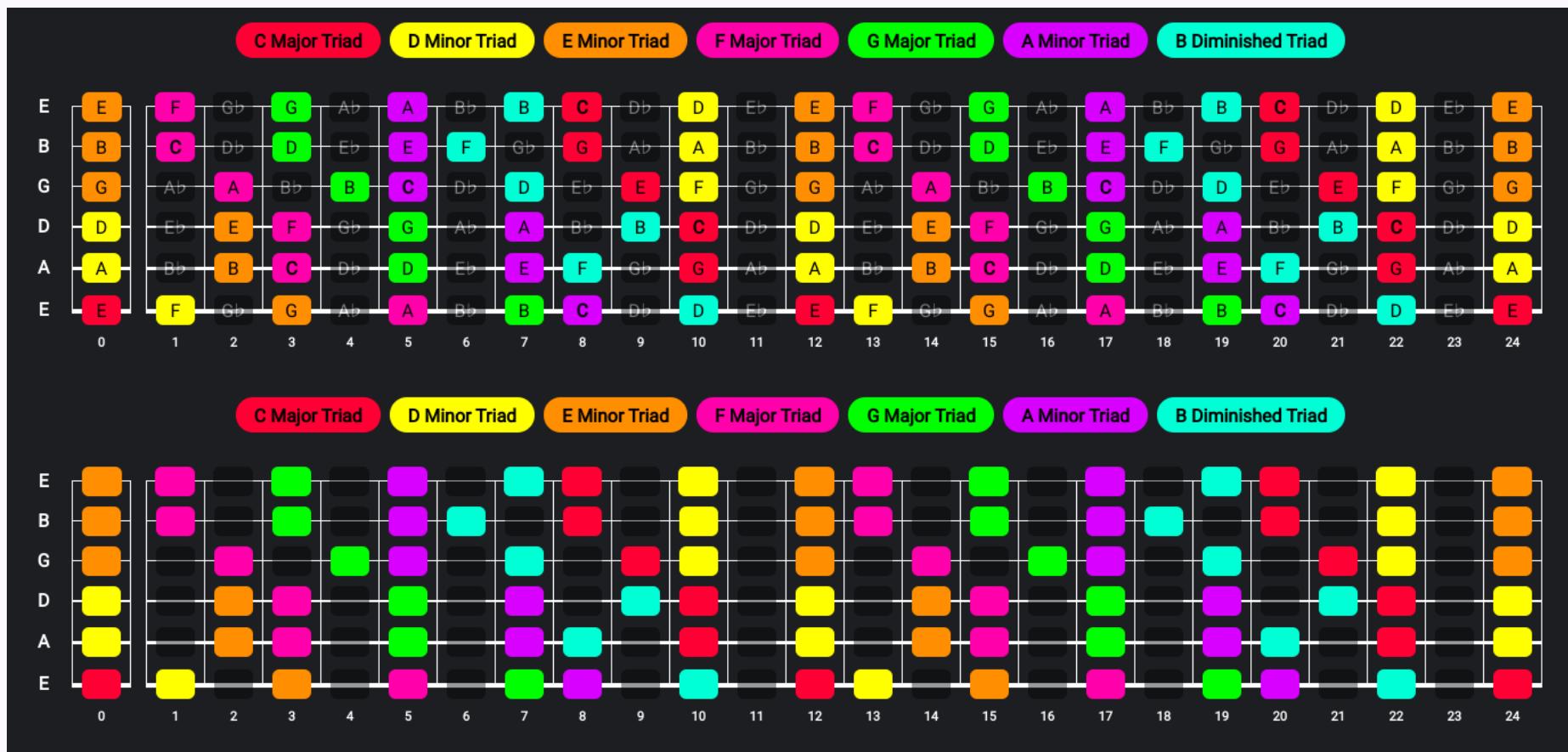
ALL TRIADS OF THE C MAJOR SCALE IN ONE DIAGRAM

These diagrams show frets 1-24, and the open strings (0). Look at groups of three strings: **strings 1-3 and strings 4-6**. Each group has a 1, 3, & 5. Notice how the B string Rule changes the path of each shape by comparing the shape on strings 4 - 6 vs the shape on strings 1-3. Also notice that each shape is two octaves of its triad. For example, if we follow the C Major triad shape 1 from the 6th string to the 1st string, the order of notes is C, E, G, C, E, G (1, 3, 5, 1, 3, 5). A version of each diagram without note names has also been included to help you to focus on the shapes.

Shape 1 Triads (1, 3, 5)



Shape 2 Triads (1st Inversion: 3, 5, 1)

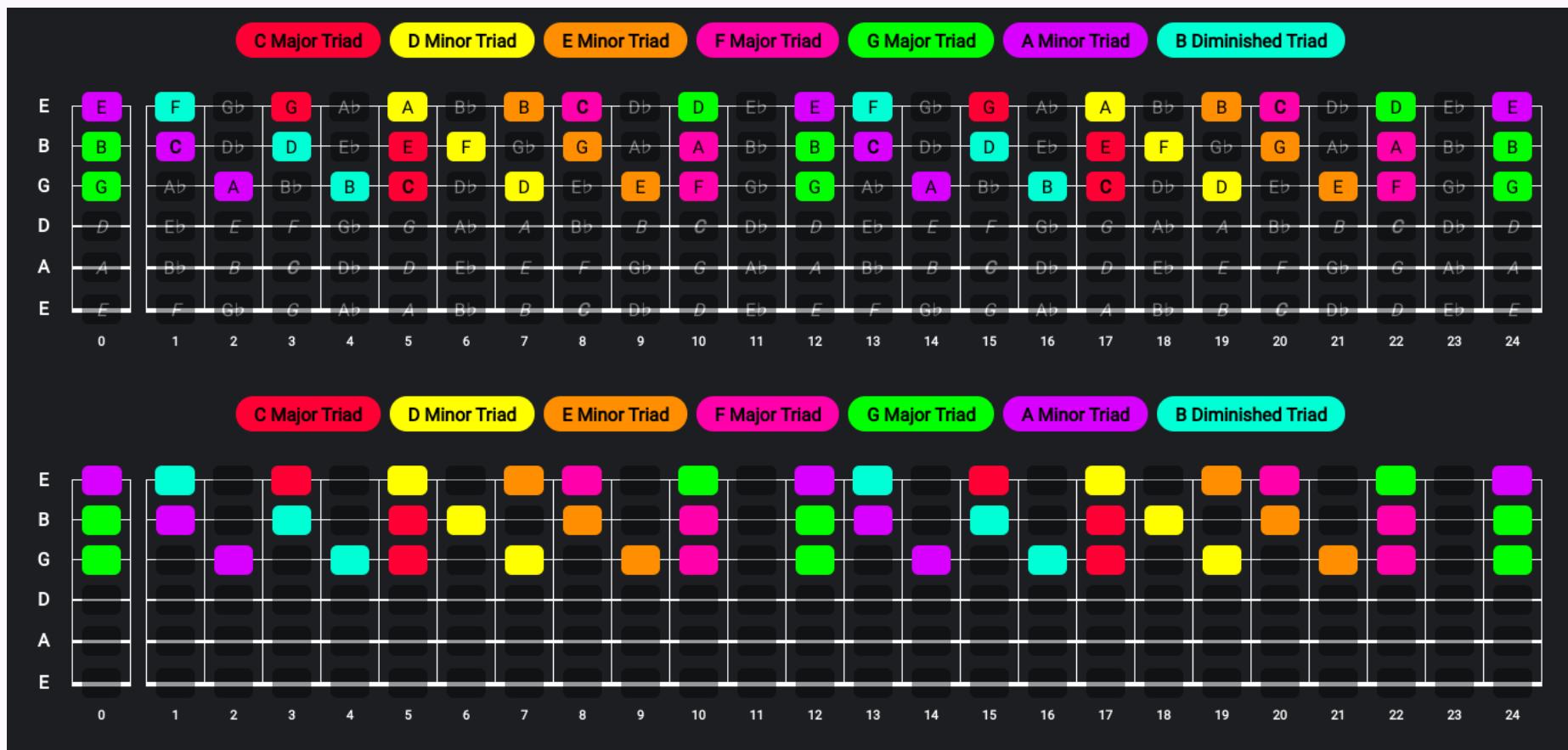


Shape 3 Triads (2nd Inversion: 5, 1, 3)

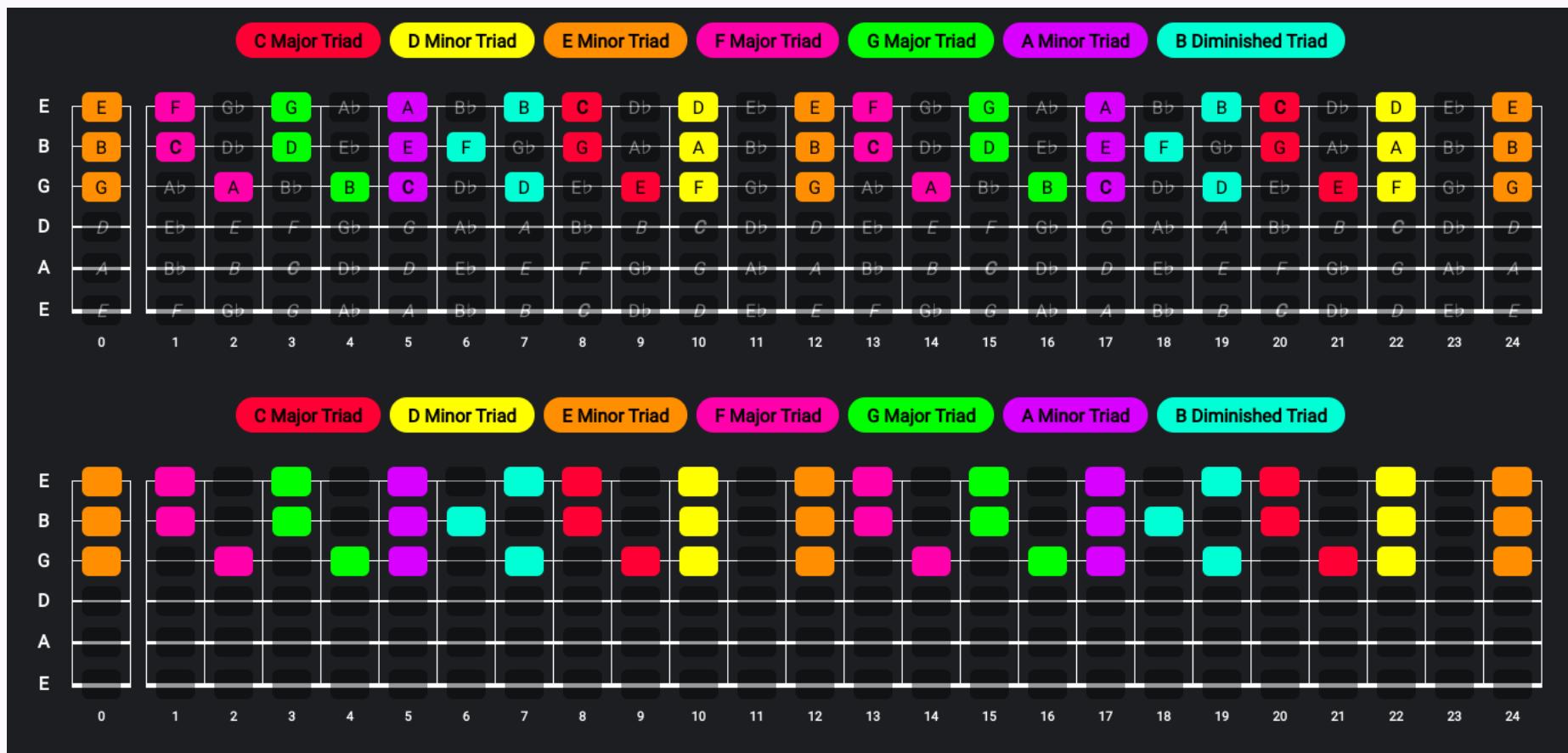


ALL TRIADS OF THE C MAJOR SCALE IN ONE DIAGRAM (STRINGS 1 – 3 ONLY)

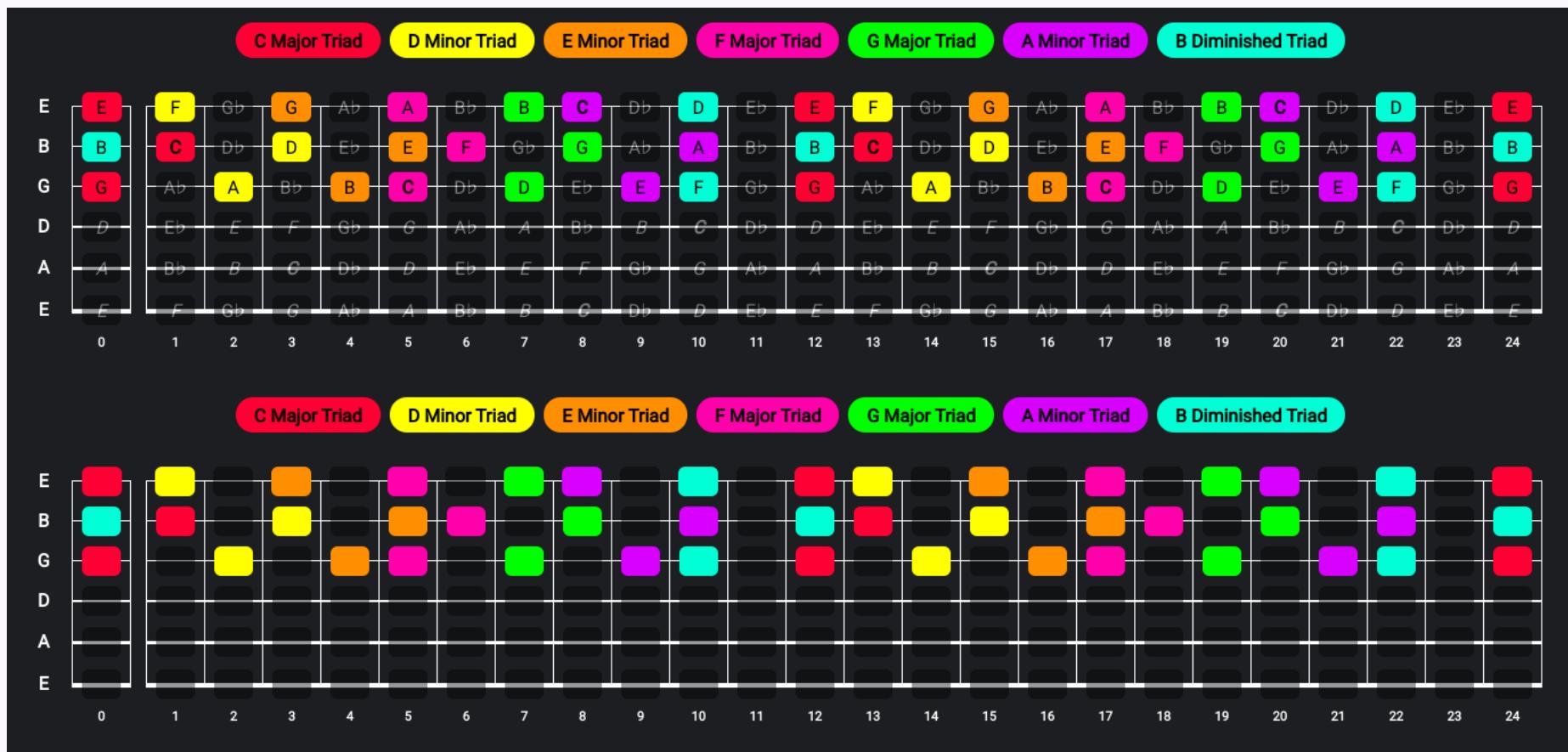
Shape 1 Triads (1, 3, 5)



Shape 2 Triads (1st Inversion: 3, 5, 1)



Shape 3 Triads (2nd Inversion: 5, 1, 3)



7TH CHORDS

Four note chords with a root (1), 3, 5, and 7. Remember that these chords are just the triads with an added note (a “7”).

The Major scale contains two Major 7 chords

The C Major scale includes Cmaj7 and Fmaj7.

The Major scale contains three Minor 7 chords

The C Major scale includes Dm7, Em7, and Am7.

The Major scale contains one Dominant 7 chord

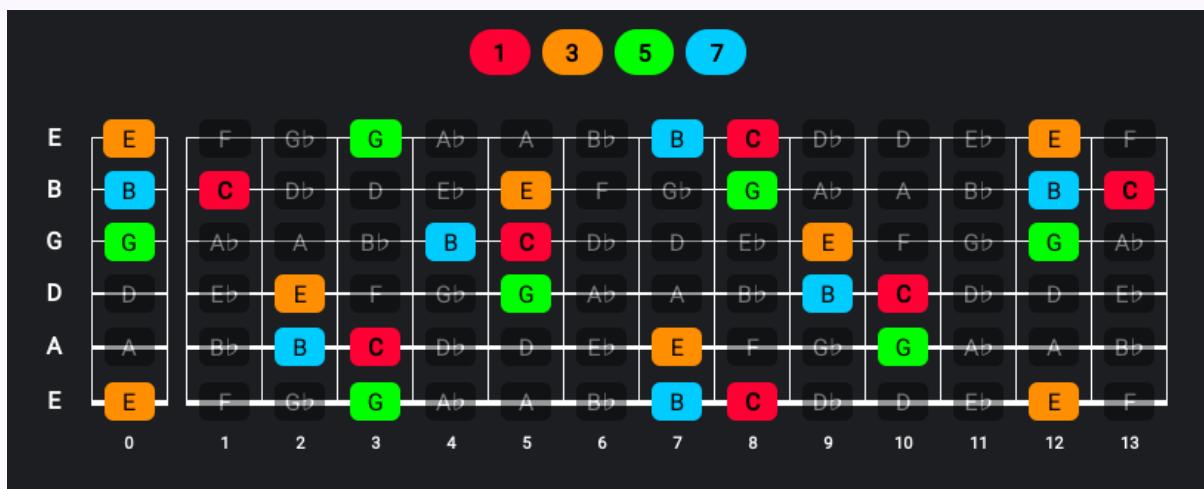
The C Major scale includes the G7 chord.

The Major scale contains one Minor 7 b5 chord

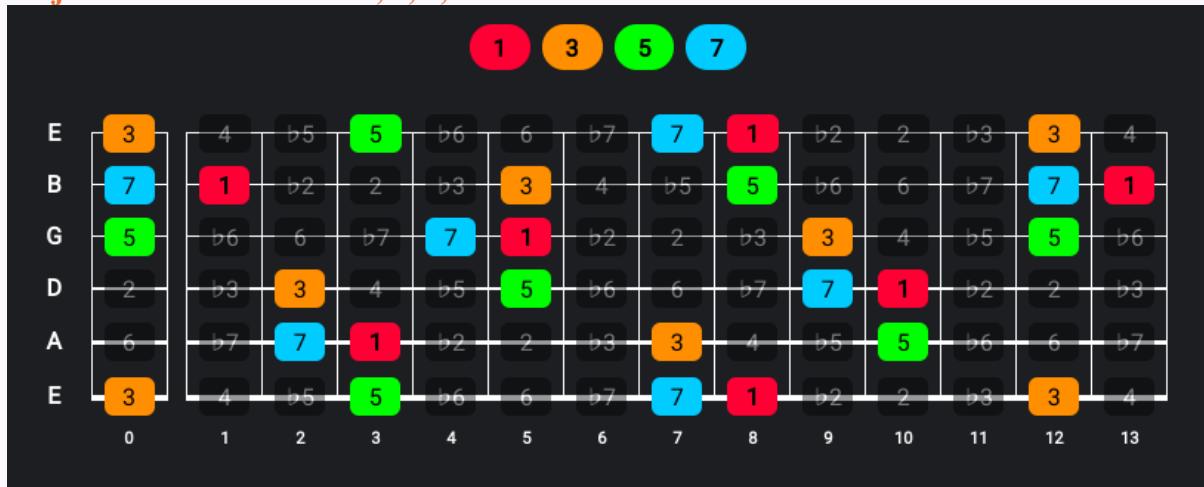
The C Major scale includes the Bm7b5 chord.

A full fretboard diagram is provided for each type of 7th chord in the key of C Major. Dm7, Em7, and Fmaj7 are not shown but remember that you can transpose the shapes. For example, you can move the Am7 shapes up 5 frets and they will become Dm7 shapes.

C Major 7 Chords



Major 7 chords contain a 1, 3, 5, and 7.



C Major 7 (Strings 6 – 3)

Three shapes are included in each diagram below. These shapes can be **played as chords** because each of the 4 notes of Cmaj7 are on separate strings.

Shape 1: The order of notes from the 6th string to the 3rd string is **1, 3, 5, 7.**

Shape 2: The order of notes from the 6th string to the 3rd string is **5, 1, 3, 7**

Shape 3: The order of notes from the 6th string to the 3rd string is **1, 5, 7, 3.**

Unlike the triads, shapes 2 and 3 are not strictly “inversions.” The theory is slightly more complicated as it involves both inversions and “drop voicings” (*not covered in this guide*).

These are not all of the possible C Major 7 shapes. Shapes 2 and 3 are commonly used. Shape 1 is difficult as it requires wide stretching. Shape 1 has mainly been included to help with visualization and to provide comparison with other shapes. Also, remember that you can play part of shape 1 (just strings 5, 4, & 3) and it will function as a rootless chord. Likewise, if we omit the 5 of shapes 2 and 3, they can be used as a “**Shell Voicing.**” Shell voicings contain the 1, 3, and 7. *Shell voicings are displayed on some of the diagrams in this section of this guide.*

The diagram shows the fretboard from 3 to 24 with six strings (E, B, G, D, A, E) on the left. Three sets of boxes at the top indicate the shapes: Major 7 Shape 1 (yellow), Major 7 Shape 2 (orange), and Major 7 Shape 3 (green). A white box labeled "Shell Voicings" contains the numbers 1, 3, and 7. Orange arrows point from these numbers to specific notes in the shapes: 1 points to the note at fret 15 on string 5; 3 points to the note at fret 8 on string 4; and 7 points to the note at fret 12 on string 3. The shapes themselves are outlined in their respective colors and show the note positions for each string.

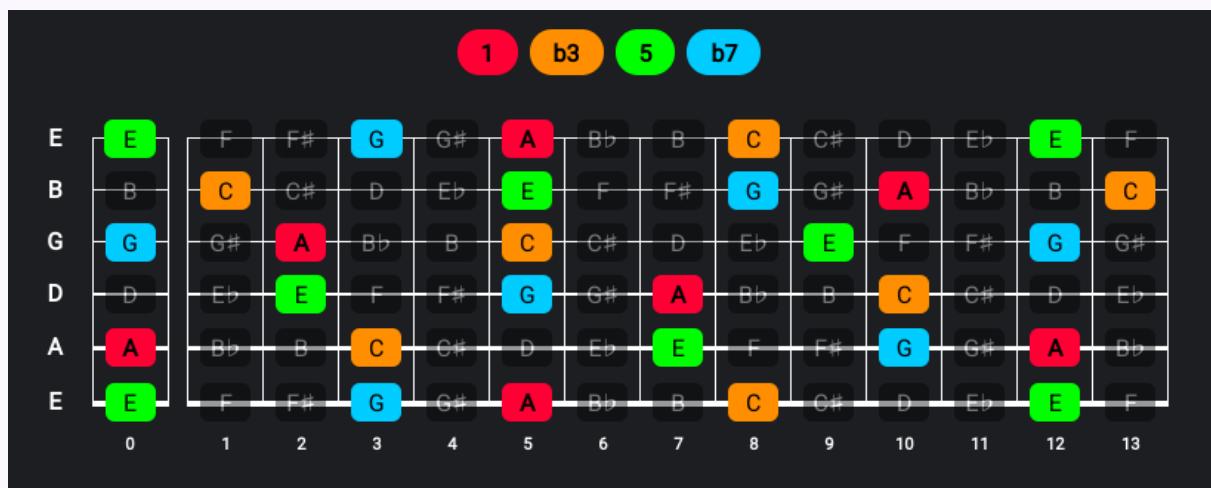
C Major 7 (Strings 5 – 2)

This diagram is similar to the one above but for strings 5, 4, and 3. It shows the same three shapes (Major 7 Shape 1, Major 7 Shape 2, Major 7 Shape 3) and highlights the notes 1, 3, and 7 in a "Shell Voicings" box. The notes 1, 3, and 7 are highlighted in orange, corresponding to the notes at frets 15, 8, and 12 respectively, as indicated by arrows.

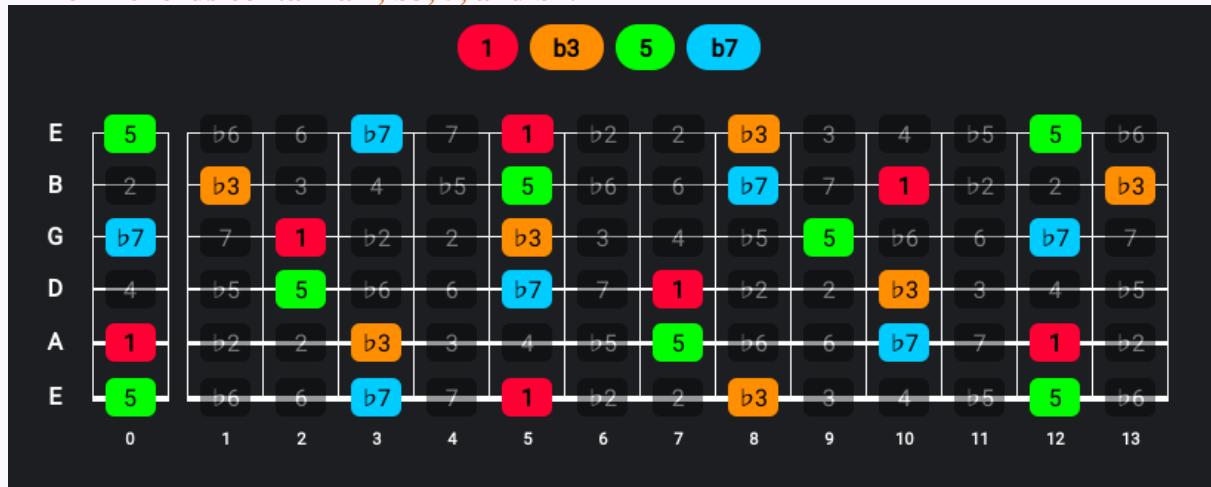
C Major 7 (Strings 4 – 1)

This diagram is for strings 4, 3, and 2. It shows the same three shapes (Major 7 Shape 1, Major 7 Shape 2, Major 7 Shape 3) and highlights the notes 1, 3, and 7 in a "Shell Voicings" box. The notes 1, 3, and 7 are highlighted in orange, corresponding to the notes at frets 15, 8, and 12 respectively, as indicated by arrows.

A Minor 7 Chords



Minor 7 chords contain a 1, b3, 5, and b7.



For each chord displayed in this guide, it's a good idea to revisit the full fretboard diagrams like the one above, to piece together the different shapes.

A Minor 7 (Strings 6 – 3)

This fretboard diagram illustrates shell voicings for the A Minor 7 chord across strings 6, 5, 4, and 3. The strings are labeled E (bottom) to B (top). The diagram shows three shapes: Shape 1 (root position), Shape 2 (first inversion), and Shape 3 (second inversion). Shell voicings are highlighted with colored boxes: green for the root position and orange for the first and second inversions. Arrows point to specific voicings: one from the 12th fret on string 3 to the 17th fret on string 3, and another from the 17th fret on string 3 to the 17th fret on string 2. The 5th string (A) is the root for these voicings.

A Minor 7 (Strings 5 – 2)

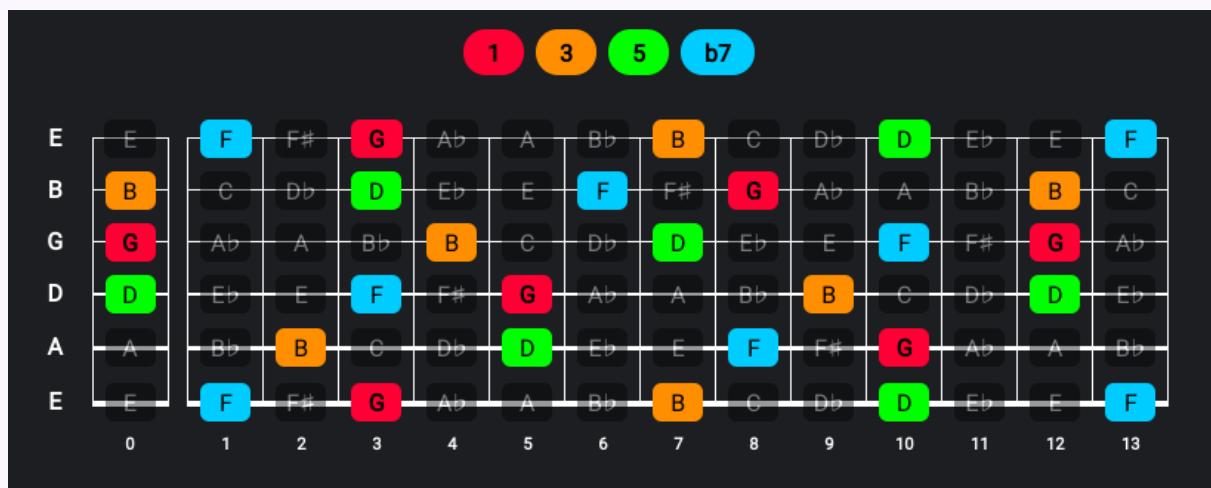
This fretboard diagram illustrates shell voicings for the A Minor 7 chord across strings 5 and 2. The strings are labeled E (bottom) to B (top). The diagram shows three shapes: Shape 1 (root position), Shape 2 (first inversion), and Shape 3 (second inversion). Shell voicings are highlighted with colored boxes: green for the root position and orange for the first and second inversions. The 5th string (A) is the root for these voicings.

A Minor 7 (Strings 4 – 1)

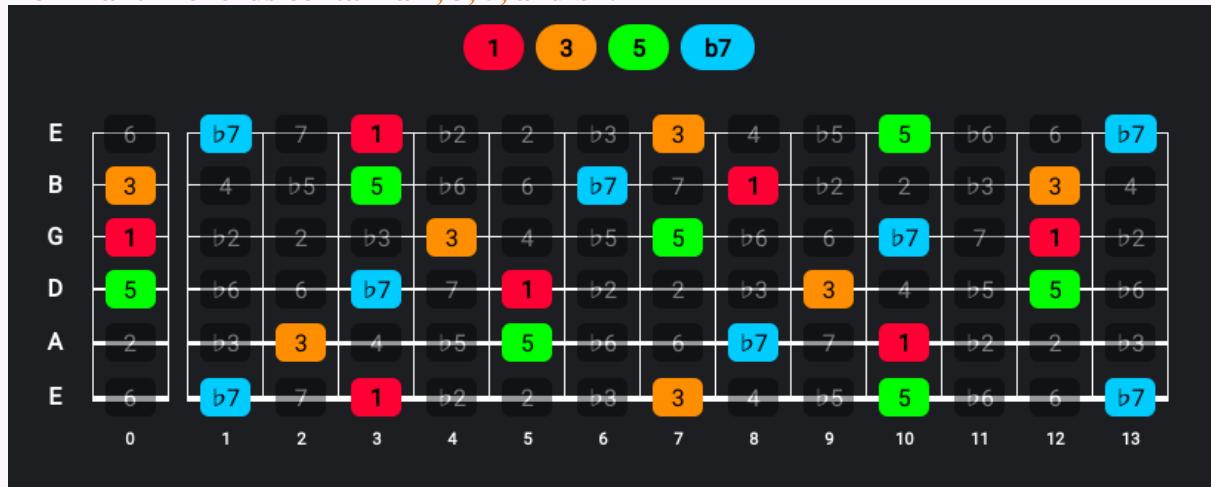
This fretboard diagram illustrates shell voicings for the A Minor 7 chord across strings 4 and 1. The strings are labeled E (bottom) to B (top). The diagram shows three shapes: Shape 1 (root position), Shape 2 (first inversion), and Shape 3 (second inversion). Shell voicings are highlighted with colored boxes: green for the root position and orange for the first and second inversions. The 5th string (A) is the root for these voicings.

Shell voicing shapes with a 5th string root (the A string) can also be played using a 6th string root (the low E string). This applies to all shell voicings.

G Dominant 7 Chords



Dominant 7 chords contain a 1, 3, 5, and b7.



G Dominant 7 (Strings 6 – 3)

Dominant 7 Shape 1 Dominant 7 Shape 2 Dominant 7 Shape 3

Shell Voicings

The diagram shows a fretboard with strings E, B, G, D, A, and E. It highlights three shell voicing patterns across three shapes:

- Shape 1:** Root position. The first two notes are on the G string (3rd and 4th frets), with a green box around the 3rd fret.
- Shape 2:** The notes move to the B string (5th and 6th frets), with a yellow box around the 5th fret.
- Shape 3:** The notes move back to the G string (7th and 8th frets), with an orange box around the 7th fret.

G Dominant 7 (Strings 5 – 2)

Dominant 7 Shape 1 Dominant 7 Shape 2 Dominant 7 Shape 3

This diagram shows a fretboard with strings E, B, G, D, A, and E. It highlights three shell voicing patterns across three shapes:

- Shape 1:** Root position. The first two notes are on the B string (5th and 6th frets), with a yellow box around the 5th fret.
- Shape 2:** The notes move to the G string (7th and 8th frets), with a green box around the 7th fret.
- Shape 3:** The notes move back to the B string (10th and 11th frets), with a green box around the 10th fret.

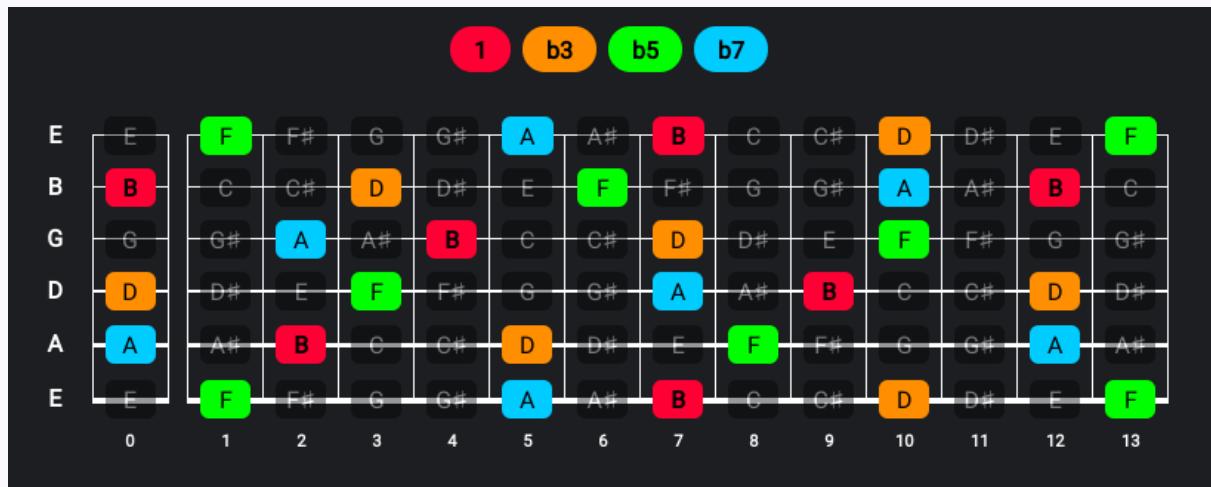
G Dominant 7 (Strings 4 – 1)

Dominant 7 Shape 1 Dominant 7 Shape 2 Dominant 7 Shape 3

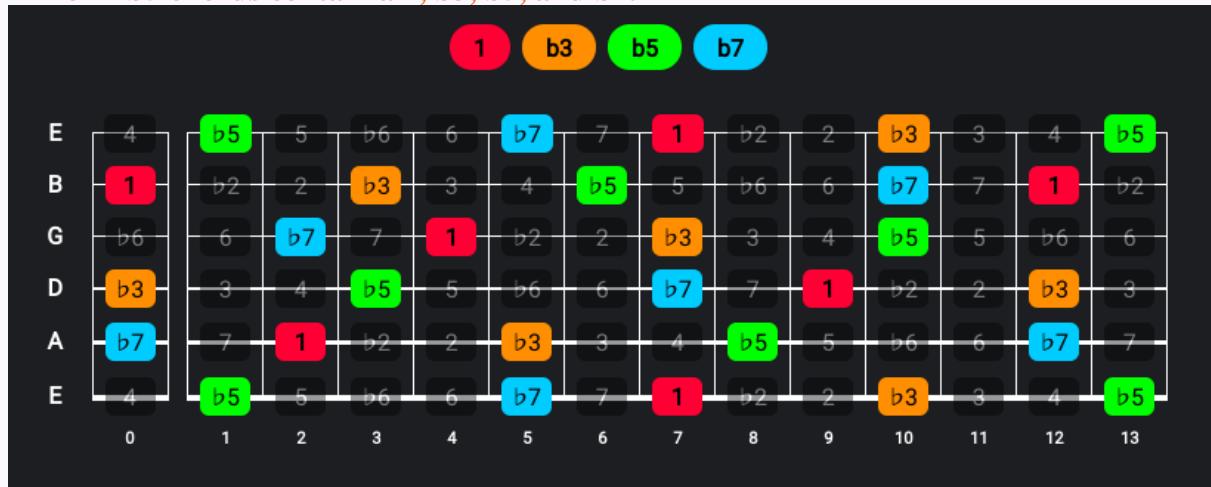
This diagram shows a fretboard with strings E, B, G, D, A, and E. It highlights three shell voicing patterns across three shapes:

- Shape 1:** Root position. The first two notes are on the B string (5th and 6th frets), with a yellow box around the 5th fret.
- Shape 2:** The notes move to the G string (7th and 8th frets), with a green box around the 7th fret.
- Shape 3:** The notes move back to the B string (12th and 13th frets), with a green box around the 12th fret.

B Minor 7 b5 Chords



Minor 7 b5 chords contain a 1, b3, b5, and b7.



B Minor 7 b5 (Strings 6 – 3)

The diagram shows the fretboard from 1 to 23 across six strings (E, B, G, D, A, E). Three shell voicing shapes are highlighted:

- Minor 7 b5 Shape 1:** Yellow boxes at positions 7, 13, and 19.
- Minor 7 b5 Shape 2:** Orange boxes at positions 11, 15, and 19.
- Minor 7 b5 Shape 3:** Green boxes at positions 19, 20, and 21.

A red box labeled "Shell Voicings" highlights the first two shapes. Two red arrows point from the first shape to the second. The notes highlighted are 1, b3, and b7.

Notice that the shell voicings are the same as the Minor 7 (m7) shell voicing shapes. Without the b5, a m7b5 chord has a 1, b3, and b7, which is the same as a m7 shell voicing.

B Minor 7 b5 (Strings 5 – 2)

The diagram shows the fretboard from 1 to 23 across six strings (E, B, G, D, A, E). Three shell voicing shapes are highlighted:

- Minor 7 b5 Shape 1:** Green boxes at positions 3, 10, and 19.
- Minor 7 b5 Shape 2:** Yellow boxes at positions 10, 12, and 14.
- Minor 7 b5 Shape 3:** Orange boxes at positions 19, 20, and 21.

The notes highlighted are 1, b3, and b7.

B Minor 7 b5 (Strings 4 – 1)

The diagram shows the fretboard from 1 to 23 across six strings (E, B, G, D, A, E). Three shell voicing shapes are highlighted:

- Minor 7 b5 Shape 1:** Yellow boxes at positions 6, 7, 10, and 15.
- Minor 7 b5 Shape 2:** Orange boxes at positions 10, 13, and 16.
- Minor 7 b5 Shape 3:** Green boxes at positions 19, 20, and 21.

The notes highlighted are 1, b3, and b7.

COMPARISON OF 7TH CHORDS (maj7, 7, m7, m7b5)

The following diagrams includes each type of 7th chord produced by the Major scale. Be aware that only Cmaj7 is produced by the C Major scale. **Cmaj7**, C Dominant 7 (**C7**), **Cm7**, and **Cm7b5** have been used as they all share the same root note (C). Shape 1 = 1, 3, 5, 7; Shape 2 = 5, 1, 3, 7; Shape 3 = 1, 5, 7, 3 (*the shapes included in the previous section*).

Cmaj7 (Strings 6 – 3) These chords contain a 1, 3, 5, and 7.

	Major 7 Shape 1			Major 7 Shape 2			Major 7 Shape 3													
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

C7 (Strings 6 – 3) These chords contain a b7 as opposed to the Maj7's 7.

	Dominant 7 Shape 1			Dominant 7 Shape 2			Dominant 7 Shape 3													
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

Cm7 (Strings 6 – 3) These chords contain a b3 and b7 as opposed to the Maj7's 3 and 7.

	Minor 7 Shape 1			Minor 7 Shape 2			Minor 7 Shape 3													
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

Cm7b5 (Strings 6 – 3) These chords contain a 1, b3, b5 and b7.

	Minor 7 b5 Shape 1			Minor 7 b5 Shape 2			Minor 7 b5 Shape 3													
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
B	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6
G	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4
D	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1
A	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5
E	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

7TH CHORD ARPEGGIOS

7th Chord Arpeggios in the Key of C Major (Starting with C on 3rd fret of 5th String)

Each of the seven 7th chords produced by the C Major scale are included in this section. Pay attention to where the shapes are relative to each other. They are all in close proximity so that you can play them one after the other in the same position on the fretboard. Have the C Major scale in the back of your mind when you are studying or playing these shapes. Also pay attention which notes (1, 3, 5, or 7) are on the same string.

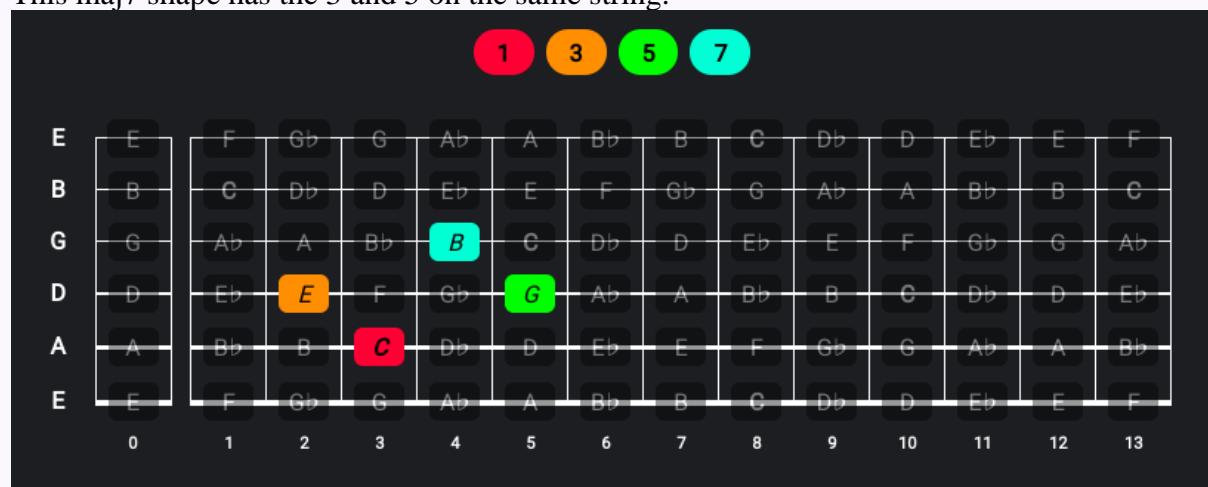
These **shapes can be moved up or down** the fretboard **to transpose them**.

E.g. moving a C Major arpeggio up 2 frets and it will become a D Major arpeggio.

C Major 7 Arpeggio

5th String Root

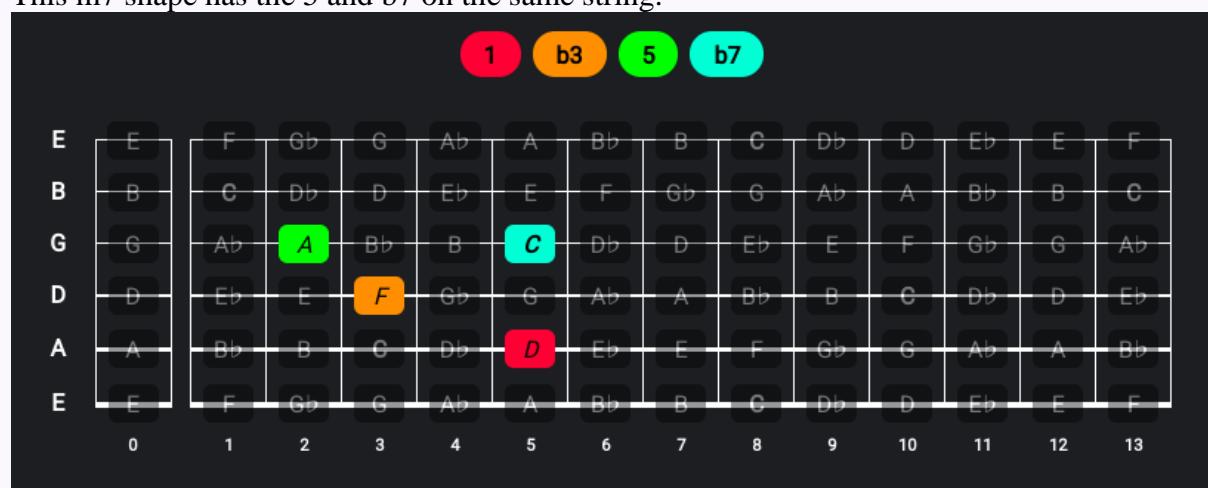
This maj7 shape has the 3 and 5 on the same string.



D Minor 7 Arpeggio

5th String Root

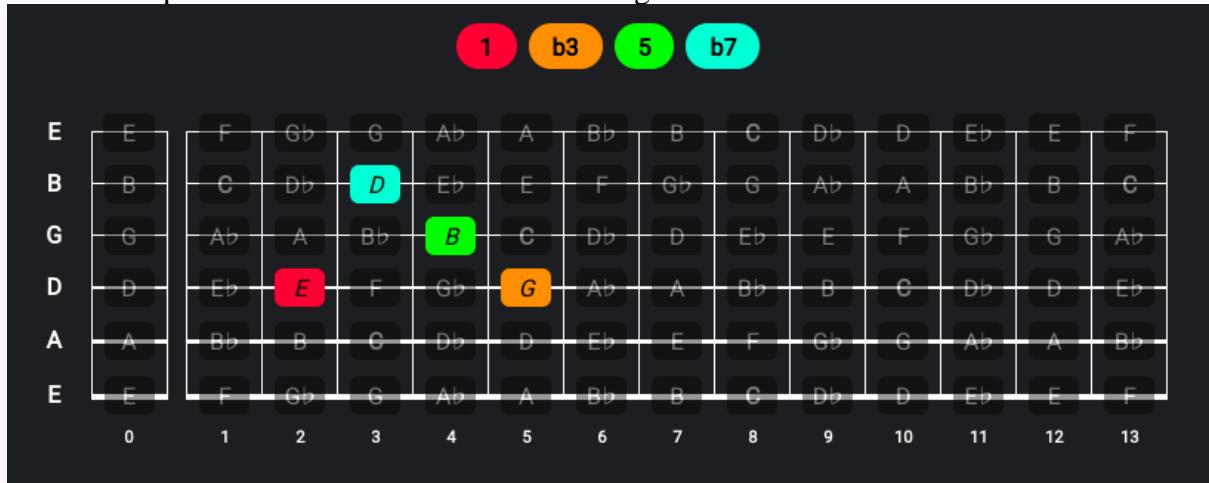
This m7 shape has the 5 and b7 on the same string.



E Minor 7 Arpeggio

4th String Root

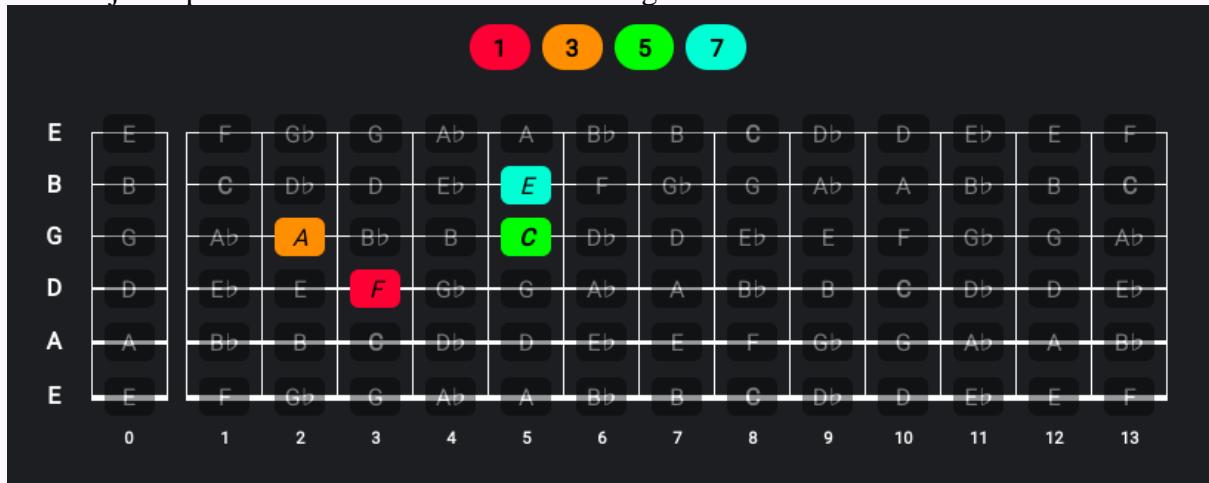
This m7 shape has the 1 and b3 on the same string.



F Major 7 Arpeggio

4th String Root

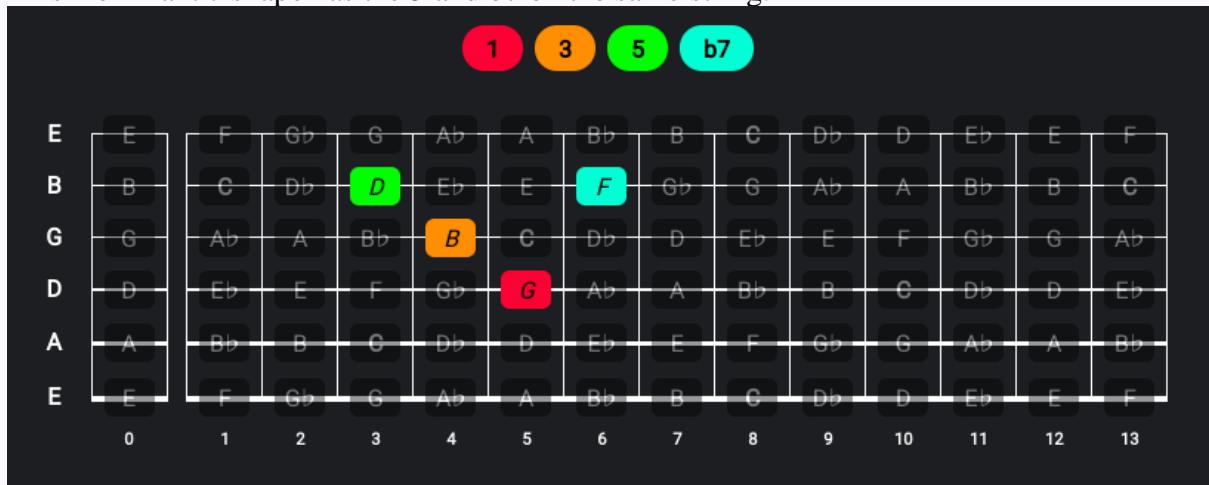
This maj7 shape has the 3 and 5 on the same string.



G7 (G Dominant 7) Arpeggio

4th String Root

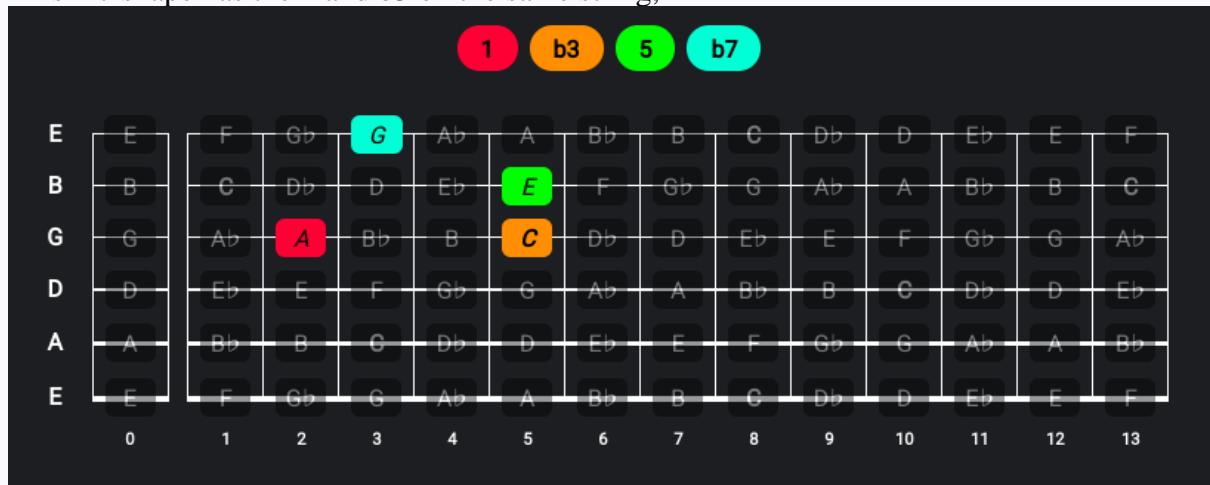
This Dominant 7 shape has the 5 and b7 on the same string.



A Minor 7 Arpeggio

3rd String Root

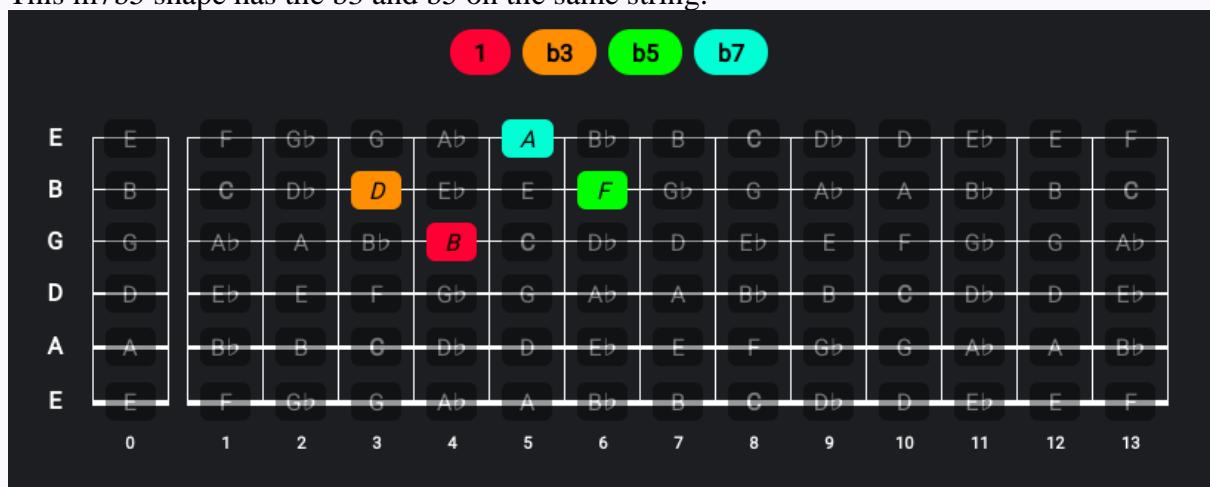
This m7 shape has the 1 and b3 on the same string,



B Minor 7 b5 Arpeggio

3rd String Root

This m7b5 shape has the b3 and b5 on the same string.



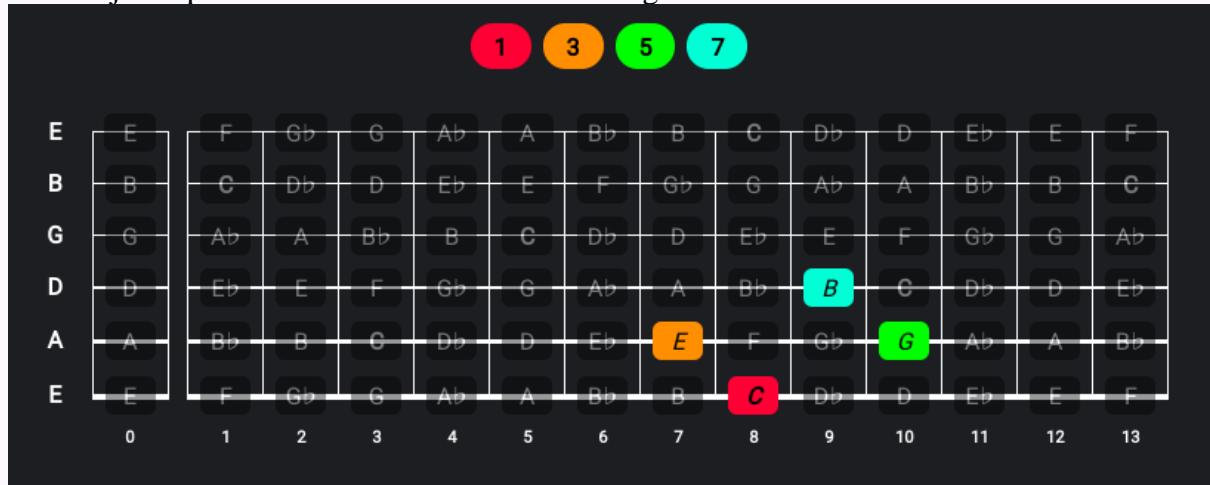
7th Chord Arpeggios in the Key of C Major (Starting with C on 8th fret of 6th String)

All seven of the 7th chords (4 note chords) in the key of C Major. This time we are using the 6th string as the root note location.

C Major 7

6th String Root

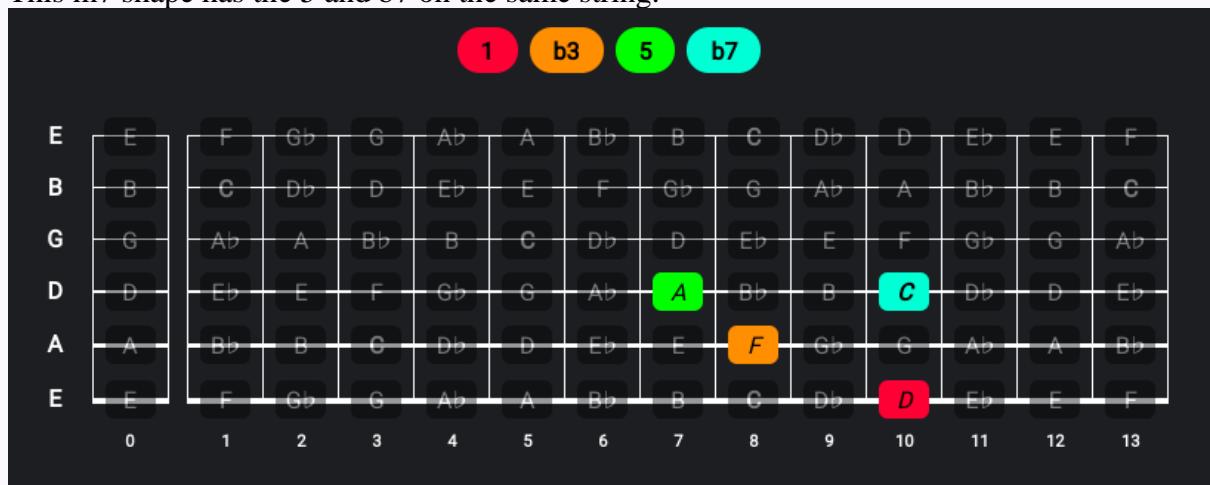
This maj7 shape has the 3 and 5 on the same string.



D Minor 7

6th String Root

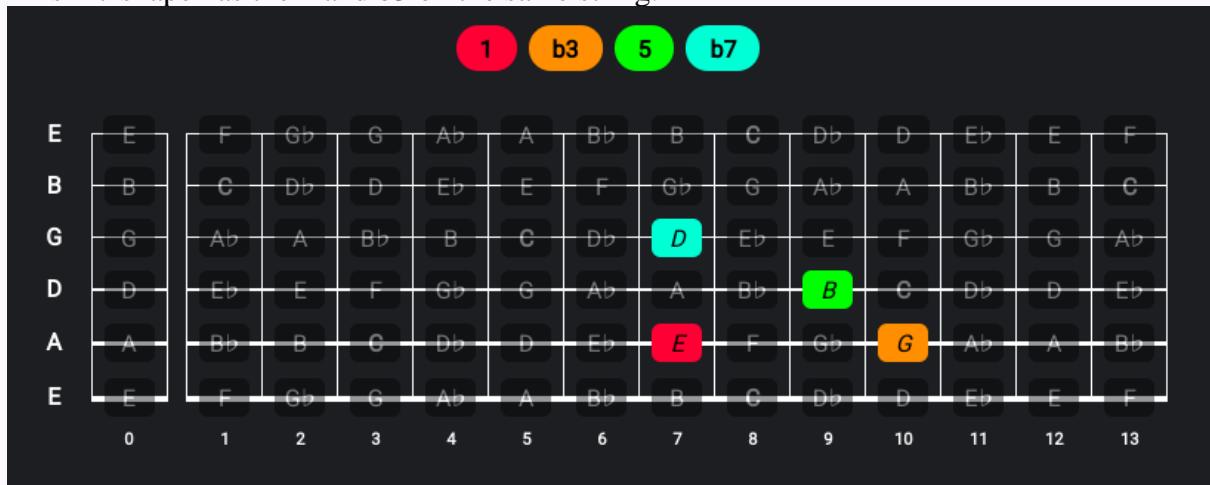
This m7 shape has the 5 and b7 on the same string.



E Minor 7

5th String Root

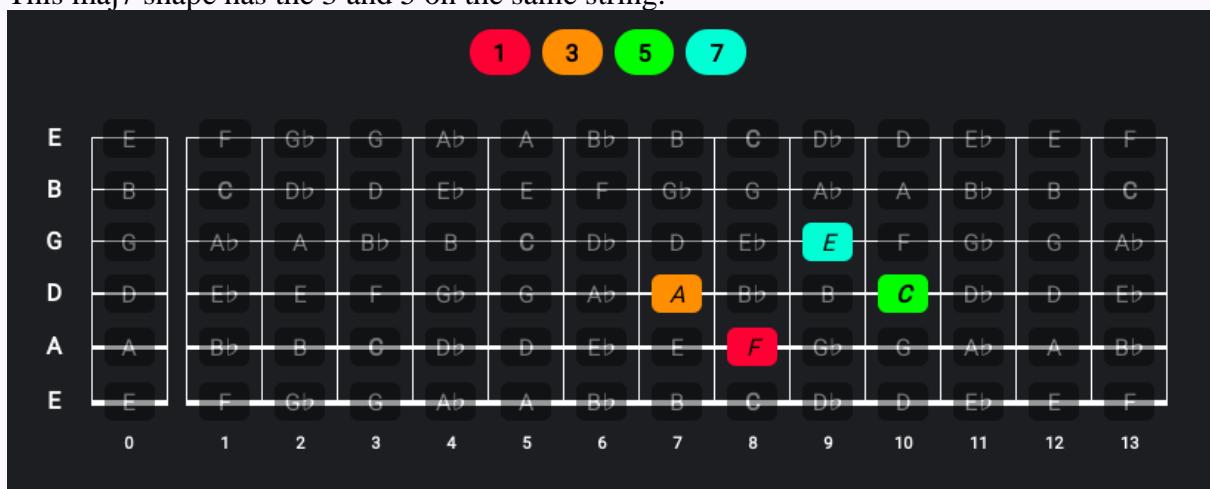
This m7 shape has the 1 and b3 on the same string.



F Major 7

5th String Root

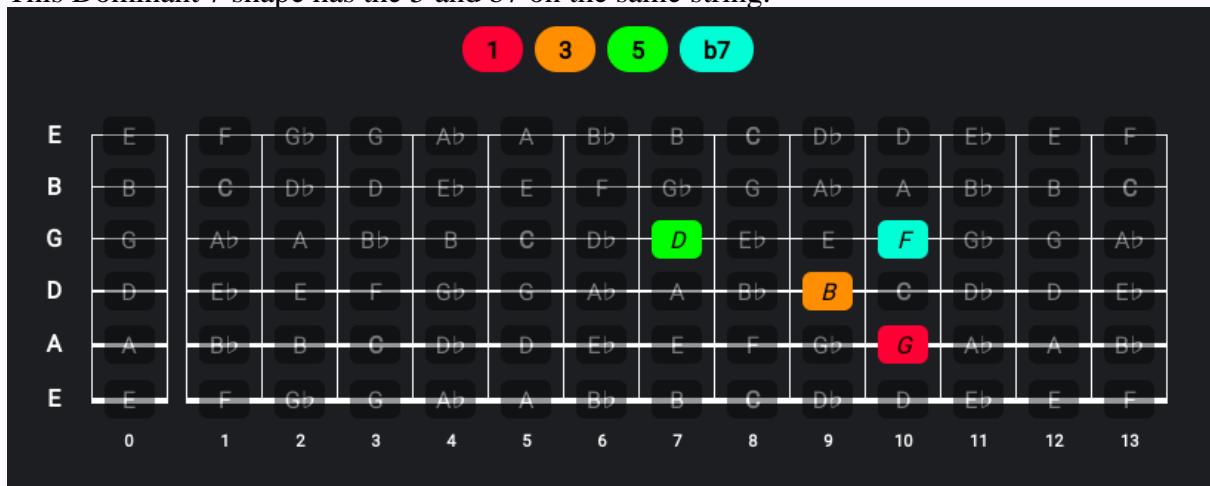
This maj7 shape has the 3 and 5 on the same string.



G7 (G Dominant 7)

5th String Root

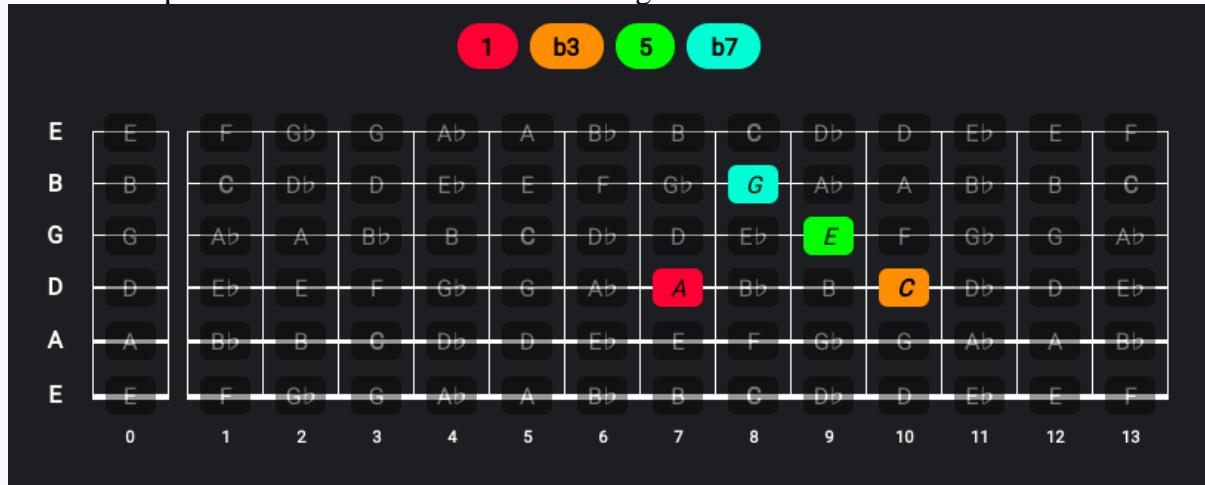
This Dominant 7 shape has the 5 and b7 on the same string.



A Minor 7

4th String Root

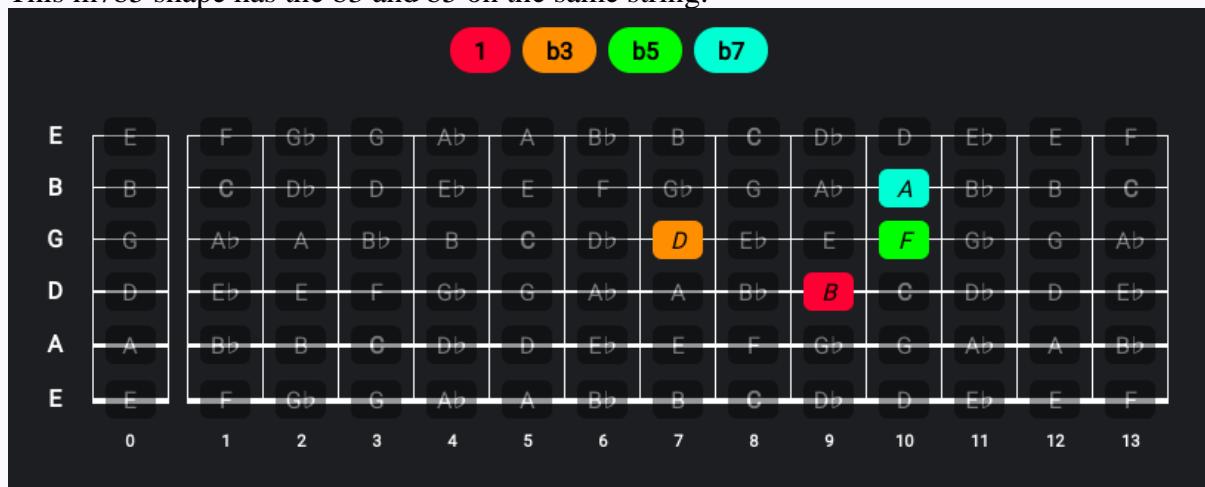
This m7 shape has the 1 and b3 on the same string.



B Minor 7 b5

4th String Root

This m7b5 shape has the b3 and b5 on the same string.

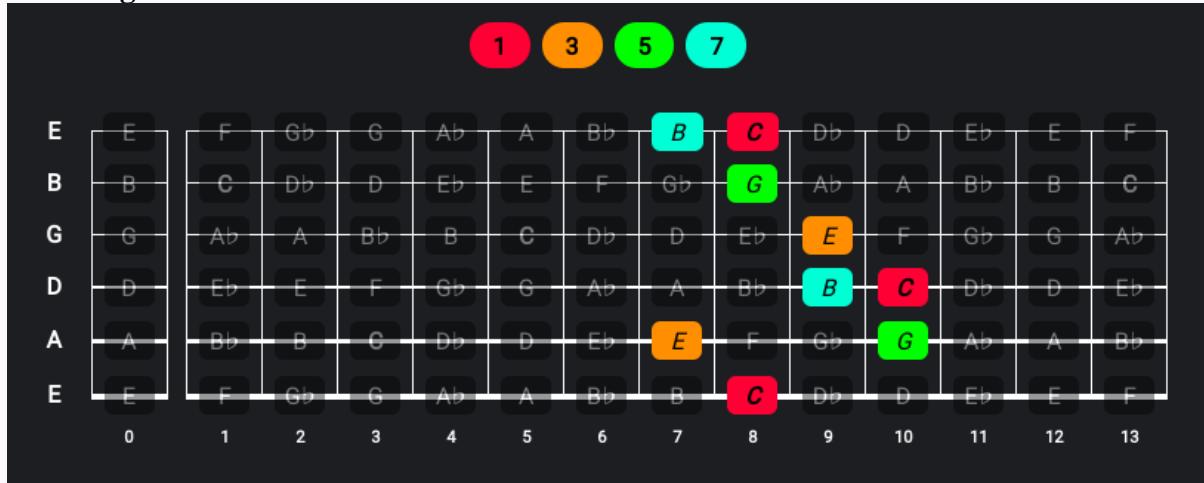


Two Octave 7th Chord Arpeggios

Remember that these shapes can be moved up or down the fretboard to transpose them.
E.g. moving a C Major 7 arpeggio up 2 frets and it will become a D Major 7 arpeggio.

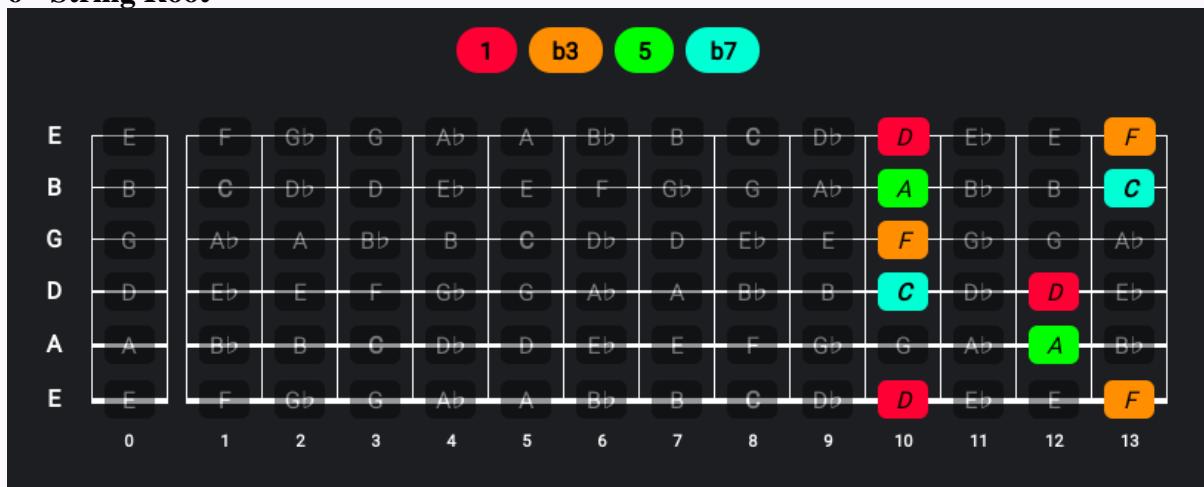
C Major 7

6th String Root



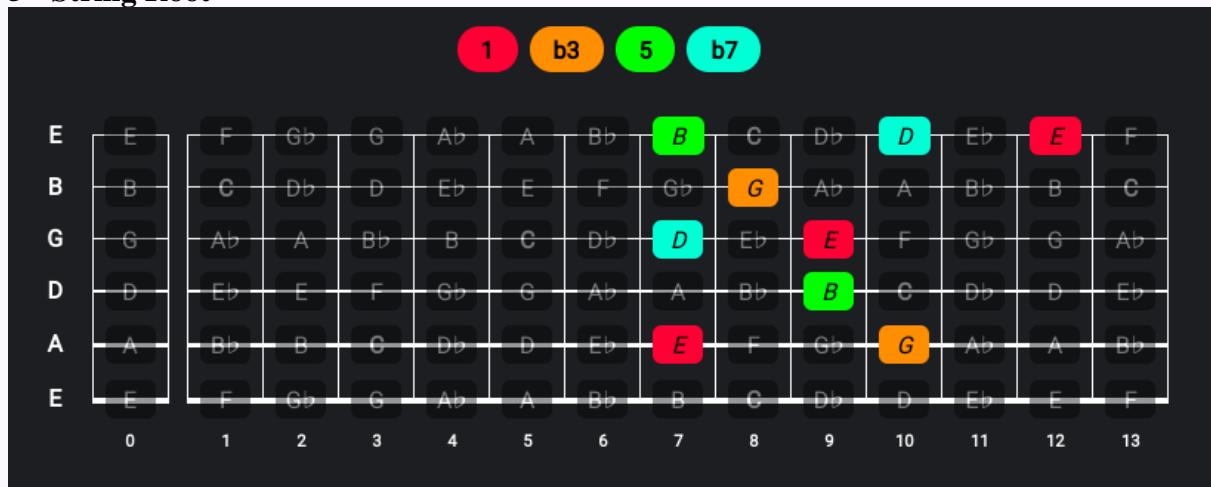
D Minor 7

6th String Root



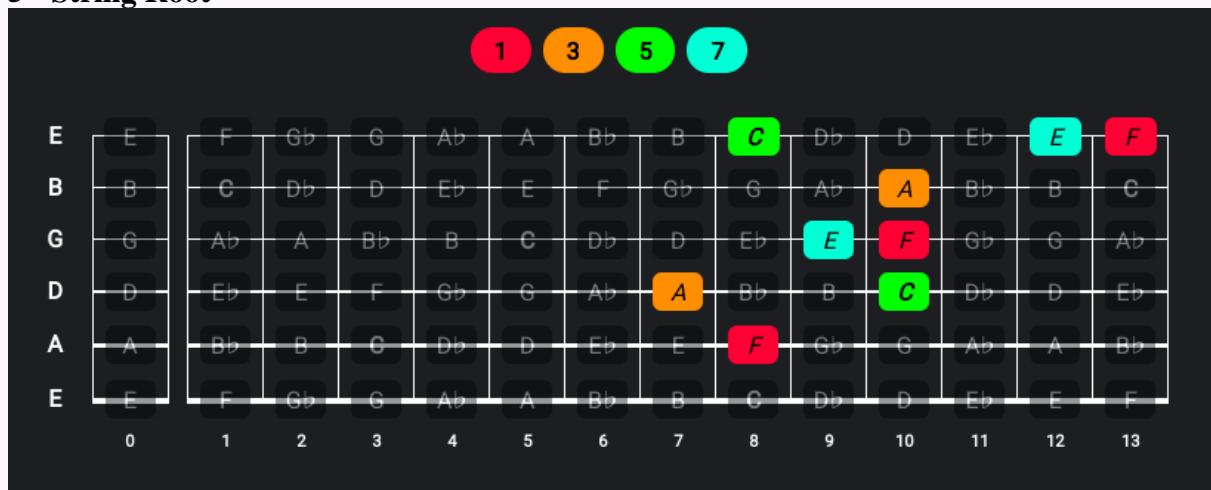
E Minor 7

5th String Root



F Major 7

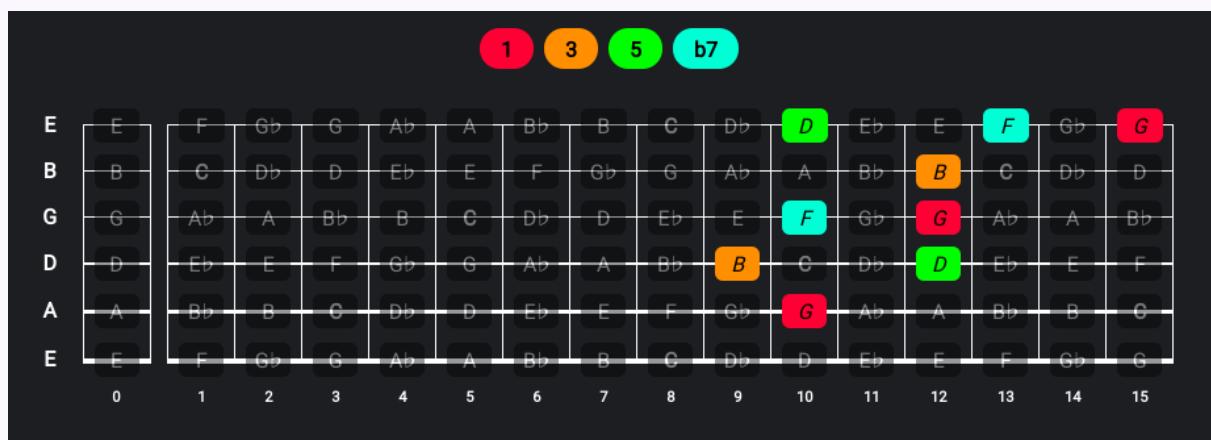
5th String Root



G7 (G Dominant 7)

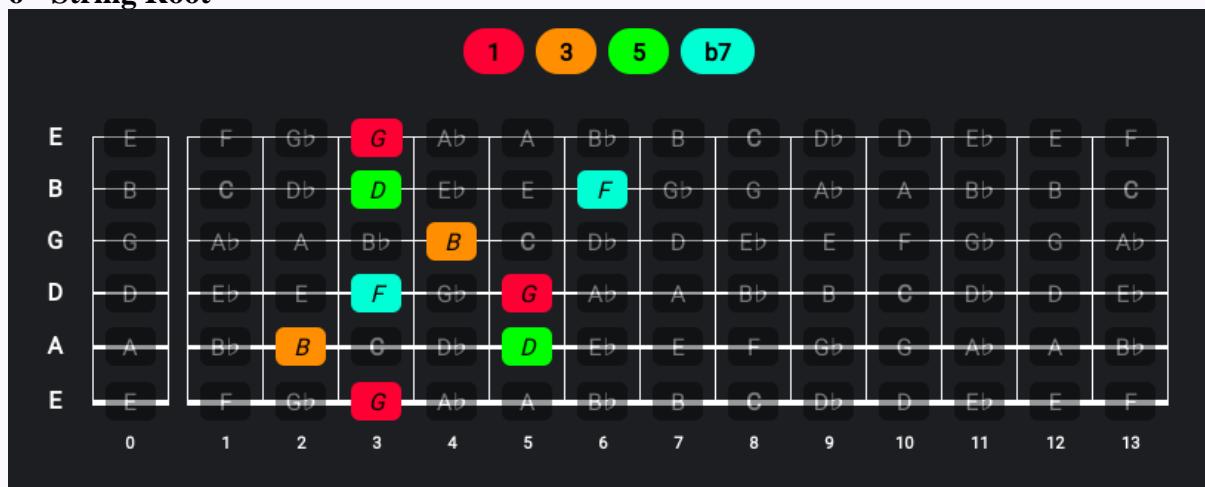
5th String Root

Remember, **this shape** can be used to play any **Dominant 7 arpeggio**. E.g. If we move it down 2 frets so that the 1(root) is on the 8th fret of the 5th string, then it will be an F7 arpeggio.



G7 (G Dominant 7)

6th String Root

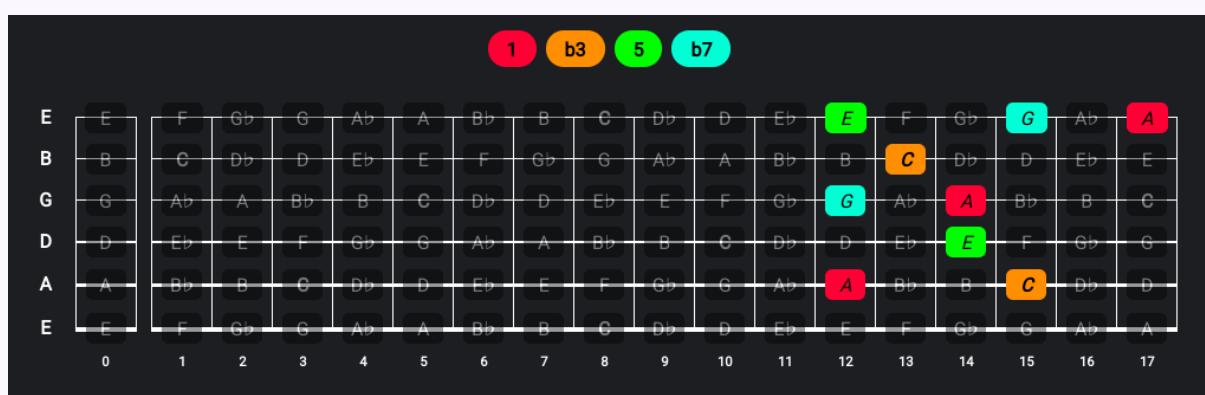


A Minor 7

5th String Root

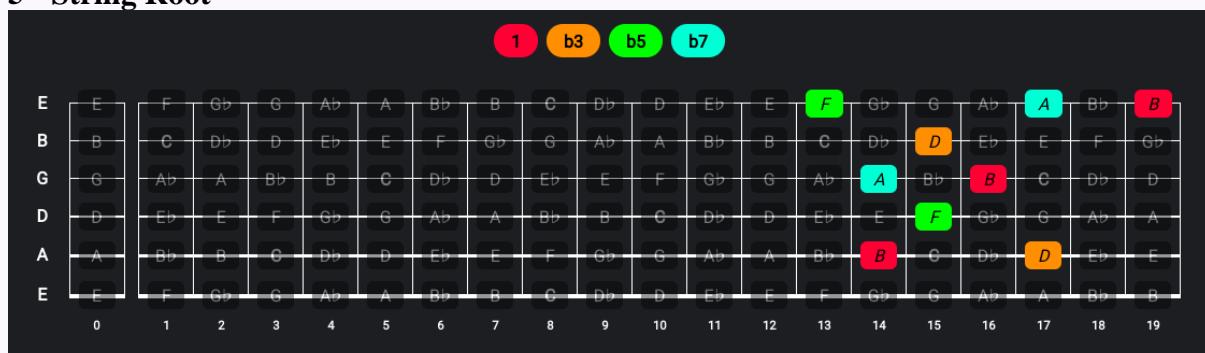
Remember, **this shape** can be used to play any **Minor 7 arpeggio** if we move it.

Remember, this shape can be used to play any Minor 7 arpeggio. E.g. if we move it down to the fret 7 it will be a E Minor 7 arpeggio.



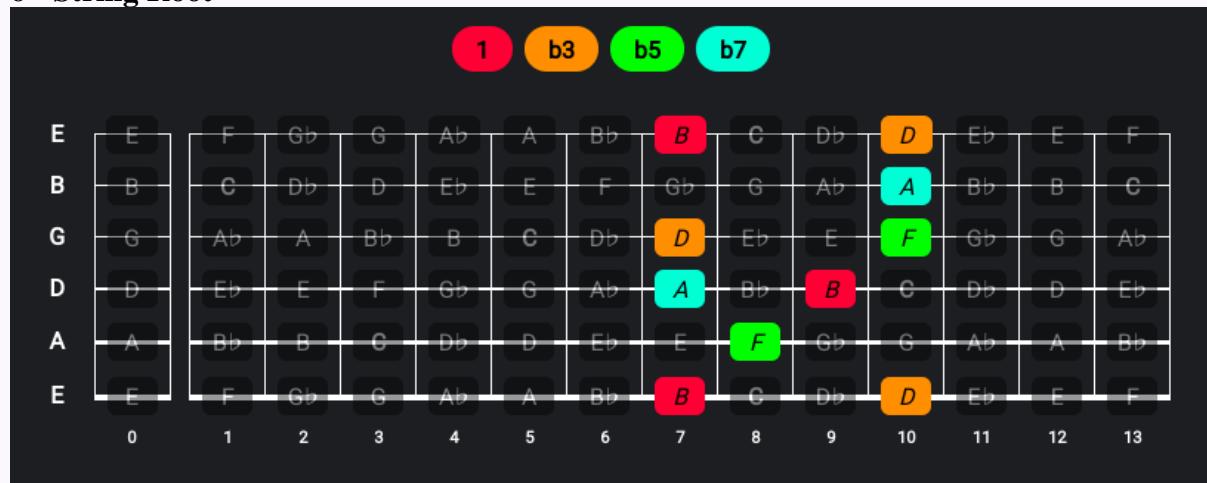
B Minor 7 b5

5th String Root



B Minor 7 b5

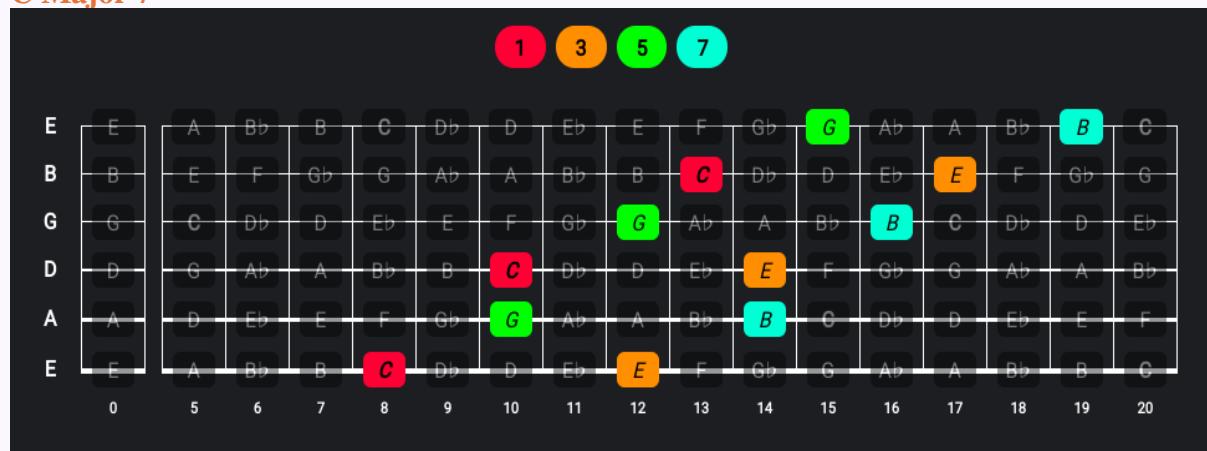
6th String Root



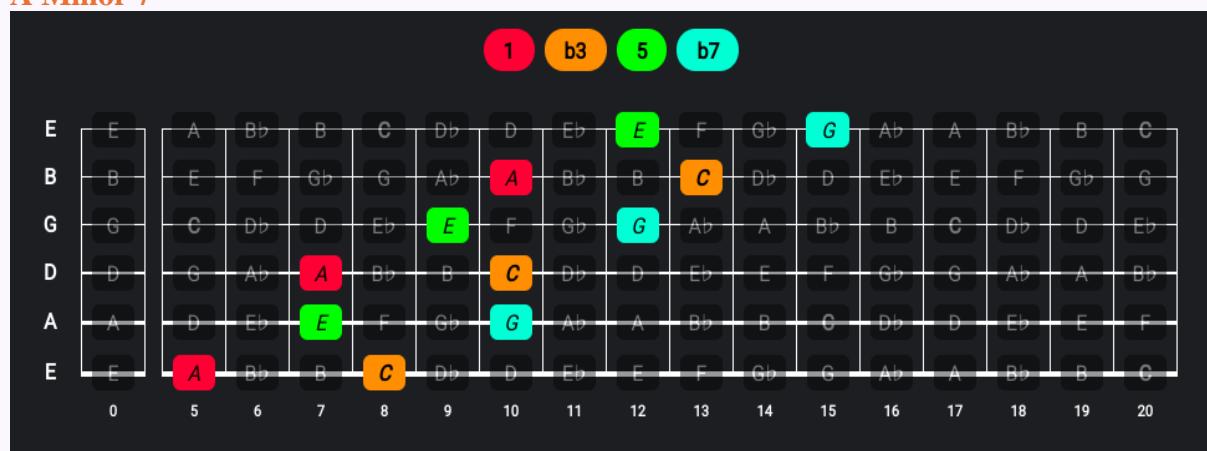
2 Note Per String Arpeggios

Remember that these shapes can be transposed. Think of them based on the type of chord they are (Major 7, Minor 7, Dominant 7, or Minor 7 b5). An example of each of these chord types is provided below. The 1st note of each string is always played by the 1st finger with 2 note per string shapes.

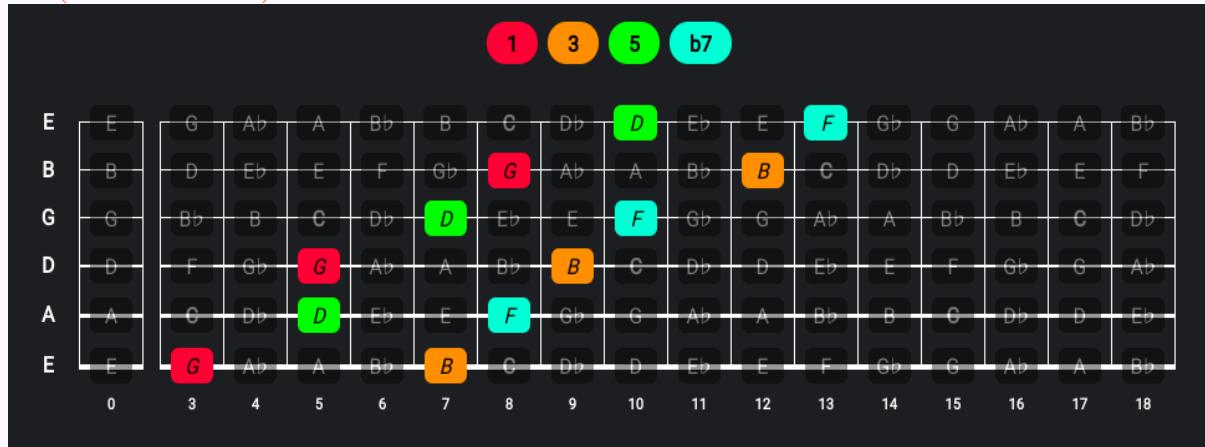
C Major 7



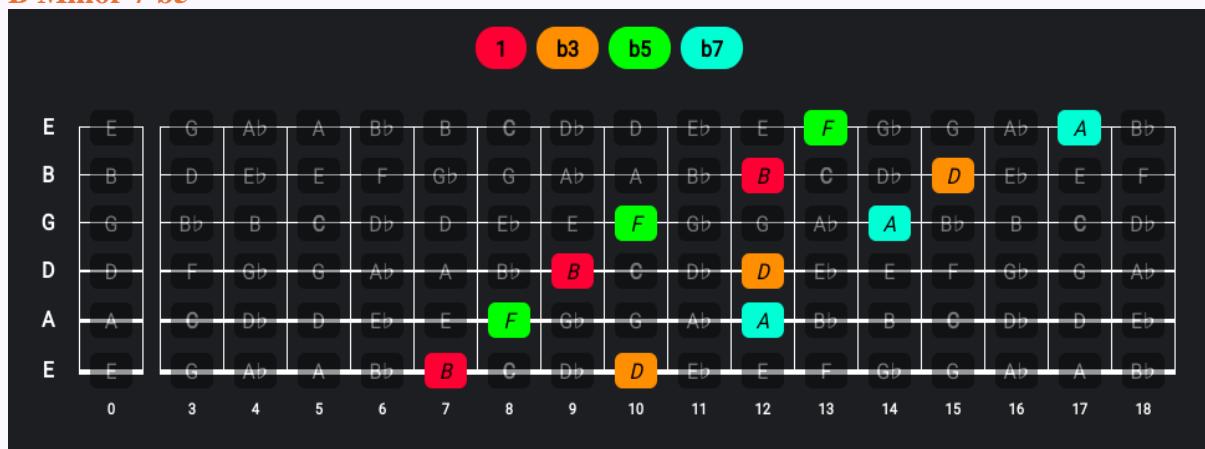
A Minor 7



G7 (G Dominant 7)



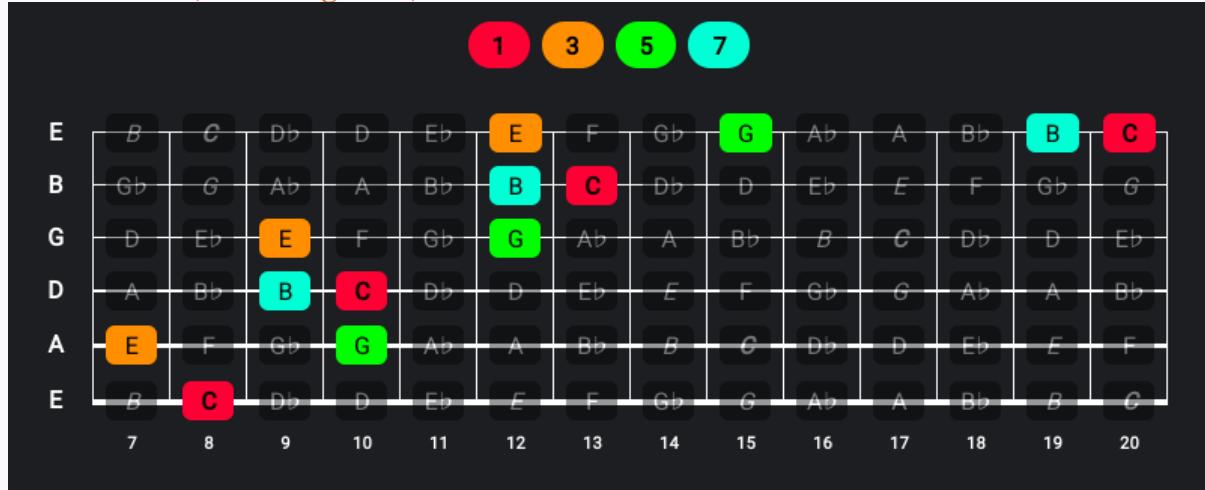
B Minor 7 b5



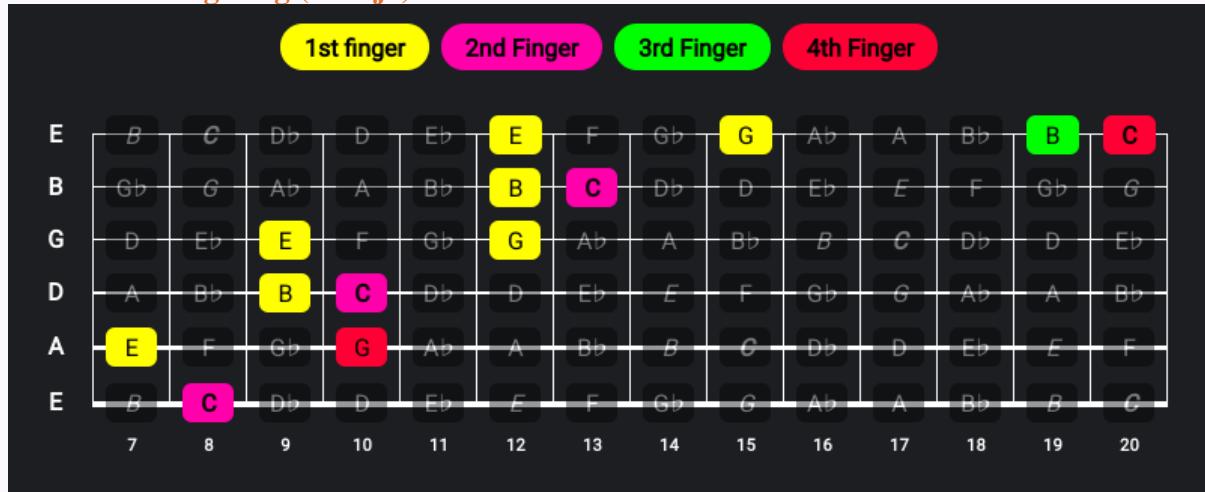
Three Octave Arpeggios

These shapes require the 1st finger to shift along one string and some of them require the 1st finger to be barred on pairs of strings. Notice that the shapes with a major third (3) have the 1 and 3 on the different strings, whereas the shapes with a minor third (b3) have the 1 and b3 on the same string. The reason for this approach is that a major third requires a 4 fret stretch. It's easier to move down a string. A minor third requires a 3 fret stretch which is often easier than moving to the next string. Remember that these are only examples and that you may wish to play arpeggios with different shapes and or fingering.

C MAJOR 7 (6th String Root)



Left Hand Fingering (Cmaj7)



A MINOR 7 (6th String Root)

1 b3 5 b7

Left Hand Fingering (Am7)

1st Finger 2nd Finger 3rd Finger 4th Finger

G DOMINANT 7 (6th String Root)

1 3 5 b7

Left Hand Fingering (G7)

	1st Finger				2nd Finger				3rd Finger				4th Finger			
E	F#	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F	F#	G		
B	D _b	D	E _b	E	F	G	A _b	A	B _b	B	C	D _b	D			
G	A	B _b	B	C	D _b	D	E _b	E	F	F#	G	A _b	A	B _b		
D	E	F	F#	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F		
A	B	C	D _b	D	E _b	E	F	F#	G	A _b	A	B _b	B	C		
E	F#	G	A _b	A	B _b	B	C	D _b	D	E _b	E	F	F#	G		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15		

B MINOR 7 b5 (6th String Root)

	1				b3				b5				b7			
E	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C		
B	F#	G	G#	A	A#	B	C	C#	D	D#	E	F	F#	G		
G	D	D#	E	F	F#	G	G#	A	A#	B	C	C#	D	D#		
D	A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A	A#		
A	E	F	F#	G	G#	A	A#	B	C	C#	D	D#	E	F		
E	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C		
	7	8	9	10	11	12	13	14	15	16	17	18	19	20		

Left Hand Fingering (Bm7b5)

	1st Finger				2nd Finger				3rd Finger				4th Finger			
E	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C		
B	F#	G	G#	A	A#	B	C	C#	D	D#	E	F	F#	G		
G	D	D#	E	F	F#	G	G#	A	A#	B	C	C#	D	D#		
D	A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A	A#		
A	E	F	F#	G	G#	A	A#	B	C	C#	D	D#	E	F		
E	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C		
	7	8	9	10	11	12	13	14	15	16	17	18	19	20		

7TH CHORDS CONTAIN TWO TRIADS

1. THE FIRST THREE NOTES FORM A TRIAD
2. THE LAST THREE NOTES FORM A TRIAD

⇒ For example, Cmaj7 contains the notes C, E, G, B.
The first three notes are a C Major triad (C, E, G)
The last three notes are an E Minor triad (E, G, B)
Notice that the E Minor triad is one of the seven triads in the key of C Major.

⇒ Another example: G7 contains the notes G, B, D, F.
The first three notes are a G Major triad (G, B, D)
The last three notes are an B Diminished triad (B, D, F)
Notice that B Diminished is one of the seven triads in the key of C Major.

MAJOR 7 CHORDS

Contain a **Major Triad** (built from the 1 of the chord) and a **Minor Triad** (built from the 3 of the chord).

MINOR 7 CHORDS

Contain a **Minor Triad** (built from the 1 of the chord) and a **Major Triad** (built from the b3 of the chord).

DOMINANT 7 CHORDS

Contain a **Major Triad** (built from the 1 of the chord) and a **Diminished Triad** (built from the 3 of the chord).

MINOR 7 b5 CHORDS

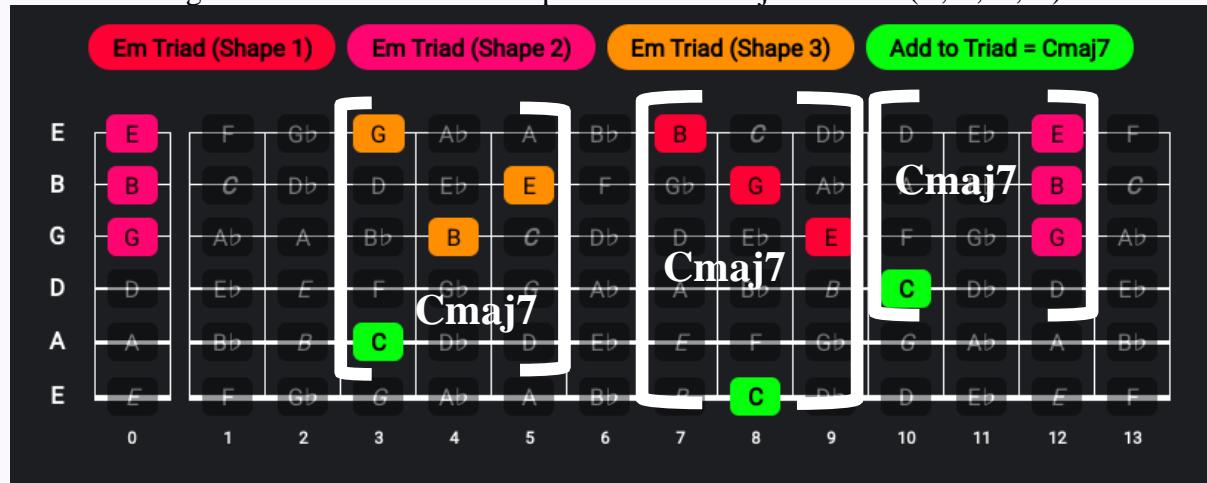
Contain a **Diminished Triad** (built from the 1 of the chord) and a **Minor Triad** (built from the b3 of the chord).

Why is this useful? It is useful because it means that you can build a 7th chord by taking a triad and adding a root note that is a 3rd below the root of the triad. It is another way of thinking about chords, and it will provide you with different shapes to play.

This concept also applies to 9, 11, and 13 chords but these are outside the scope of this guide.
For example, 9 chords contain three triads; one built from the 1st, one from the 3rd, and one from the 5th. 11 chords contain four triads, and 13 chords contain 5 triads. Cmaj9 (a “maj9” chord) contains the notes C, E, G, B, D. This includes a C Major triad (C, E, G), an E Minor triad (E, G, B), and a G Major triad (G, B, D).

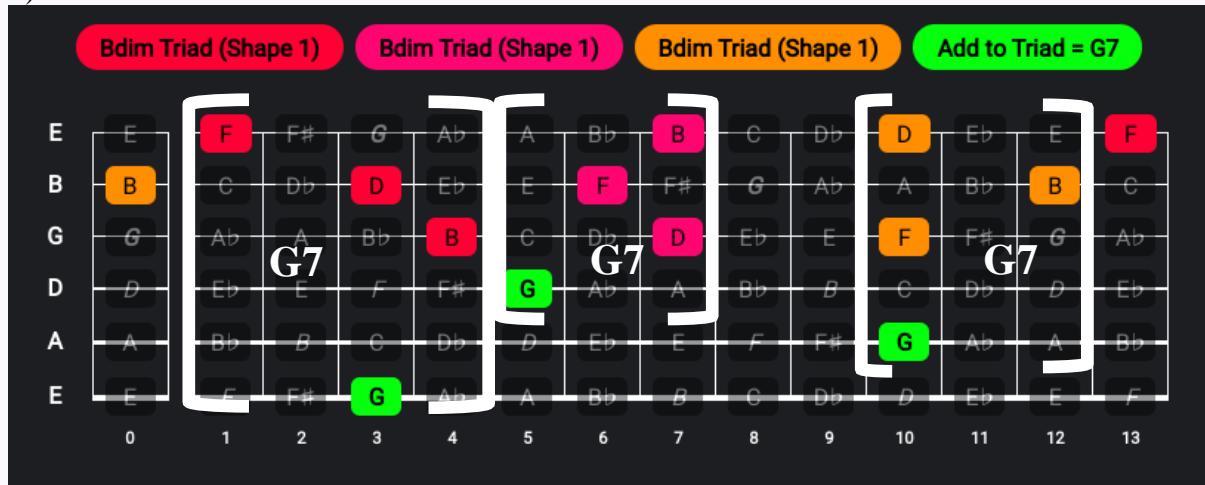
Example 1: C MAJOR 7

The Diagram below shows the three inversions of the E Minor triads that occur between frets 0 – 13. Adding the Note C to these triads produces a C Major 7 chord (C, E, G, B).



Example 2: G DOMINANT 7

The Diagram below shows the three inversions of the B Diminished triads that occur between frets 0 – 13. Adding the Note G to these triads produces a G Dominant 7 (G7) chord (G, B, D, F).



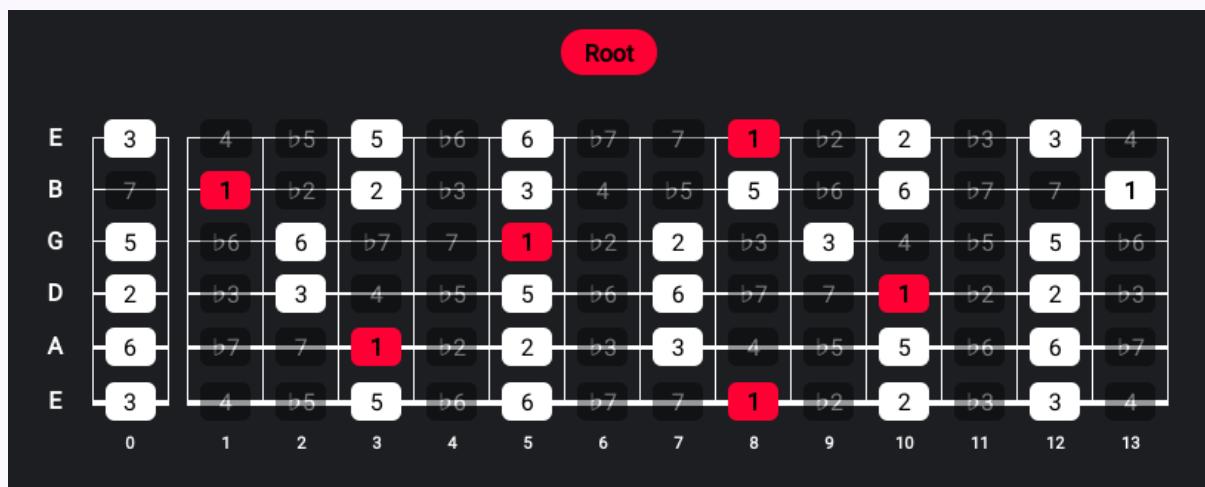
PENTATONIC SCALES

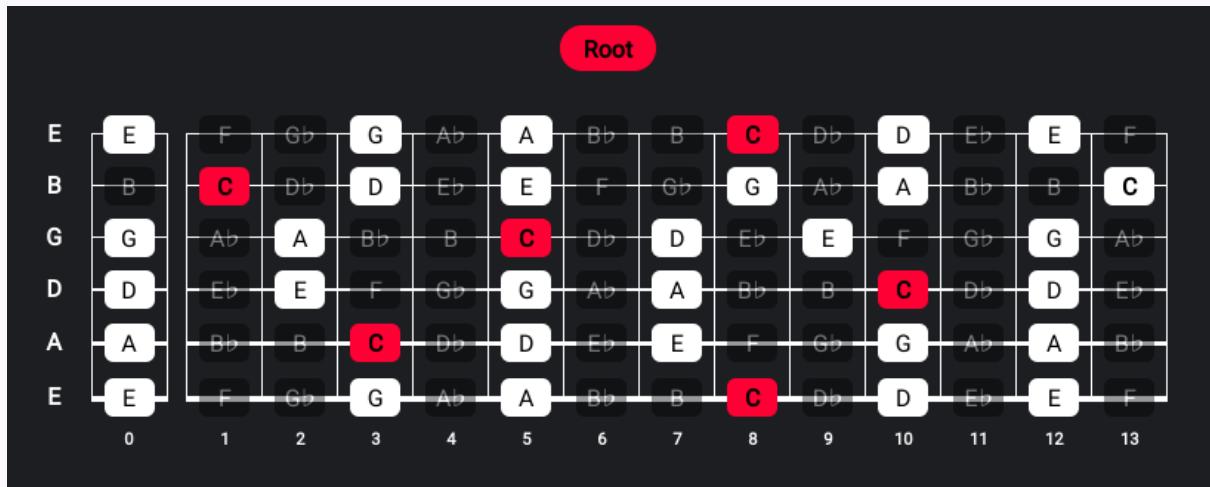
Pentatonic scales are useful because they remove notes from the Major scale that can sound dissonant if used incorrectly. Their shapes are also easy to remember and execute on the guitar.

The Major Pentatonic Scale

The Major Pentatonic scale is **derived from the Major scale**. It has two notes less than the Major scale, which has seven. It **excludes the 4th and 7th degrees** of the scale. Notice in the diagram below that notes 4 and 7 are missing. The Major Pentatonic Scale is often used instead of the Major Scale. It works well over **Major chords** and **Major 7 chords**.

They can also be used over **Dominant 7 chords** but you should **avoid staying on the “6”** of the scale for too long. This is because the 6 is one semitone below the b7 of the Dominant 7 chord. Notes that are a semitone apart make a dissonant sound when played together. However this dissonance can be pleasing in the right context, e.g. if the 6 is played quickly and resolves to the b7.



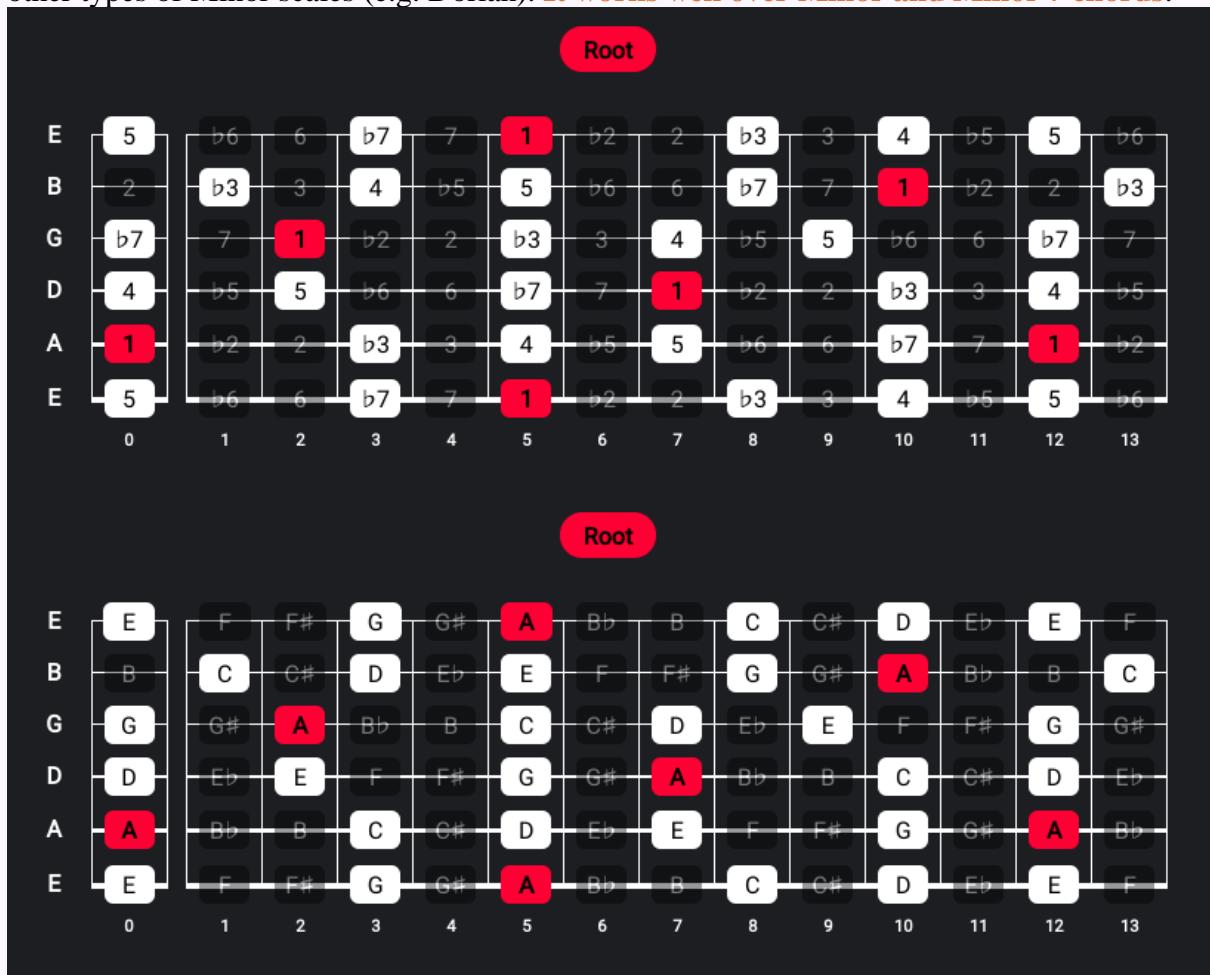


The Minor Pentatonic Scale

The Minor Pentatonic is the relative of the Major Pentatonic scale. For example, the C Major and A Minor Pentatonic scales include the same notes A, C, D, E, G except that C Major starts on the note C: C, D, E, G, A. You can also think of the Minor Pentatonic scale as being the **Natural Minor scale but without the 2 and b6**.

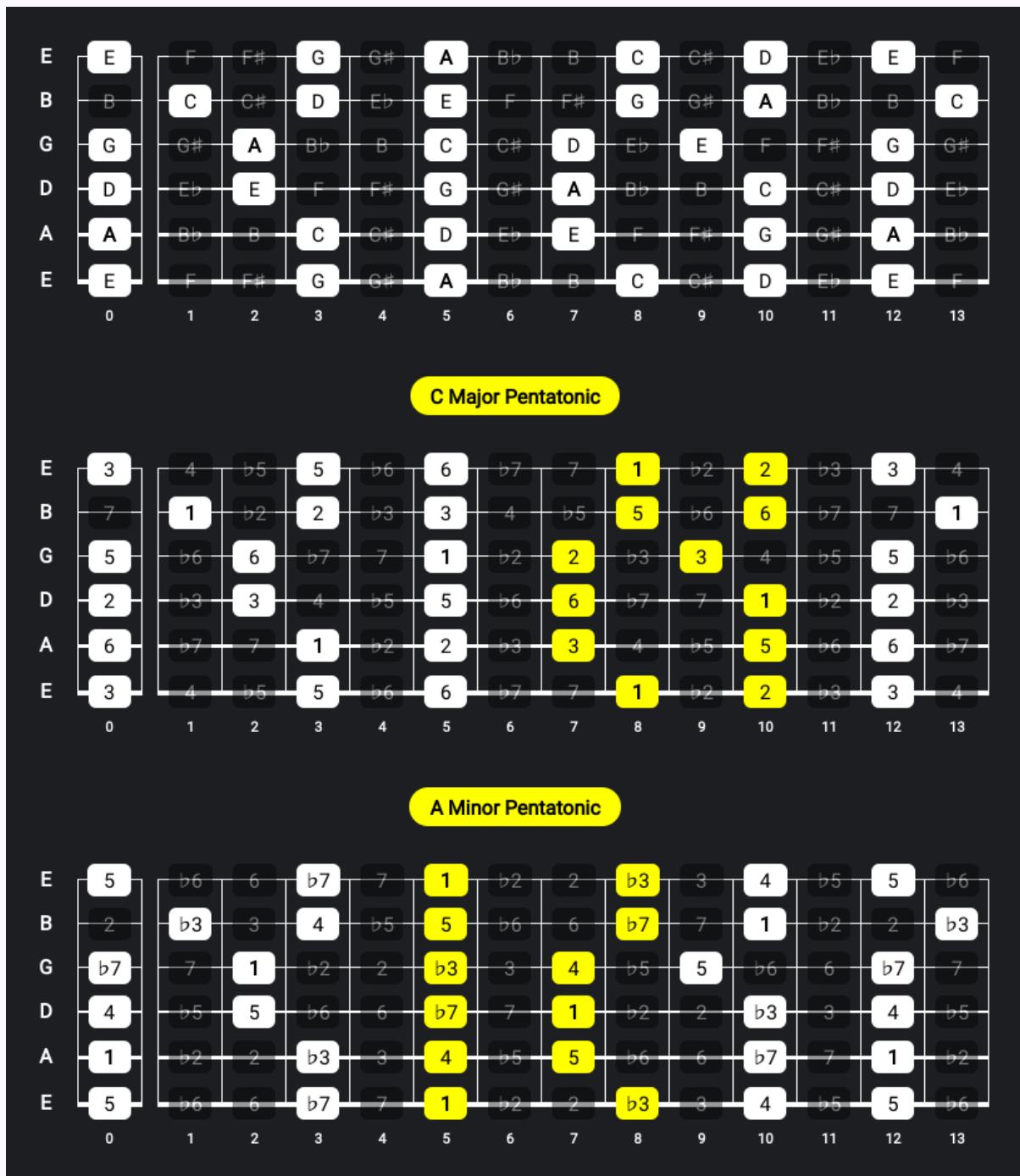
The relative Minor Pentatonic is 3 semitones below the root of the Major Pentatonic.

The Minor Pentatonic is often used instead of the Natural Minor scale or in substitution for other types of Minor scales (e.g. Dorian). **It works well over Minor and Minor 7 chords.**



Comparison Between Major & Minor Pentatonic Shapes

Notice that the Minor Shape is located to the left of the Major Shape. There is more information on this on the next page.



The 5 Pentatonic Shapes

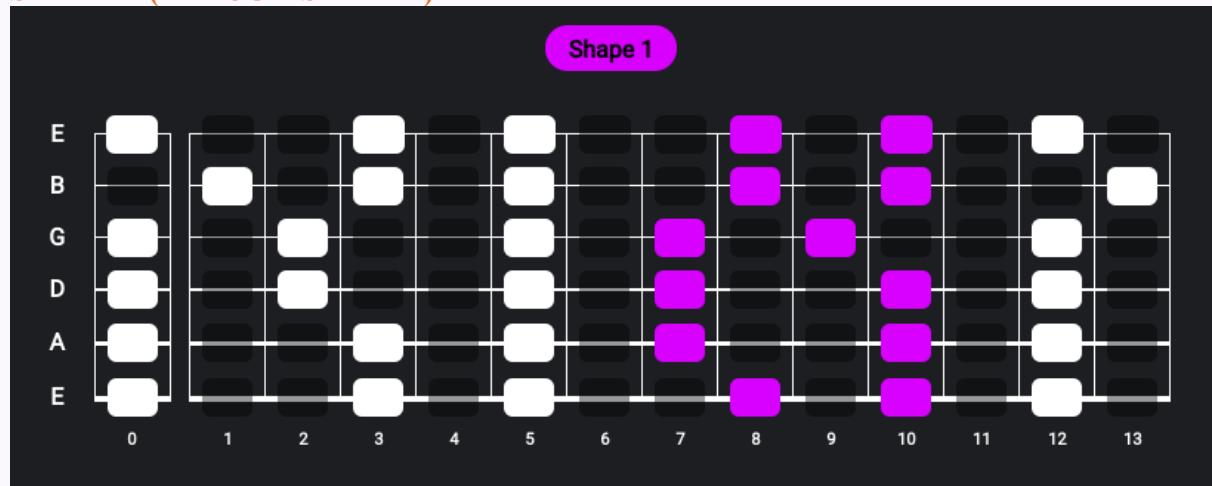
There are **five shapes that can be used to play the pentatonic scale** on the guitar. Two of the shapes were shown above (*highlighted yellow*); the Major shape and the Minor shape. The Major Shape is the C Major Pentatonic scale and the Minor shape is its relative the A Minor Pentatonic scale.

Each shape begins with a different note of the scale. There are five shapes because the Pentatonic scale has five notes. These shapes are sometimes numbered differently by different people. In this guide we are going to call the **Major Pentatonic “Shape 1.”** You may see others name the Major Pentatonic as “Shape 2.” The important thing is to be able to connect the five shapes across the fretboard and to know which are the Major and Minor shapes. In this guide, the **Minor Pentatonic is named “Shape 5.”**

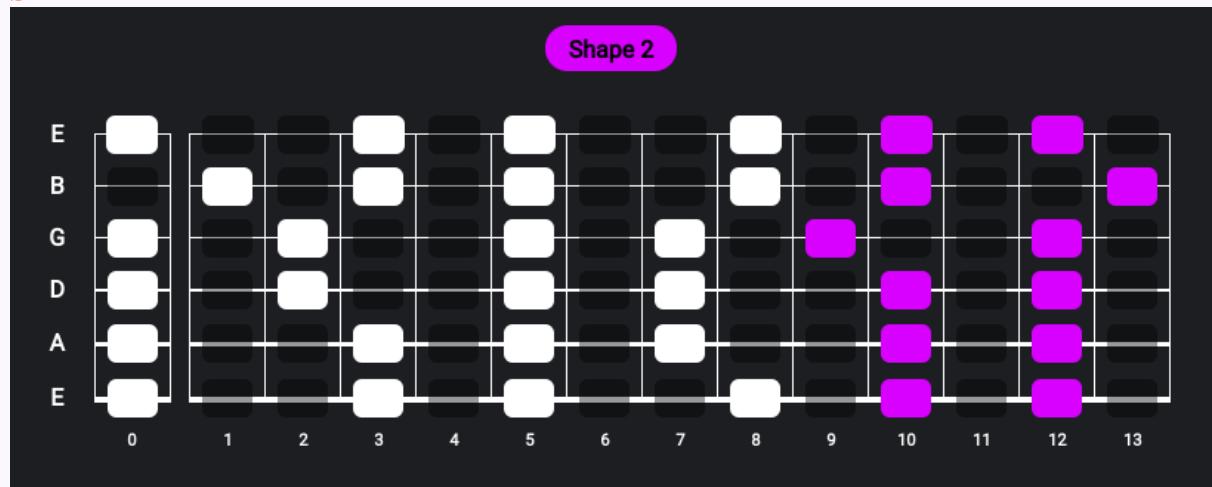
Each shape has two notes per string and includes all 6 strings. Think of the fretboard as a puzzle and each shape as a puzzle piece that connects to the next piece and the one before it. Each shape is part of the two shapes that are adjacent to it. E.g. fret 5 is the start of Shape 5 and the end of Shape 4.

Shapes are numbered in order of their positions relative to each other. I.e. Shape 2 is to the right of Shape 1; Shape 3 is to right of Shape 2; Shape 4 to the right of Shape 3; and Shape 5 to the right of Shape 4. Shape 1 is to the right of Shape 5 (**the pattern of shapes repeats itself**).

SHAPE 1 (“MAJOR SHAPE”)

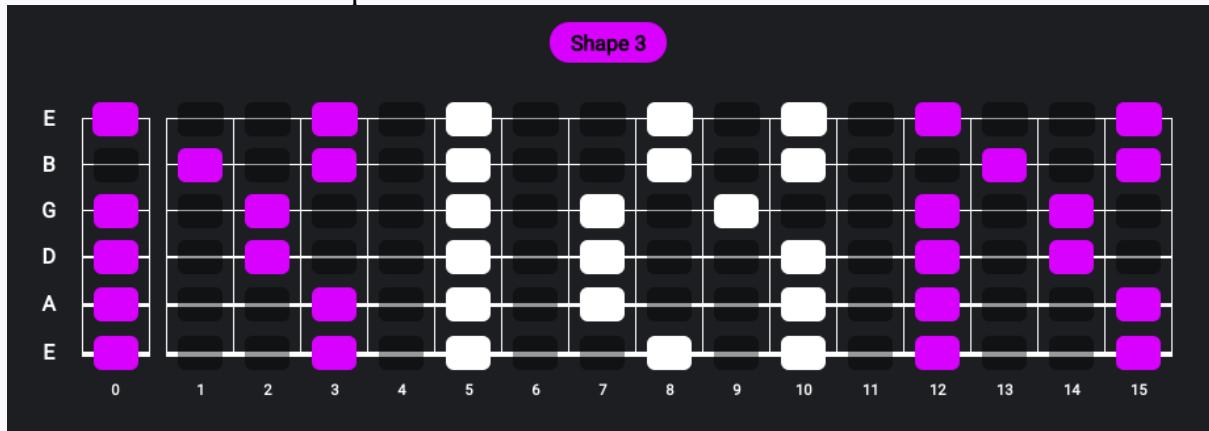


SHAPE 2

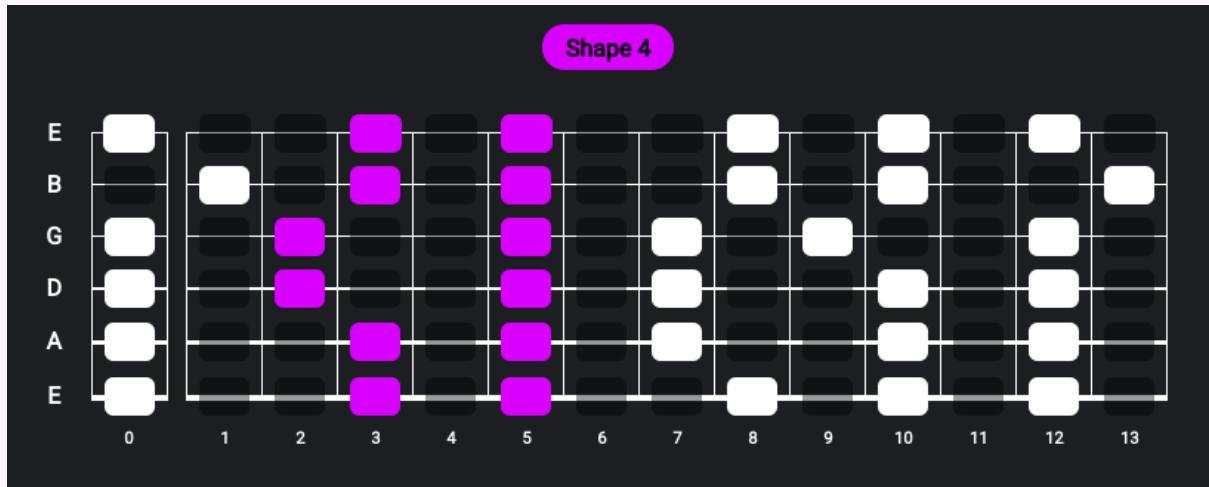


SHAPE 3

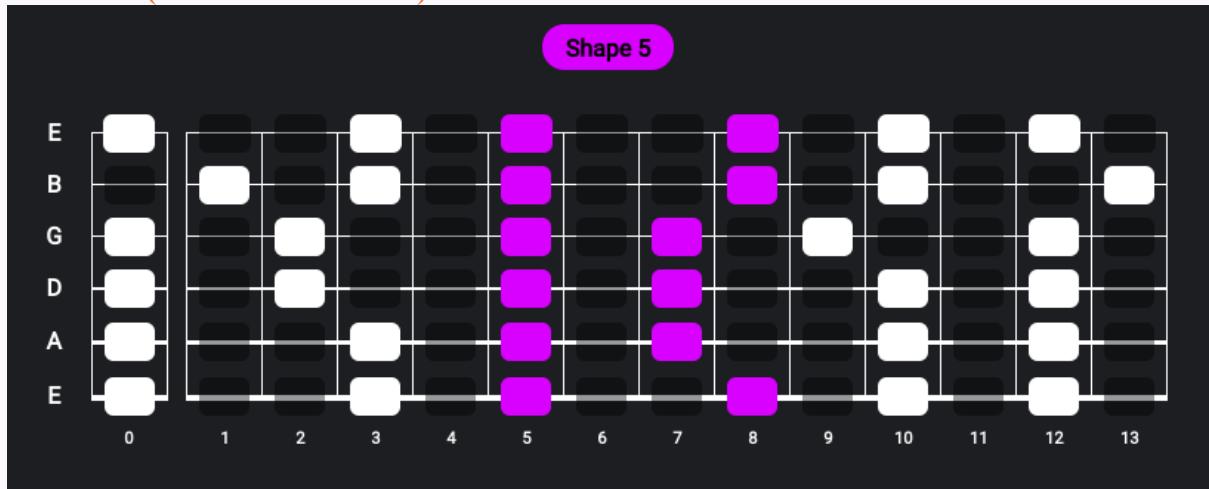
Remember that shapes repeat every 12 frets. That is why this diagram includes two of this shape. Be aware that this diagram goes from fret 0 – 15 and the others only go up to fret 13. This is to show the full shape 3 at frets 12 – 15.



SHAPE 4



SHAPE 5 (“MINOR SHAPE”)



HOW TO USE SCALES AND ARPEGGIOS

There are two purposes of learning scales and arpeggios

- (1) To **improve** your **technical facility** on the instrument.
- (2) To apply to them to the **creation of music**.

This section focuses on the second, and arguably the most important purpose; to use scales and arpeggios to make music. It could be your own song, or it could be improvising in a jam.

Most of the time, **music uses chords**. These chords are often played by one or more players, e.g. the guitarist and pianist both play the notes C, E, and G at the same time. However, more often it is the individual notes played by each player that are added together to form a chord. It's all about what notes are being played at the same time. For example, If I play the note C on my guitar and you play the notes E and G on the piano; then overall we are playing a C Major chord (C, E, G). As another example, if I play a C major Chord and you sing the note B then overall this makes a C Maj7 chord (C, E, G, B).

We don't necessarily always hear these moments as chords as they may pass by quickly, however, this is what is happening from a theoretical perspective and there can be practical value in viewing music with this lens. If what you're playing sounds bad, then it is probably because it is producing bad sounding chords or unpleasing movements between chords.

The notes you are playing are either adding new notes to the music (as in the above examples), or you are playing notes that are already being played by others. **Playing notes that are already being played** can be thought of as "**outlining the chord**." When we play the arpeggio of a chord, we are outlining notes that are in the chord. It sounds good because you are reinforcing notes that are already part of the music. This, of course, relies on the music already sounding good, and what "sounds good" is subjective.

Adding notes that are not already being played can be more difficult. Like anything in music, you will need to use your ear. When you are playing a scale, you will notice that some notes will sound better than others over certain chords. Remembering the arpeggio of the underlying chord and how the other notes in the scale fit around these notes will help you to navigate towards the best sounding notes.

Remember that the most important thing is that what you play sounds good! Don't get too caught up in the theory. Practice by playing with others or by using backing tracks to develop your ear & your skills.

An example of applying arpeggios and the C Major scale to a chord progression in the key of C Major is provided on the next page.

Example: A guitarist is playing chords, and **you are improvising** over the chords. The chord progression is **Am7, G7, C Major**.

You play notes from the Am7 arpeggio over the Am7 chord, the G7 arpeggio over the G7 chord, and the C Major arpeggio over the C Major chord. As you know that **these chords are in the key of C Major**, you also use other notes of the C Major scale as part of the arpeggio-based lines that you are playing. The **arpeggios outline the chords**, and the **other notes of the scale add new notes to the music**.

Am7 **G7** **C**

CHORD CONTAINS A, C, E, AND G CHORD CONTAINS G, B, D, AND F CHORD CONTAINS C, E, AND G

Am7 **G7** **C** **C**

1 2 3 4

CHORDS

YOU

A B C E G G F G D E E C E G A G E D C B

The analysis below includes some chords that have not been discussed in this guide. Do not worry if you are unfamiliar with these chords. It is more important that you understand the overall concept.

In **bar one** you play the notes A, C, E, and G, which are in the Am7 arpeggio. You also play the note B which is in the C Major scale. The note B is the 9 of A. Therefore, at that moment it is as if an Am9 chord is being played.

In **bar two** you play the notes G, D, and F, which are in a G7 chord. You also play the note E which is in the C Major scale. The note E is the 6 (also called the 13) of G. Therefore, at that moment it is as if a G13 (without the 9 and 11) is being played.

In **bar three** you play the notes C, E, and G, which are in a C Major chord. You also play the note A which is the 6 of C. Therefore, at that moment it is as if a C6 chord is being played.

In **bar four** you play the notes C, E, and G, (C Major chord). You also play the note D which is the 9 of C. Therefore, at that moment it is as if a C add9 chord is being played. You also play the note B, therefore at that moment it is as if a Cmaj7 chord (C, E, G, B) is being played.

C MAJOR SCALE PATTERNS & ARPEGGIO EXAMPLES

On the next page there are some scale patterns and arpeggios. This is provided to give some guidance on how to play some of the scales and arpeggios covered in this guide. There are many more possibilities, but these will help to get you started. **It is important to play scales and arpeggios with a metronome to ensure you are playing at a consistent tempo.**

A video of the tablature with audio is available here:

[C Major Scale Patterns and Arpeggios](#)

Apply these patterns to the different scales and arpeggios you have learned in this guide. Take notice of the fingerings used (**left hand**) and picking instructions (**right hand**). Most of the patterns use **alternate picking** (every upstroke is followed by a down stroke). The “*Two Octaves of Cmaj7 Arpeggio Ascending and Descending*” example uses **economy picking**. Economy picking requires a combination of alternate and sweep picking. Consecutive down or upstrokes are used to move to the next string, below or above, respectively. For example, the first two notes of this arpeggio use down strokes. The motion of the first downstroke is continued to the string below, i.e. one downstroke is used to pick both of the strings (E and A).

Different guitarists have different picking style preferences. You may favor alternate picking over economy picking, or vice versa. Experiment with both and you will discover what you prefer. You may even discover that you like to use both styles but that it depends on the situation as to which one is most appropriate.

You may also wish to play these patterns using hammer-ons and pull-offs (“legato” style). The examples in this guide can be adapted to this style by only picking notes when you change strings. There is also a legato style where only hammer-ons are used and this does not require any picking at all.

C Major Scale Patterns & Arpeggios

Scale Ascending and Descending

Left hand fingering is shown by the numbers next to notes. Fingers are numbered 1 - 4.

Downstrokes and upstrokes (right hand) are shown below the notes.

The] symbol is a downstroke and the V symbol is an upstroke.

mf

]

V

T

A

B

8 10 7 8 10 7 9 10 10 9 7 10 8 7 10 8

3 Note Pattern Ascending

Use left hand fingering shown above in the first scale pattern.

]

V

T

A

B

8-10-7-8-7-8 10-8-10-7-9-7 9-10-9-10-7-9 7-9-10-9-10-8 10-8-10-7-8

3 Note Pattern Descending

Use left hand fingering shown above in the first scale pattern.

]

V

T

A

B

8-7-10-10-8-10-8 10-8-10-9-10-9-7-9 7-10-7-10-9-10-9-7 9-7-10-7-10-8-10-8 7-8-7-10-8

4 Note Pattern Ascending

Use left hand fingering shown above in the first scale pattern.

4 Note Pattern Descending

Use left hand fingering shown above in the first scale pattern.

The image shows a musical score for guitar. The top part is a standard staff notation with a treble clef, showing a continuous melody of eighth and sixteenth notes. Below the staff is a tablature system. The first string is labeled with a 'T' and 'A', and the second string with a 'B'. Fingerings are indicated above the tablature: the first measure shows '8-7' over '10-8-7'; the second measure shows '10-8' over '10-9-8'; the third measure shows '10-9-7' over '10-9-7'; the fourth measure shows '7' over '10-9-7-10-9-7'; the fifth measure shows '9-7' over '10-8-7'; and the sixth measure shows '10-8-7' over '10-8'. The tablature itself consists of vertical columns of dots representing fret positions.

Two Octaves of Cmaj7 Arpeggio Ascending & Descending

Left hand fingering is shown next to notes.

Left hand fingering is shown next to notes.

2 1 4 3 2 1 2 1 2 3 4 3

T A B 8 7 10 9 10 9 8 7 8 9 10 9 10 7 8

2 Note Per String Cmaj7 Arpeggio (2 Octaves) Ascending & Descending

Left hand fingering is shown next to notes.

All 7th Chord Arpeggios of C Major Ascending

The image shows a musical score for guitar. The top part is a staff with eight measures of music, each starting with a note from the previous measure's ending. The chords are labeled above the staff: Cmaj7, Dm7, Em7, Fmaj7, G7, Am7, Bm7b5, and Cmaj7. Below the staff is a fretboard diagram with fingerings (e.g., 1, 2, 3, 4) indicating which strings to play. The bottom part of the image shows a fretboard diagram with two rows of numbers: A (top row) and B (bottom row). The numbers correspond to the fingerings on the staff above, showing the progression of notes across the strings.

All 7th Chord Arpeggios of C Major Descending

Guitar tablature for a blues progression. The top staff shows a melody line with eighth-note patterns. The bottom staff shows a bass line with eighth-note patterns. The progression consists of seven measures: Bm7b5, Am7, G7, Fmaj7, Em7, Dm7, and Cmaj7. The bass line uses notes from the A and B strings.

Sequence of Triads in the Key of C Major (Shape 1)

C Major D Minor E Minor F Major G Major A Minor B Diminished C Major

Fretboard diagram showing a sequence of triads in the key of C Major (Shape 1). The diagram includes a treble clef, a key signature of one sharp, and a time signature of common time. It shows the notes for C Major, D Minor, E Minor, F Major, G Major, A Minor, B Diminished, and C Major across the six strings of a guitar. Fingerings are indicated above the notes, and fret numbers are shown below the strings.

Sequence of 1st Inversion Triads in the Key of C Major (Shape 2)

C Major D Minor E Minor F Major G Major A Minor B Diminished C Major

Fretboard diagram showing a sequence of 1st inversion triads in the key of C Major (Shape 2). The diagram includes a treble clef, a key signature of one sharp, and a time signature of common time. It shows the notes for C Major, D Minor, E Minor, F Major, G Major, A Minor, B Diminished, and C Major across the six strings of a guitar. Fingerings are indicated above the notes, and fret numbers are shown below the strings.

Sequence of 2nd Inversion Triads in the Key of C Major (Shape 3)

C Major D Minor E Minor F Major G Major A Minor B Diminished C Major

Fretboard diagram showing a sequence of 2nd inversion triads in the key of C Major (Shape 3). The diagram includes a treble clef, a key signature of one sharp, and a time signature of common time. It shows the notes for C Major, D Minor, E Minor, F Major, G Major, A Minor, B Diminished, and C Major across the six strings of a guitar. Fingerings are indicated above the notes, and fret numbers are shown below the strings.

Sequence of Triads in the Key of C Major (All Three Major, Minor, & Diminished Shapes)

Am Triad (Minor Shape 2) Bdim Triad (Diminished Shape 2) C Triad (Major Shape 2) Dm Triad (Minor Shape 1)

Em Triad (Minor Shape 1) F Triad (Major Shape 3) G Triad (Major Shape 3) Am Triad (Minor Shape 3)

Bdim Triad (Diminished Shape 3) Bdim Triad (Diminished Shape 1) C Triad (Major Shape 1) C Triad (Major Shape 1)

A Minor/C Major Pentatonic Pattern Ascending

$\text{♩} = 120$
Shape 5

Treble clef staff:
Fret positions: 5, 8, 5, 7, 5, 7

Bass clef staff:
Fret positions: 5, 8, 5, 7, 5, 8

A Minor/C Major Pentatonic Pattern Descending

Treble clef staff:
Fret positions: 8, 5, 8, 5, 7, 5, 8, 5, 7, 5, 7, 5, 7, 5, 8

Bass clef staff:
Fret positions: 8, 5, 8, 5, 7, 5, 8, 5, 7, 5, 7, 5, 7, 5, 8

A Minor/C Major Pentatonic Pattern Ascending & Descending

Shape 4 Shape 5 Shape 1 Shape 5 Shape 4

Treble clef staff:
Fret positions: 3, 5, 3, 5, 5, 7
8, 10, 8, 10, 10, 8
7, 5, 7, 5, 5, 3
5, 3

Bass clef staff:
Fret positions: 3, 5, 3, 5, 5, 7
8, 10, 8, 10, 10, 8
7, 5, 7, 5, 5, 3
5, 3

TABLE: THE SEVEN MODES OF THE C MAJOR SCALE & THEIR INTERVALS

Semitones		0	1	2	3	4	5	6	7	8	9	10	11	12
Intervals		1	b2	2	b3	3	4	#4 / b5	5	b6	6	b7	7	8
C	Major Scale/Ionian Mode	C		D		E	F		G		A		B	C
D	Dorian Mode	D		E	F		G		A		B	C		D
E	Phrygian Mode	E	F		G		A		B	C		D		E
F	Lydian Mode	F		G		A		B	C		D		E	F
G	Mixolydian Mode	G		A		B	C		D		E	F		G
A	Natural Minor Scale/Aeolian Mode	A		B	C		D		E	F		G		A
B	Locrian Mode	B	C		D		E	F		G		A		B

- ⇒ All but two of the modes contain a second (2): Phrygian and Locrian contain a flat second (b2) instead.
- ⇒ Three modes contain a major third (3) interval: Ionian, Lydian, and Mixolydian.
- ⇒ Four modes contain a minor third (b3): Dorian, Phrygian, and Aeolian, and Locrian.
- ⇒ All modes contain a perfect fourth (4) except for Lydian which has a #4. A “#4” can also be viewed as a b5 but Lydian already has a 5.
- ⇒ All modes contain a perfect fifth (5) except for Locrian which has a b5.
- ⇒ Three modes contain a flat sixth (b6): Phrygian, Aeolian, and Locrian.
- ⇒ Four modes contain a sixth (6): Ionian, Dorian, Lydian, and Mixolydian.
- ⇒ Five modes contain a flat seventh (b7): Dorian, Phrygian, Mixolydian, Aeolian, and Locrian.
- ⇒ Two modes contain a seventh (7): Ionian and Lydian.

The table above shows the modes of the C Major Scale and their intervals. Think of the pattern of intervals as a formula for the mode. Then you can transpose these modes. For Example, the A Mixolydian Mode (the 5th mode of the D Major scale) contains the notes (1) A, (2) B, (3) C#, (4) D, (5) E, (6) F#, and (b7) G. Notice that although the specific notes are different to G Mixolydian, the intervals are the same. This is because the number of semitones between each note is the same.

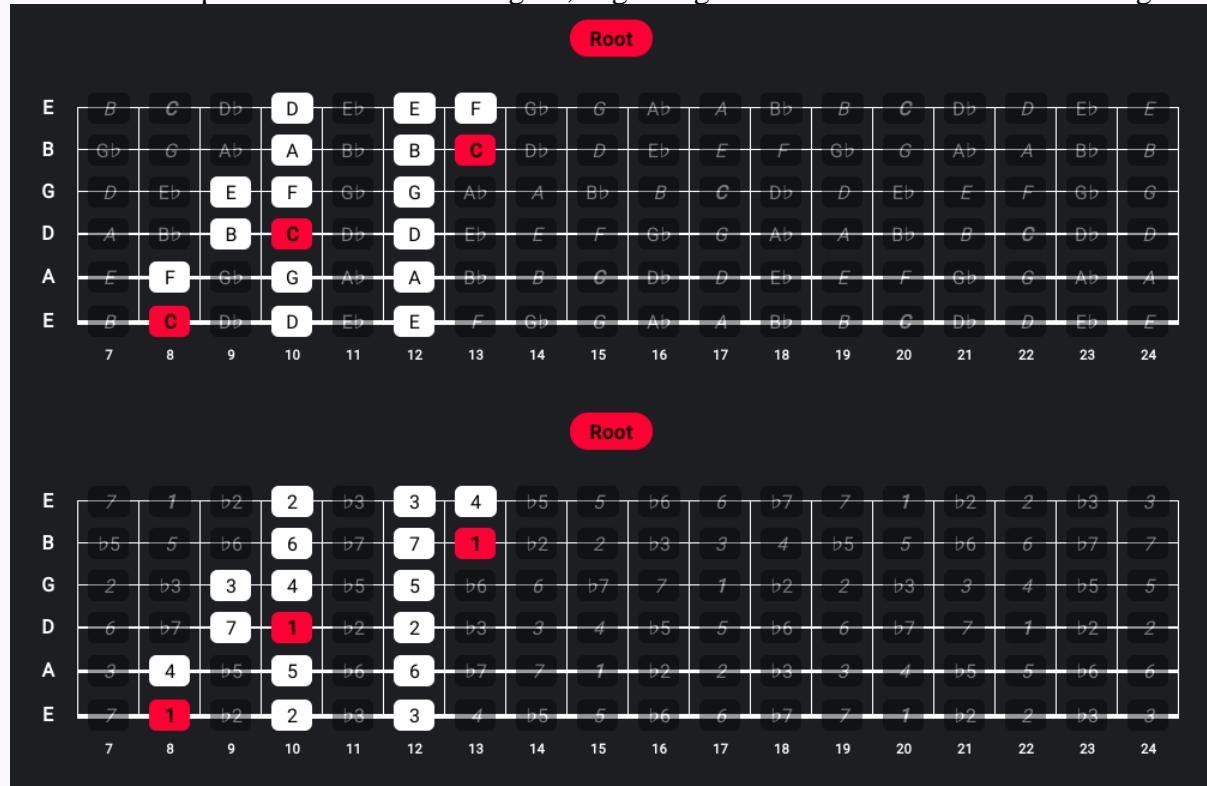
Semitones	0	2	4	5	7	9	10	12
Intervals	1	2	3	4	5	6	b7	8
A Mixolydian Mode	A	B	C#	D	E	F#	G	A

CONNECTING THE C MAJOR SCALE MODES ACROSS THE FRETBOARD

A diagram of each of the modes of C Major is provided below with notes and scale degrees. These modes are in order beginning with C Ionian. Each diagram is a 3 Notes Per String shape. The first shape begins on the 8th fret of the low E string. Notice that each mode shape begins to the right of the previous mode.

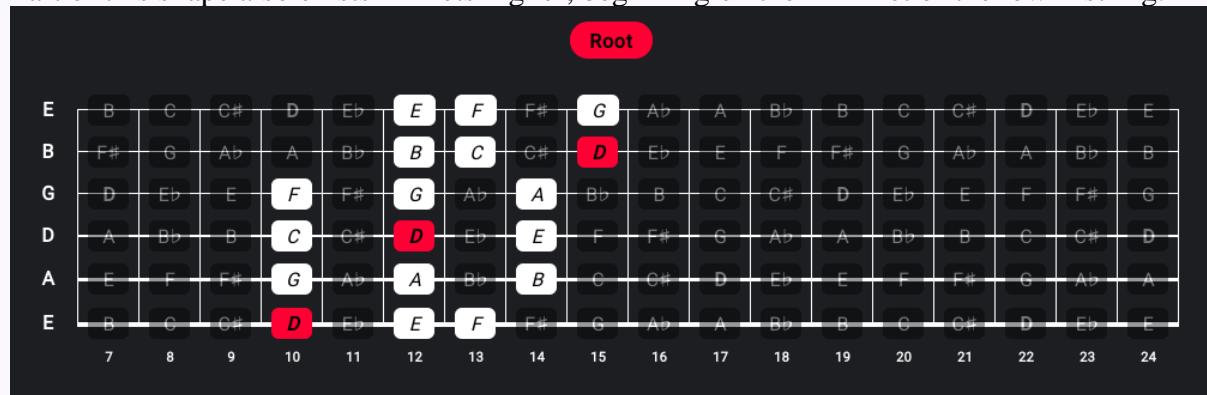
1. C IONIAN MODE (*C Major*)

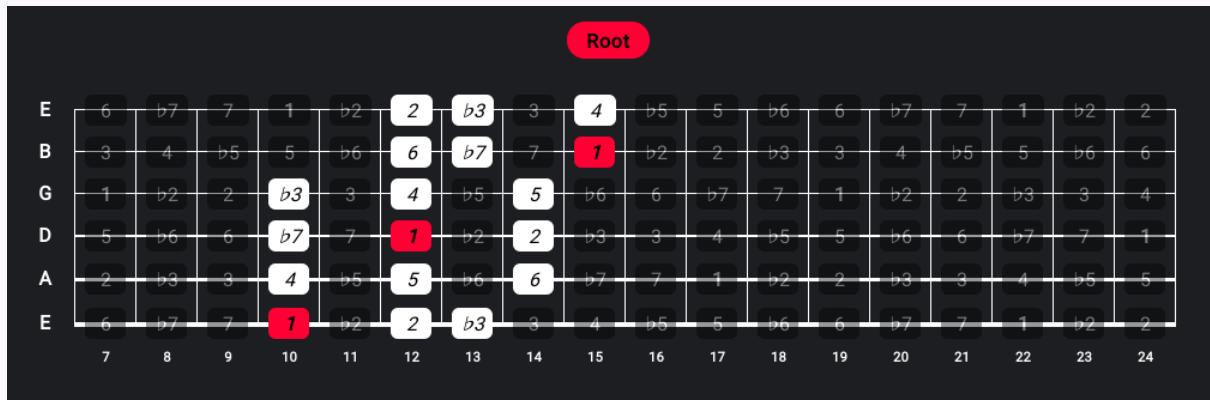
Part of this shape also exists 12 frets higher, beginning on the 20th fret of the low E string.



2. D DORIAN MODE

Part of this shape also exists 12 frets higher, beginning on the 22nd fret of the low E string.





3. E PHRYGIAN MODE

This shape also exists 12 frets lower, beginning on fret 0 of the low E string.

The top diagram shows a fretboard from fret 7 to 24, starting at the 1st fret of the E string. The bottom diagram shows a fretboard from fret 7 to 24, starting at the 0th fret (open) of the E string. Both diagrams highlight the E Phrygian mode notes: E (1), b7 (2), 7 (3), 1 (4), b2 (5), b3 (6), 4 (7). The 1st fret is highlighted in red in both diagrams.

4. F LYDIAN MODE

This shape also exists 12 frets lower, beginning on the 1st fret of the low E string.

This diagram shows a fretboard from fret 7 to 24, starting at the 1st fret of the E string. The mode follows the Lydian scale pattern: F (1), G (2), A (3), bB (4), C (5), D (6), E (7). The 1st fret is highlighted in red.

Root																							
E	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7					
B	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5					
G	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2					
D	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6					
A	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7	1	b2	2	b3	3					
E	b5	5	b6	6	b7	7	1	b2	2	b3	3	4	b5	5	b6	6	b7	7					
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					

5. G MIXOLYDIAN MODE

This shape also exists 12 frets lower, beginning on the 3rd fret of the low E string.

The figure consists of two fretboard diagrams for a B major scale. The top diagram shows the notes from B to E across 24 frets, with the root 'B' at the 7th fret. The bottom diagram shows the notes from B to E across 24 frets, with the root 'B' at the 15th fret.

Top Diagram Notes:

- Frets 7-16: B, C, D \flat , D, E \flat , E, F, F \sharp , G, A \flat
- Frets 17-24: A, B \flat , B, C, D \flat , D, E \flat , E, F \sharp , G, A \flat
- Root 'B' is at the 7th fret.
- Notes highlighted in red: G (fret 20), G (fret 17), G (fret 15).

Bottom Diagram Notes:

- Frets 7-16: B, C, D \flat , D, E \flat , E, F, F \sharp , G, A \flat
- Frets 17-24: A, B \flat , B, C, D \flat , D, E \flat , E, F \sharp , G, A \flat
- Root 'B' is at the 15th fret.
- Notes highlighted in red: 1 (fret 20), 1 (fret 17), 1 (fret 15).

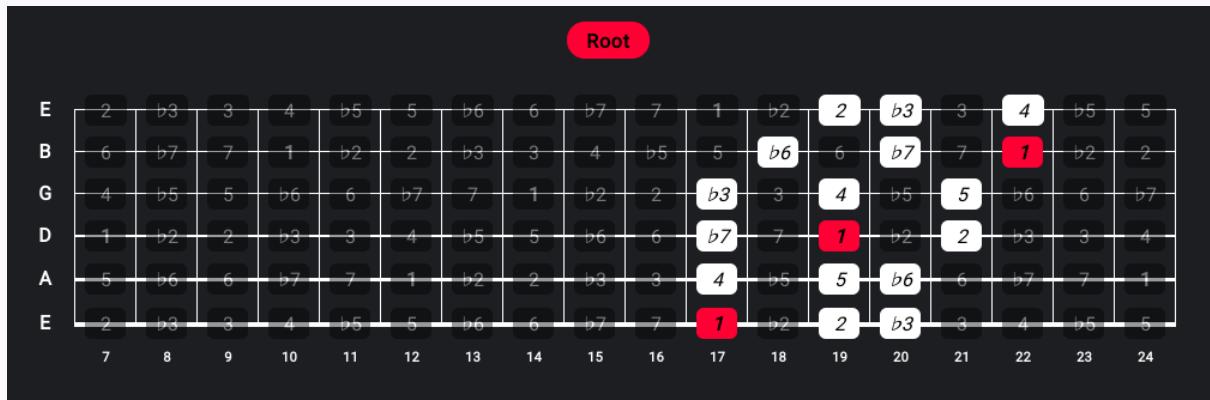
6. A AEOLIAN MODE (A *Natural Minor*)

This shape also exists 12 frets lower, beginning on the 5th fret of the low E string.

This shape also exists 12 frets lower, beginning on the 5th fret of the low E string.

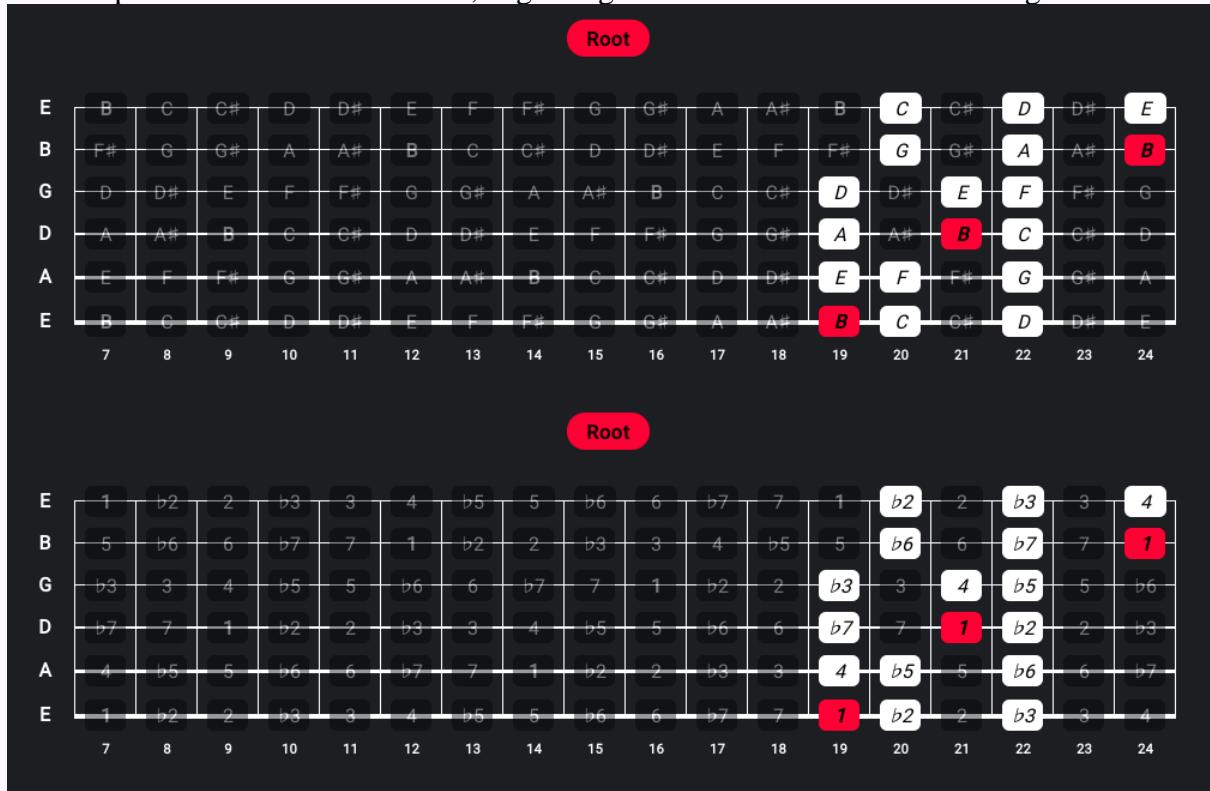
Root

	B	C	G#	D	Eb	E	F	F#	G	G#	A	Bb	B	C	C#	D	Eb	E
E	B	C	G#	D	Eb	E	F	F#	G	G#	A	Bb	B	C	C#	D	Eb	E
B	F#	G	G#	A	Bb	B	C	C#	D	Eb	E	F	F#	G	G#	A	Bb	B
G	D	Eb	E	F	F#	G	G#	A	Bb	B	C	C#	D	Eb	E	F	F#	G
D	A	Bb	B	C	C#	D	Eb	E	F	F#	G	G#	A	Bb	B	C	C#	D
A	E	F	F#	G	G#	A	Bb	B	C	C#	D	Eb	E	F	F#	G	G#	A
E	B	C	G#	D	Eb	E	F	F#	G	G#	A	Bb	B	C	G#	D	Eb	E
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24



7. B LOCRIAN MODE

This shape also exists 12 frets lower, beginning on the 7th fret of the low E string.



You have reached the end of this guide.

Scale and Arpeggio Diagrams were generated using fretflip.com. Tablature was generated using [Guitar Pro](https://guitarpro.com).