

Scales, Arpeggios and Modes

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Introduction

Applying music theory to the guitar is a bit different than other non-stringed instruments.

The reason is because anything that can be played in one single key on the guitar can then be “moved” to any other key by simply applying the same *shape* or *pattern*.

This is not possible on instruments such as the piano, saxophone, flute, etc. For those instruments, you must know note names, which notes are in which scales, etc. In other words, those other instruments do not have the same **movable shapes** that the guitar does.

While it is definitely beneficial to learn all of the note names across the neck, you can still get A LOT accomplished by simply applying the **movable shape theory** concepts that are discussed in this book.

- **NOTE:** This book is primarily focused on the **shape theory** aspect of the guitar. The Zombie Guitar website dives deep into many other music theory concepts which move beyond just the *shape theory* that is discussed in this book.

The movable shape/pattern concept applies to entire scales, portions of scales, full chords, *pieces* of chords, arpeggios, etc.

For the purposes of this book, we will primarily be looking at how shape theory applies to lead guitar playing (aka. "soloing"). However the concept of movability applies to ALL aspects of the guitar.

The movable *patterns* discussed in this book will provide you with a *soling framework* for which you can use to compose or improvise solos and/or lead lines.

In order to do this, you must first understand how to determine the **key** that a song or chord progression is in.

Once you determine the key, you can then apply the proper scale(s) which can then be used to compose or improvise your lead lines.

This book contains full fretboard diagrams of the fundamental scales, arpeggios, and modes in every key.

If you want to skip the first 60 or so pages, and just jump right to the end of book where the fretboard diagrams are, that would be perfectly fine. I believe that at least half of the people who purchase this book will do exactly that.

Why not? Just pull up a backing track, and start jamming. Who cares about theory? The fact that this is even possible is the beauty of the guitar!

On the other hand, if you want to gain a basic understanding of the fretboard layout and how music theory is applied to the guitar, then perhaps the first 60 or so pages may be of interest to you.

This book uses large font and occasionally has some dumb humor thrown in, so it's not a terribly boring read.

Whatever you decide to do though, it's up to you. You can use the book however you'd like. After all, it is your book.

Just make sure to have fun!

This zombie picture is just thrown in here to fill this empty space because I wanted to start the music theory section at the top of a fresh, new page.

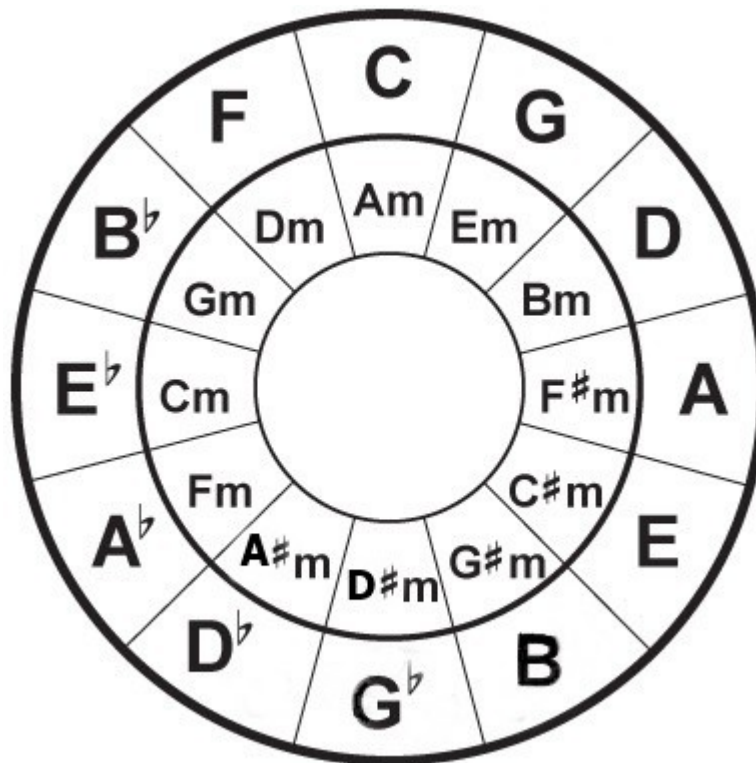


Guitar Music Theory 101

The Diatonic Scale and the 12 Keys in Music

This book contains the fundamental building blocks for lead guitar playing. While there are many 'exotic' scales that exist, you will find that you can accomplish 99.9% of what you are trying to achieve in your playing with just one single scale – **The Diatonic Scale**.

There are 12 keys in music, each of which is represented on the circle of fifths:



- The outer circle represents the MAJOR version of each of the 12 keys
- The inner circle represents the MINOR version of each of the 12 keys

You can think of the “major version” of each key as it's HAPPY form.

Alternatively, you can think of the “minor version of each key as it's SAD form.

Essentially, there are 12 PAIRS of major/minor combinations. These pairs are known as the relative major/minor pairs.

In short, a relative major/minor pair shares the exact same notes as one another.

For example, if you were to play the 'C major scale' on a piano, you would start at any of the possible 'C' notes, and then play through all of the white keys until you reached the next note 'C' in a higher pitch. The result would be the 'C major scale'.

The relative minor of 'C major' is 'A minor'. Therefore, if you were to start on any of the possible 'A' notes on the piano, and play through all of the white keys until you reached the next note 'A', you would have just played the 'A minor scale'.

So if you play only adjacent white keys starting and ending on 'C', you have the 'C major scale'. If you play only adjacent white keys starting and ending on 'A', you have the A minor scale.

C major and A minor are a relative major/minor pair.

Now let's take a look at the entire piano...

If you were to write a song on the piano, and that song consisted of chords and melody lines that only used white keys, then you would say that the song was in the 'key of C major' or the 'key of A minor'.

If the song had on overall HAPPY sound and feeling to it, and/or the song started/ended on a C major chord, then it would be safe to assume that the key of the song was 'C major'.

If the song had an overall SAD sound and feeling to it, and/or the song started/ended on an A minor chord, then it would be safe to assume that the key of the song was 'A minor'.

Many songs jump back and forth between the major and minor, but that does not mean that a key change is occurring. So long as the entire song contained chords and melody lines that only used white keys, then it remains in only one single KEY.

There are 12 possible keys in music.

Now there's a subtle difference between a 'scale' and a 'key'.

C major scale: C D E F G A B

If you were to play those 7 notes starting and ending on the note 'C', you would have just played the 'C major scale' in one octave.

You could also start on any 'C' and play through 2 octaves of the 'C major scale'. You could do the same thing for 3 octaves, etc.

The same thing would apply for the 'A minor scale' as well.

A minor scale: A B C D E F G

Now, you can use those 7 notes to create chords and melody lines. By doing so, you would be creating music that was in the 'key of C major (or A minor)'.

You could do the same thing for any of the 12 keys...

Let's take a look at another relative major/minor pair – G major/E minor.

The G major scale is: **G A B C D E F#**

The E minor scale is: **E F# G A B C D**

On the piano this would be 6 white keys and 1 black key. The 'F#' note is a black key.

What can you do with those 7 notes?

Well, you can either just play through either the G major scale or the E minor scale in 1 octave, 2 octaves, 3 octaves, or more.

Or...

You could write a piece of music that contained chords and melody lines that used only those 7 notes.

Maybe the first chord would be a G major chord...

G major chord: G – B – D

Maybe the second chord would be a D major chord...

D major chord: D – F# - A

Maybe the third chord is an E minor chord...

E minor chord: E – G – B

Maybe you want to keep your song simple, so you stick with just those three chords.

So far, this song is completely **diatonic** to the key of G major/E minor.

Some parts of the song sound happy, whereas maybe the choruses have a sadder feel to them. That's normal. The song is just jumping back and forth between its major version and its minor version.

As the singer sings over your rhythm chords, they use only notes contained in the G major/E minor scale. Therefore, the singing is completely *diatonic* to this particular key.

After 2 verses and 2 choruses, the lead guitarist steps up for their solo. They only use notes from the G major/E minor scale, which again are:

G A B C D E F#

This person is a seasoned guitar player, so they know how to utilize the entire neck of the guitar to play a solo. They understand that the notes 'G', 'A', 'B', 'C', 'D', 'E', and 'F#' can be found in many different spots on the fretboard.

The solo sounded amazing, and every single note that was played seemed to work perfectly with the overall flow of the song. This was due to the fact that the only notes used were contained in the G major/E minor scale (the key of the song).

This could also be stated as “They kept their playing completely diatonic to the key of G major/E minor”.

Things begin to get more complicated when you start throwing out-of-key chords, non-diatonic notes, and key changes into the mix. However, you must know the rules of how to remain **diatonic to a key** before you can break them.

The purpose of this book is to teach you 'the rules'.

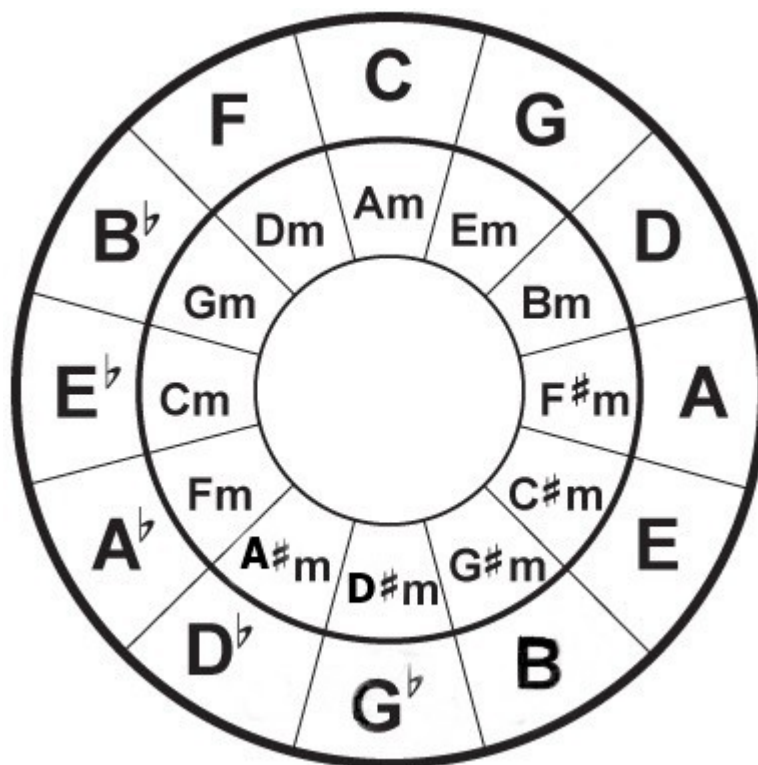
You can learn and understand the rules in a relatively short amount of time (hopefully by the time you finish this book), but it is the application of these rules that you will spend the rest of your life focusing on and refining.

“Minutes to learn, a lifetime to master”

This saying is true for learning music theory on the guitar. Many people are intimidated by music theory, but due to the movable nature of the guitar, applying music theory to the guitar is something that can be learned VERY quickly. However, “mastery” will take longer than just a single lifetime.

However, I don't want to just throw a hundred random charts at you without giving you some sort of explanation as to how to go about using them.

Let's take another look at the circle of fifths again:



As you can see there are 12 relative major/minor pairs. These are the 12 possible keys that you can play in.

Some keys can be referenced by either their 'sharp name' or their 'flat name'. For example the 'key of Gb major' and the 'key of F# major' are the exact same thing since Gb and F# are the exact same note. When a note has 2 possible names, it is considered to be **enharmonic**.

In order to keep things a little less confusing, this book will refer to the MAJOR version of the keys by their flat name and the MINOR version of the keys by their sharp name. Exceptions being the key of Gb/F# major and A#/Bb minor. You will see both of these used as well.

This may be a bit confusing to some people, but fret not my friend (pun intended), you don't really need to worry about a lot of this theoretical stuff when it comes to the guitar since it's really just a matter of remembering how to play a bunch of movable shapes and patterns.

Anyway, back to the 12 keys in music...

Here are the notes that are contained in each of the 12 keys as viewed from the major perspective:

C major: C D E F G A B
G major: G A B C D E F#
D major: D E F# G A B C#
A major: A B C# D E F# G#
E major: E F# G# A B C# D#
B major: B C# D# E F# G# A#
F# or Gb major: F# G# A# B C# D# E#
Db major: Db Eb F Gb Ab Bb C
Ab major: Ab Bb C Db Eb F G
Eb major: Eb F G Ab Bb C D
Bb major: Bb C D Eb F G A
F major: F G A Bb C D E

Here are the notes that are contained in each of the 12 keys as viewed from the minor perspective:

A minor: A B C D E F G
E minor: E F# G A B C D
B minor: B C# D E F# G A
F# minor: F# G# A B C# D E
C# minor: C# D# E F# G# A B
G# minor: G# A# B C# D# E F#
D# minor: D# E# F# G# A# B C#
A# or Bb minor: Bb C Db Eb F Gb Ab
F minor: F G Ab Bb C Db Eb
C minor: C D Eb F G Ab Bb
G minor: G A Bb C D Eb F
D minor: D E F G A Bb C

Things get a bit confusing the closer you get towards the bottom of the circle. As you can see, the key of F#/Gb major (or D# minor) is full of sharps (or flats), and there really is no such thing as the note 'E#', since the next highest pitch above the note 'E' is the note 'F'. However, in order to avoid writing both 'F' and 'F#' in the same grouping of notes, 'E#' was used.

Is this confusing you?

No worries my friend. If you were learning how to improvise and compose solos on the saxophone, flute, or piano then you would need to memorize all of this stuff.

Fortunately, you do not need to know any of this stuff in order to apply music theory to the guitar. Let me help to illustrate this concept by giving you some fretboard diagrams.

Here is the C major scale spanned across the entire neck of the guitar:

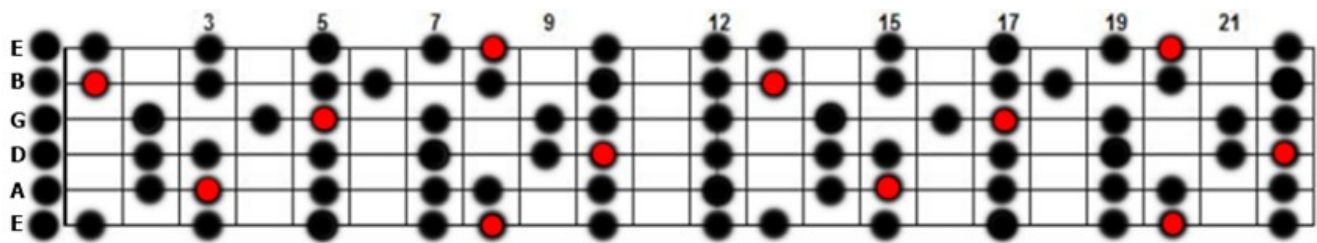


figure 1

On this diagram, the red dots indicate all of the possible places that the note 'C' can be found on the fretboard.

The black dots indicate the remaining 6 notes of the C major scale.

In other words, this fretboard diagram shows you all of the possible places that you can play the notes 'C', 'D', 'E', 'F', 'G', 'A', and 'B'. If you are able to memorize this scale, in this key, across the entire neck of the guitar, then you will have the ability to play in the 'key of C major' and the 'key of A minor'.

When viewing things from the minor perspective, I use white dots to indicate the tonic note of the scale, which in this case would be the note 'A'.

Now here is the A minor scale spanned across the entire neck of the guitar:

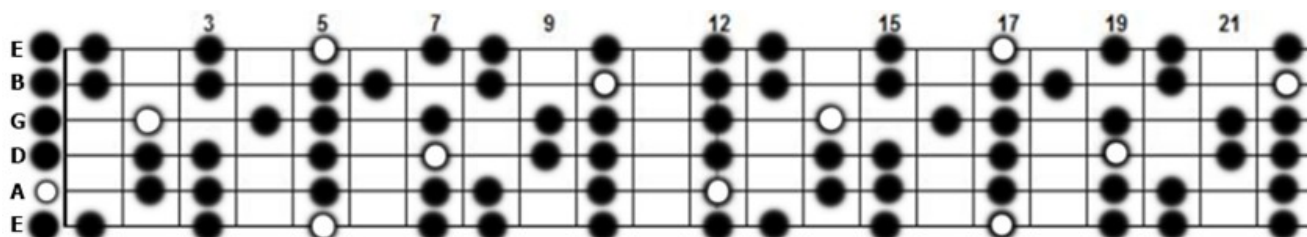


figure 2

Notice that everything is exactly the same as the diagram for C major:

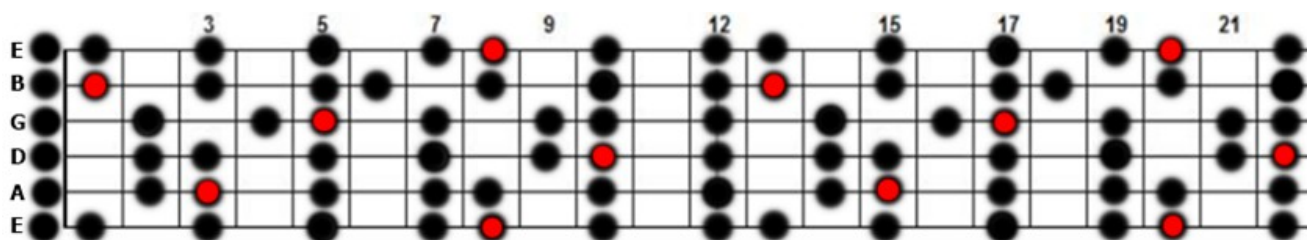


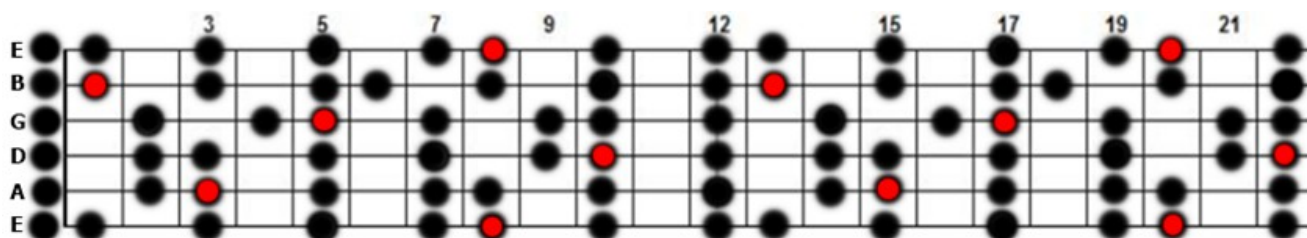
figure 1

The only difference is the location of the colored note, which indicates the **tonic note**, which is 'A' in figure 2 and 'C' in figure 1.

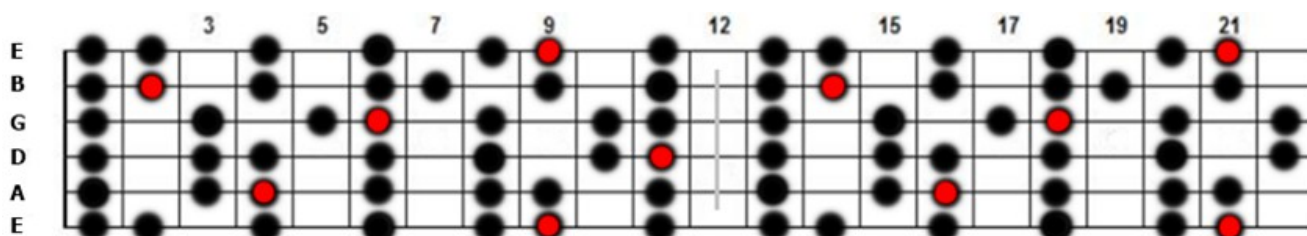
These 2 diagrams are showing you all of the available notes for this particular key. It's 'A minor' if you make your tonic note, or tonal center 'A'. It's 'C major' if you make your tonic note, or tonal center 'C'.

Now, due to the movable nature of the guitar, if you are able to successfully memorize this scale spanned across the entire neck of the guitar, then you will also have the ability to play/improvise/compose solos in all 12 keys. All that is required is a simple 'shift' of all the notes.

Take the key of 'C major' for example:

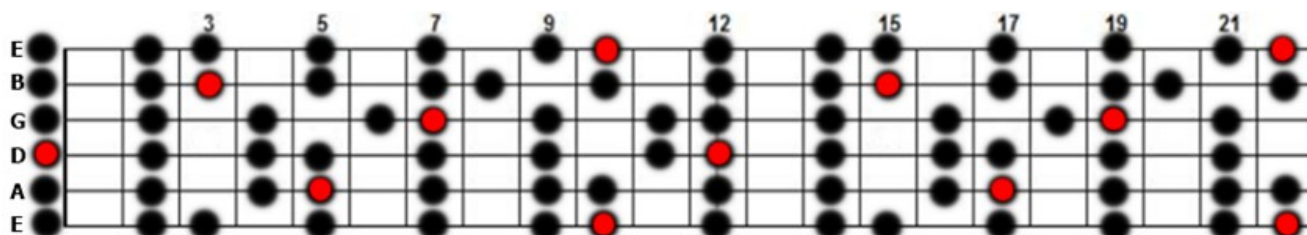


Now, take the key of 'Db major' for example:



Do you notice how everything just simply 'shifted' up one fret?

Next, take a look at the fretboard diagram for the key of 'D major':



Again, notice the simple 1-fret shift....

That's the beauty of the guitar for ya!

Although the C major scale, Db major scale, and D major scale contain different notes, the patterns are identical to one another. The only difference is a shift of the patterns up or down the fretboard.

So you really only need to memorize 1 scale 'pattern' spanned across the entire fretboard, and in doing so, you will have the ability to improvise and/or compose solos in any of the 12 keys.

In a nutshell, you can simply learn this diatonic scale using whatever 'method' of pattern memorization that you prefer, and you will then have the ability to improvise/compose solos in any of the 12 possible keys.



What About the Pentatonic Scale?

As I said in the beginning of this book, there is really only 1 scale to learn – the diatonic scale.

So what's up with this pentatonic scale thing that all the cool kids are talking about?

Well, the pentatonic scale is simply just 5 of the 7 notes of the full diatonic scale.

For example, if you were to look at the notes of the 'C major scale' and the 'C major pentatonic scale' right next to one other:

C major scale: C D E F G A B

C major pentatonic scale: C D E G A

Notice how the pentatonic scale just simply uses 5 of the 7 notes from the full diatonic scale.

Of course, you could also view this from the minor perspective as well:

A minor scale: A B C D E F G

A minor pentatonic scale: A C D E G

Again, the pentatonic scale just uses 5 of the 7 notes of the full diatonic scale.

Of course the C major pentatonic scale and the A minor pentatonic scale contain the exact same notes as each other since they are a relative major/minor pair.

Here are the notes that are contained in each of the 12 possible pentatonic scales as viewed from the major perspective:

C major: C D E G A
G major: G A B D E
D major: D E F# A B
A major: A B C# E F#
E major: E F# G# B C#
B major: B C# D# F# G#
F# or Gb major: F# G# A# C# D#
Db major: Db Eb F Ab Bb
Ab major: Ab Bb C Eb F
Eb major: Eb F G Bb C
Bb major: Bb C D F G
F major: F G A C D

Here are the notes that are contained in each of the 12 possible pentatonic scales as viewed from the minor perspective:

A minor: A C D E G
E minor: E G A B D
B minor: B D E F# A
F# minor: F# A B C# E
C# minor: C# E F# G# B
G# minor: G# B C# D# F#
D# minor: D# F# G# A# C#
A# or Bb minor: Bb Db Eb F Ab
F minor: F Ab Bb C Eb
C minor: C Eb F G Bb
G minor: G Bb C D F
D minor: D F G A C

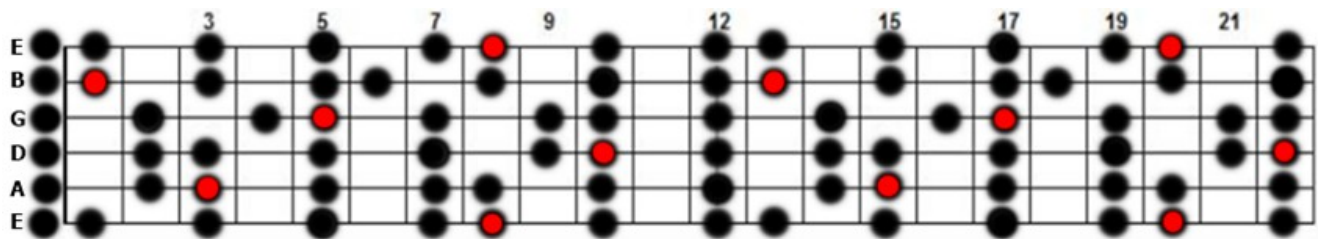
You can compare these to the full diatonic scales from the previous section to verify that only 5 of the 7 total notes are used in each case.

You can also verify that every single relative major/minor pair contains the exact same notes as one another. This applies to both the full diatonic scale and the pentatonic scale for each of the 12 possible keys.

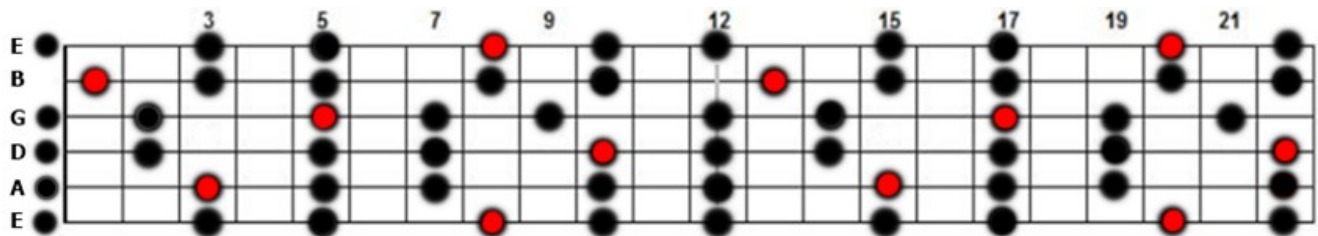
Therefore, you can view the pentatonic scale as a simplified version of the full diatonic scale.

Next, let's take a look at some fretboard diagrams to help illustrate this concept:

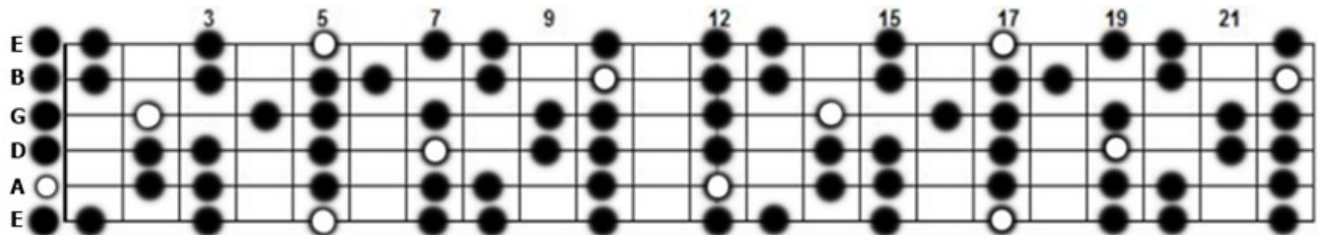
C major scale:



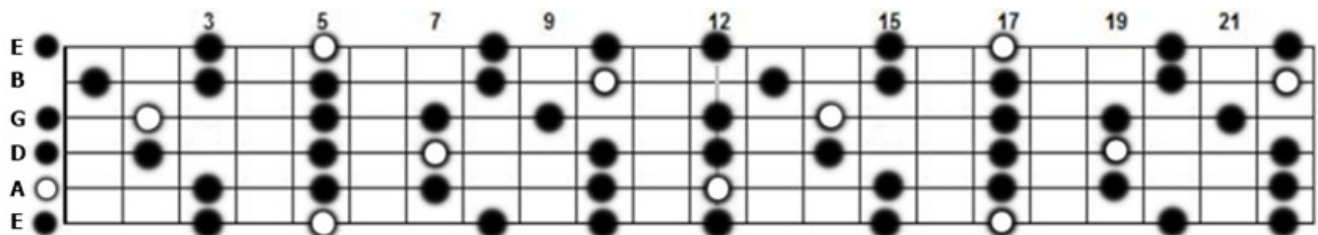
C major pentatonic scale:



A minor scale:



A minor pentatonic scale:



Notice, that the 'C major pentatonic scale' is just a simplified version of the 'C major scale'. The same is true when viewed from the minor perspective as well.

Also, notice that the only difference between the major perspective and the minor perspective is a simple change in the tonic note, or *tonal center* of the scale patterns.

As you will see in the upcoming sections, the movability concept applies to every theoretical concept on the guitar – scales, modes, chords, arpeggios, shapes, patterns, etc.

If you can do it in one key, you can do it in all 12. That's what makes learning music theory on the guitar so much easier than any other instrument!

Therefore, by knowing the following:

- The major scale and minor scale are the same exact thing, with just a different *tonic note*, or *tonal center*.
- The pentatonic scale is just a simplified version of the full diatonic scale in that it uses 5 of the 7 total notes.
- Once you know the scale 'patterns' for one key, you have the ability to improvise/compose solos in any of the 12 keys.

You are still left with just one scale – **The Diatonic Scale**.

What are Arpeggios, and how do you Apply Them?

Arpeggios sound a lot more intimidating than they actually are.

Arpeggios are simply **chords**. However unlike chords, all the notes don't have to be played at the same time. They *can* be, but they don't *have* to be.

If you were to grab your acoustic guitar and sit around the campfire strumming a C major chord all night long, what you would be doing is simultaneously be playing the notes 'C', 'E', and 'G'.

C major chord: C E G

The basic, open-position C major chord that beginners are usually taught right away spans across 5 strings. Therefore, notes are sometimes repeated within the many possible chord shapes on the guitar. Nonetheless, any combination of 'C', 'E', and 'G' will result in a C major chord being played.

Now, let's say you wanted to go head to head in a guitar battle against Yngwie Malmsteen. One of your flashy, go-to guitar tricks could be to 'sweep through arpeggios'.

If you wanted to sweep through the 'C major arpeggio' using a pattern that spans across 6 strings, you might find yourself playing the notes:

C – E – G – C – E – G

Or maybe you want to start on a note other than 'C':

E – G – C – E – G – C

It doesn't matter how you play the notes, or what order that you play them in. So long as you are only playing the notes 'C', 'E', and 'G', then you are incorporating the 'C major arpeggio' into your playing.

In music, there are 12 major chords and 12 minor chords. Each chord contains 3 notes, otherwise known as the **triads**, and they are as follows:

Major Chords/Major Triads:

C major (C): C E G
G major (G): G B D
D major (D): D F# A
A major (A): A C# E
E major (E): E G# B
B major (B): B D# F#
Gb major (Gb): Gb Bb Db
Db major (Db): Db F Ab
Ab major (Ab): Ab C Eb
Eb major (Eb): Eb G Bb
Bb major (Bb): Bb D F
F major (F): F A C

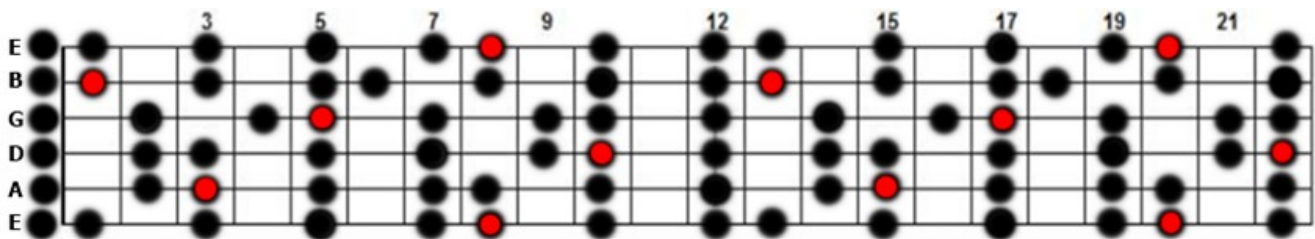
Minor Chords/Minor Triads:

A minor (Am): A C E
E minor (Em): E G B
B minor (Bm): B D F#
F# minor (F#m): F# A C#
C# minor (C#m): C# E G#
G# minor (G#m): G# B D#
D# minor (D#m): D# F# A#
A# minor (A#m): A# C# F
F minor (Fm): F Ab C
C minor (Cm): C Eb G
G minor (Gm): G Bb D
D minor (Dm): D F A

Now just as you can take a scale, which consists of 7 notes, and span it across the entire fretboard in order to create an overall *framework of scale patterns*, you can do the same thing with these 3-note triads. The result will be a *framework of arpeggio patterns*.

Let's take a look at some fretboard diagrams:

Let's start with the key of C major:

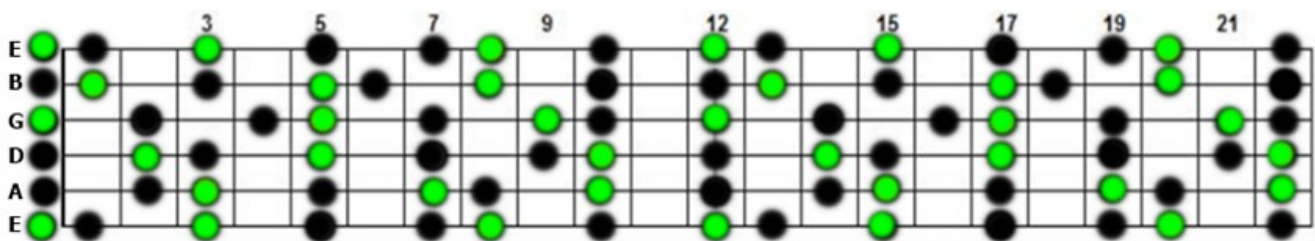


We already know that the notes of the C major scale are:

C D E F G A B

Therefore, if we were to outline the C major arpeggio shapes/patterns *within this diatonic framework*, the notes 'C', 'E', and 'G' would still be diatonic to the 'key of C major'.

Here's what the **C major arpeggio framework within the key of C major** would look like:



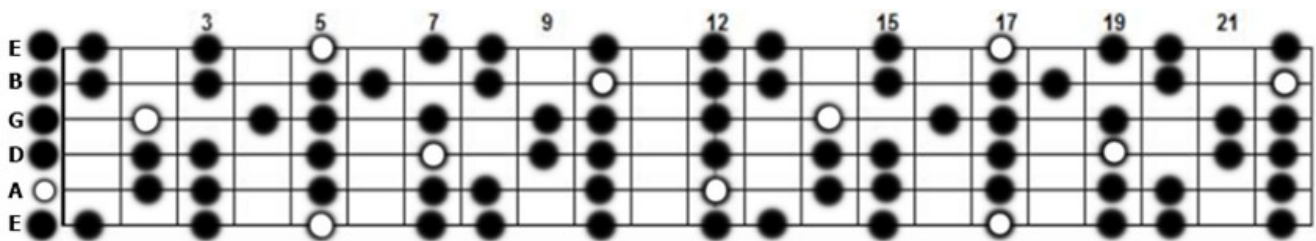
The green notes indicate all of the possible places to play the notes 'C', 'E', and 'G' across the fretboard.

Notice that there is no more red note. That is because the note 'C' is now part of the C major arpeggio framework within this key.

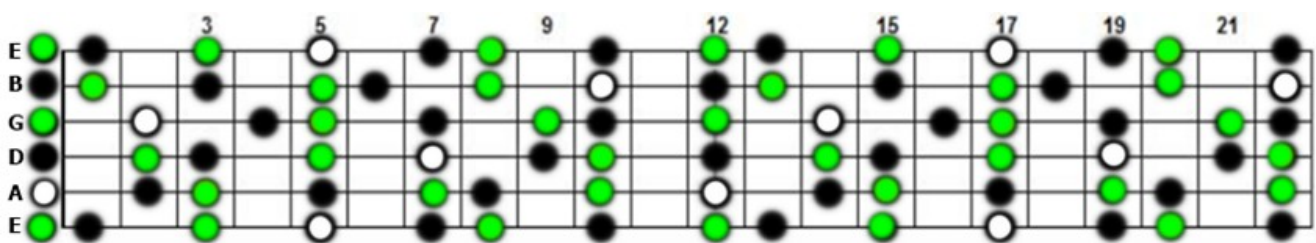
The overall key is 'C major', with the tonic note being the note 'C', but the note 'C' is now colored green since it is part of the arpeggio framework that we are focusing on.

Within the key of C major, you could focus on playing C major arpeggios up and down the fretboard by playing only the notes 'C', 'E', and/or 'G'.

If we instead started out by viewing the fretboard from the perspective of A minor, our diatonic framework would be as follows:



If we then highlighted the C major arpeggio framework, the result would be:



In reality, nothing actually changed since you will not have highlighted notes on your guitar while you are actually playing it.

However for visualization purposes, we see that the tonic note of the overall key, which in this case is the note 'A', is not part of this particular arpeggio framework. The C major arpeggio in all of its' shapes and patterns is still diatonic to this key though.

Every Key Contains 7 Diatonic Chords/Arpeggios

So far, here is what we have learned:

- There is only 1 scale that you really need to worry about, and that is the **diatonic scale**.
- There are 12 keys in music, and each key can be viewed from the major perspective or the minor perspective.
- The major and minor scale are the same thing, just with a different *tonic note*, or *tonal center*.
- Each of the 12 possible diatonic scales contains 7 notes.
- The **pentatonic scale** is just a simplified version of the full diatonic scale, as it contains 5 of the 7 possible notes.
- Within the diatonic scale, are **arpeggios**. Arpeggios are simply chords that are dispersed across the entire fretboard.
- Due to the movable nature of the guitar, anything that can be done in 1 key, can be done in all 12 keys by simply shifting the 'pattern/shape' up or down the fretboard.

We are now going to take a deeper look into the diatonic scale and look at which chords can be found within each key. Once we know which chords are found in each of the 12 keys, we can then extrapolate that information into arpeggio shapes that span the entire fretboard.

Let's start with the 'key of C major'.

C major: C D E F G A B

Starting on any of the 7 possible notes, and then creating a 3-note chord by counting 'every other note' would yield:

C major (C): C E G

D minor (Dm): D F A

E minor (Em): E G B

F major (F): F A C

G major (G): G B D

A minor (Am): A C E

B diminished triad: B D F

The diminished triad is a bit uncommon in popular music, but for the sake of completion you will see this diminished triad included in the arpeggios section of the fretboard diagrams.

Notice that there are 3 major triads, 3 minor triads, and 1 diminished triad

These 7 triads are **diatonic** to the key of C major because they only contain notes from the C major scale.

The same theory holds true if you were to view this key from the minor perspective. The same exact 7 triads would be present.

This also holds true for all 12 keys. Each key contains 7 triads, 3 of which are major, 3 that are minor, and 1 diminished triad. You can take any of the 12 possible keys, lay out its' 7 notes, and just count 'every other note' just as we did above...the result will be the 7

diatonic chords for that particular key - 3 major, 3 minor, and 1 diminished triad.

Each diatonic chord is assigned a roman numeral from 1 to 7. Major chords are given an UPPERCASE roman numeral, minor chords are assigned a lowercase roman numeral, and the diminished triad is a lowercase roman numeral with a little ° next to it. So the 7 diatonic chords in the key of C major are:

I – C
ii – Dm
iii – Em
IV – F
V – G
vi – Am
vii° - Bdim

Therefore, if you were to compose a song that consisted of only those chords (it doesn't have to be all of them), then the song would be completely diatonic to the key of C major.

The same exact 7 chords are diatonic to the key of A minor as well. A minor is just the sadder version of C major, and vise-versa.

Sometimes the roman numeral numbering system is altered for minor keys treating the first chord as the 'i chord'. The altered numbering system for the key of A minor would therefore be:

i – Am
ii^o - Bdim
bIII – C
iv – Dm
v – Em
bVI – F
bVII – G

Notice that the same exact 7 chords are found in the key of A minor that are found in the key of C major.

The reason all of those weird flat (*b*) symbols are found in front of the roman numerals for the minor key is due to the fact that the scale formula for the minor scale is:

Natural Minor Scale Formula: 1 – 2 – b3 – 4 – 5 – b6 – b7

We can still apply the “every other note trick” to this new scale formula, and the exact same 7 chords would be formed, albeit in a different order.

Take a look at each of the 12 keys, viewed from both the major perspective and the minor perspective, and see that each key contains exactly 7 diatonic chords:

Key	I	ii	iii	IV	V	vi	vii^o
C	C	Dm	Em	F	G	Am	Bdim
G	G	Am	Bm	C	D	Em	F#dim
D	D	Em	F#m	G	A	Bm	C#dim
A	A	Bm	C#m	D	E	F#m	G#dim
E	E	F#m	G#m	A	B	C#m	D#dim
B	B	C#m	D#m	E	F#	G#m	A#dim
F#/Gb	F#	G#m	A#m	B	C#	D#m	Fdim
Db	Db	Ebm	Fm	Gb	Ab	Bbm	Cdim
Ab	Ab	Bbm	Cm	Db	Eb	Fm	Gdim
Eb	Eb	Fm	Gm	Ab	Bb	Cm	Ddim
Bb	Bb	Cm	Dm	Eb	F	Gm	Adim
F	F	Gm	Am	Bb	C	Dm	Edim

You could also replace any of the major keys with its' respective relative minor, and the same 7 diatonic chords would still apply:

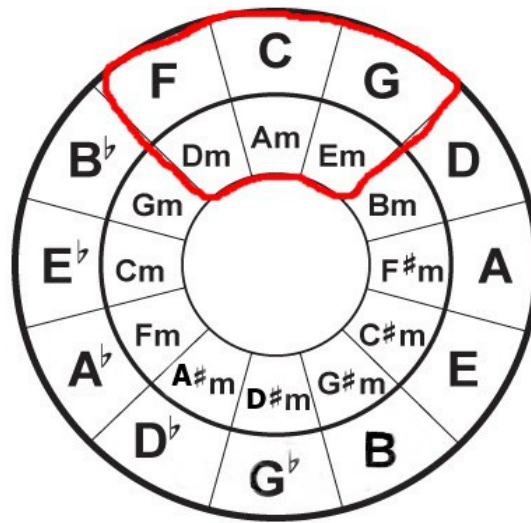
Key	i	ii°	bIII	iv	v	bVI	bVII
Am	Am	Bdim	C	Dm	Em	F	G
Em	Em	F#dim	G	Am	Bm	C	D
Bm	Bm	C#dim	D	Em	F#m	G	A
F#m	F#m	G#dim	A	Bm	C#m	D	E
C#m	C#m	D#dim	E	F#m	G#m	A	B
G#m	G#m	A#dim	B	C#m	D#m	E	F#
D#m	D#m	Fdim	F#	G#m	A#m	B	C#
Bbm	Bbm	Cdim	Db	Ebm	Fm	Gb	Ab
Fm	Fm	Gdim	Ab	Bbm	Cm	Db	Eb
Cm	Cm	Ddim	Eb	Fm	Gm	Ab	Bb
Gm	Gm	Adim	Bb	Cm	Dm	Eb	F
Dm	Dm	Edim	F	Gm	Am	Bb	C

You can see that the exact same chords are found in each of the 12 keys. The numbering system and order of the chords is just different for the minor keys.

It's often convenient to keep the roman numeral numbering system the same for both major and minor keys though, and just simply treat every key as a major key. Therefore, even if you were playing in the 'key of A minor', you would still consider the A minor chord to be the 'vi chord' instead of the 'i chord'.

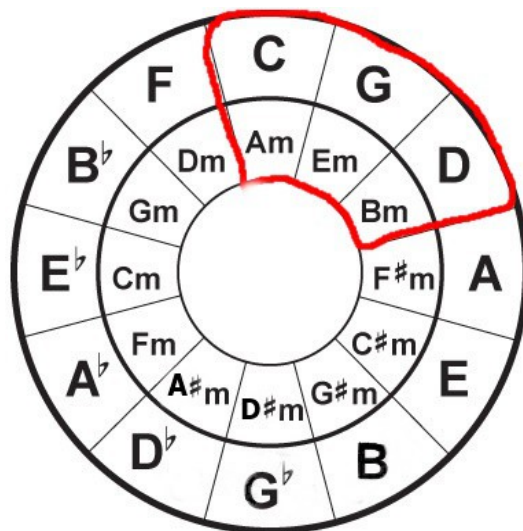
This is especially true if there aren't any non-diatonic (aka. out-of-key) chords being used in the song or progression.

The circle of fifths groups 6 of the 7 diatonic chords for each key together as follows:

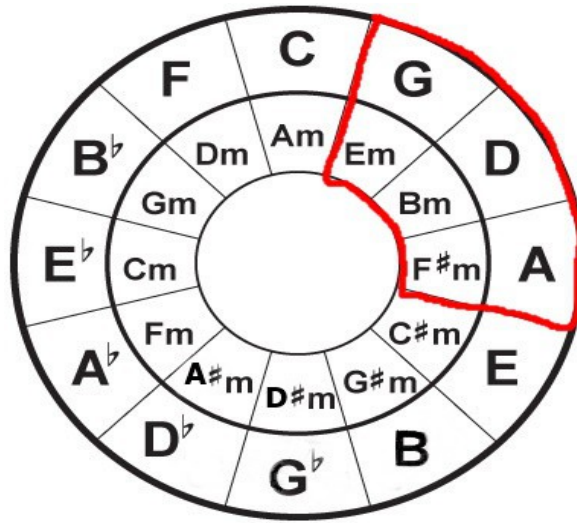


The chord symbols in the center of this grouping of 6 indicates the key of C major/A minor.

As you can see, the same thing applies to the key of G major/E minor as well:



And to the key of D major/B minor...

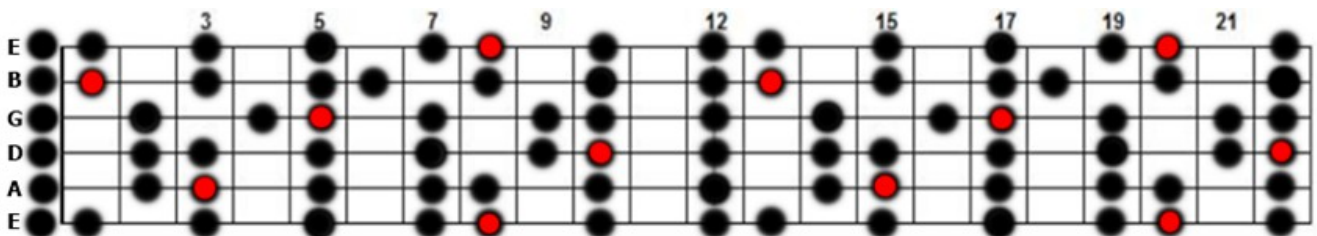


You can verify that this holds true for all 12 keys.

So knowing that each of the 12 keys has 7 diatonic chords in it, 3 of which are major and 3 that are minor (and the one weird diminished triad that doesn't fall into the grouping of 6), you can now extrapolate these chords into arpeggios that span the entire fretboard.

Let's take a look at some fretboard diagrams to illustrate this example:

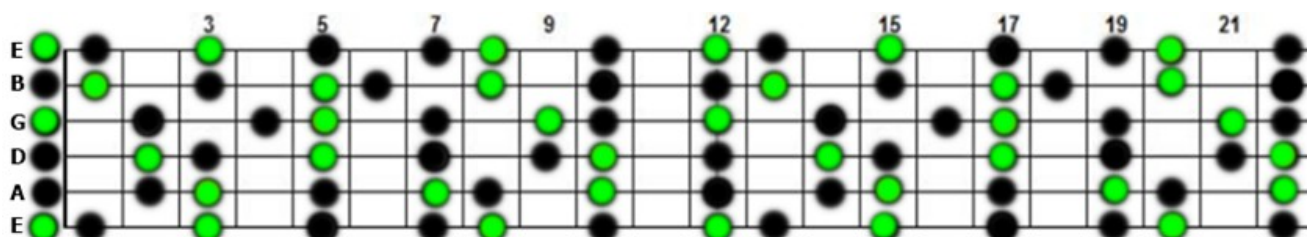
Let's start with the key of C major:



In the previous section, we already looked at the 'I chord' spanned across the entire fretboard, which is the 'C major chord':

Here is the 'I chord' in the 'key of C major',

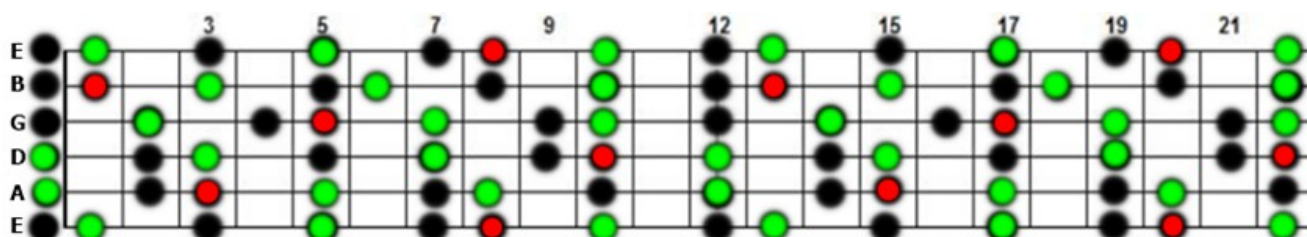
I chord (C):



The green dots indicate the notes 'C', 'E', and 'G' everywhere that they can be found on the fretboard, and the black dots are the remaining scale notes that are not part of the arpeggio.

Let's take a look at the 'ii chord' in the 'key of C major',

ii chord (Dm):



You see that the red dot came back...

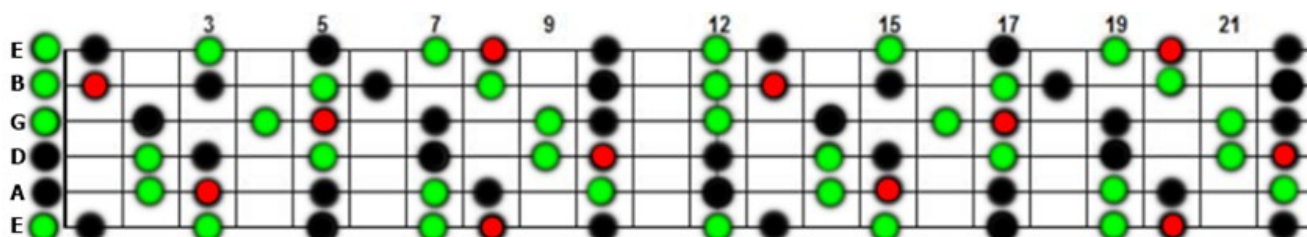
That's because the red dot indicates the *tonic note* 'C' of the overall key. Whereas, the green dots represent the *chord tones* of the particular chord at hand.

In this case, we are taking a look at the notes of the **D minor chord within the key of C major**. The green dots indicate the notes 'D', 'F', and 'A', spanned across the fretboard, whereas the black dots and red

dot are the rest of the notes found in the C major scale.

Next, let's take a look at the 'iii chord' in the 'key of C major',

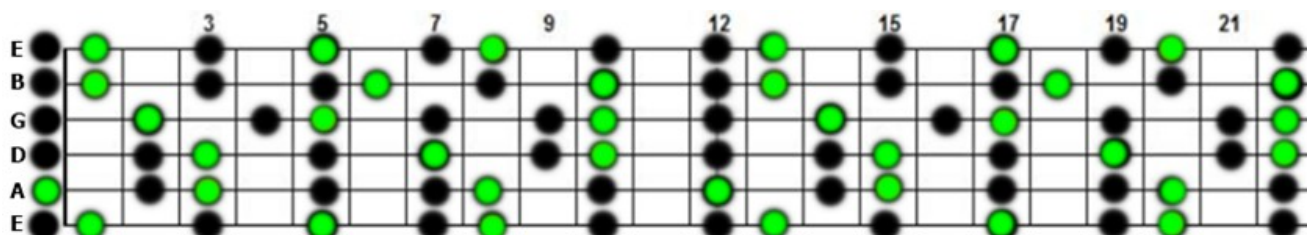
iii chord (Em):



Again, the green dots represent the notes of the E minor chord within this key, which are 'E', 'G', and 'B'.

And here is the 'IV chord' in the 'key of C major',

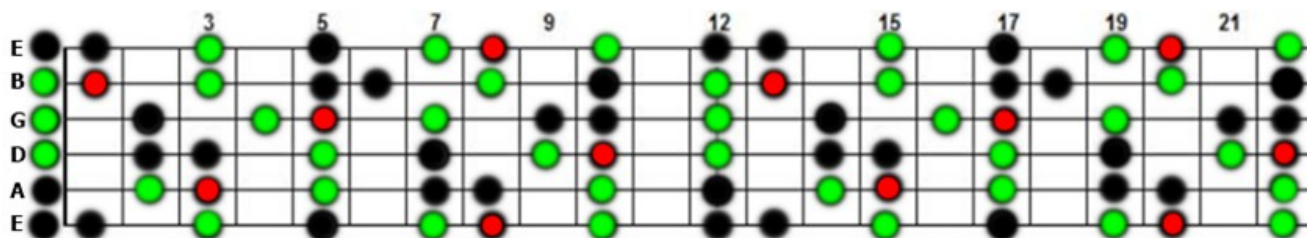
IV chord (F):



The green dots in this case, indicate the notes 'F', 'A', and 'C'.

Here is the 'V chord' in the 'key of C major',

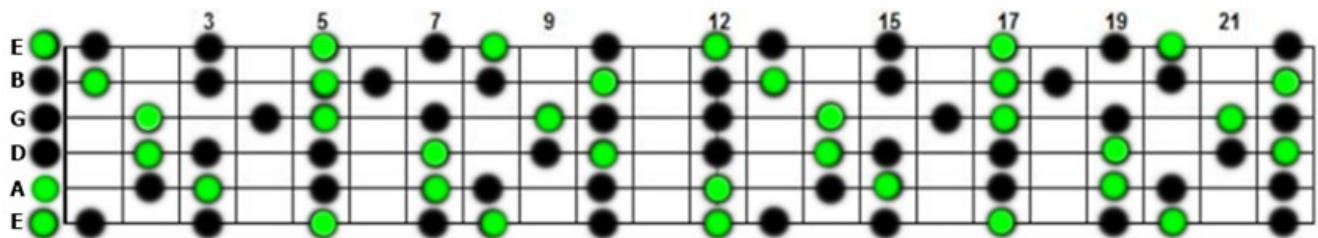
V chord (G):



The green dots indicate the notes 'G', 'B', and 'D'.

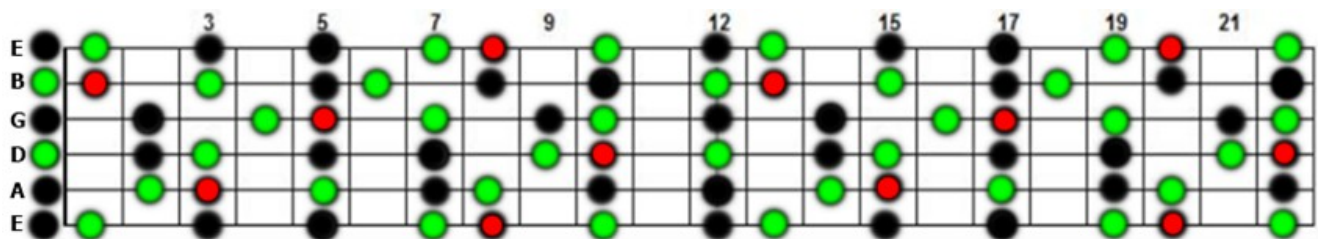
Here is the 'vi chord' in the 'key of C major',

vi chord (Am):



Finally, you have the 'vii° chord' found in the 'key of C major',

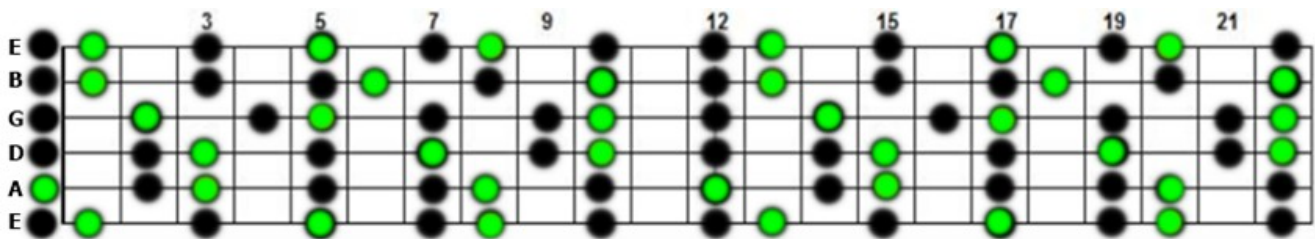
vii chord (Bdim):



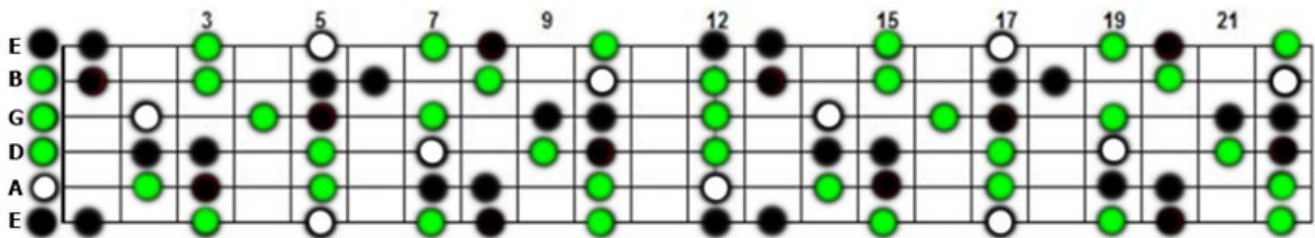
The green dots indicate the notes 'B', 'D', and 'F'.

From the perspective of the 'key of A minor':

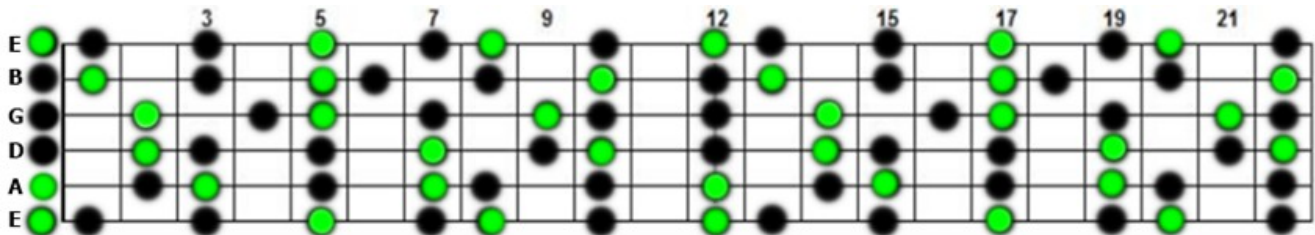
IV chord (or bVI chord) (F):



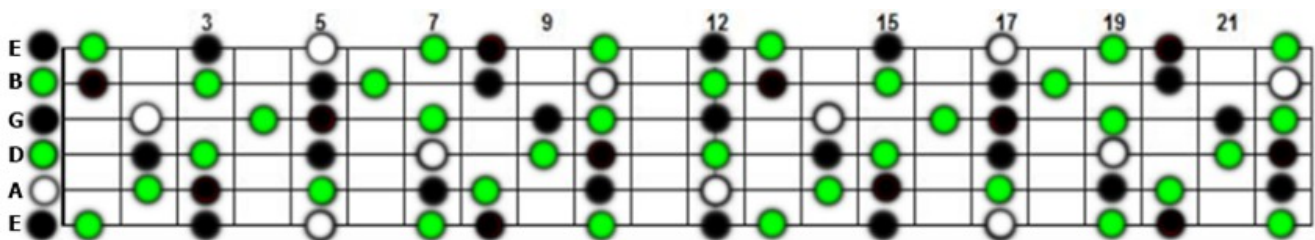
V chord (or bVII chord) (G):



vi chord (or i chord) (Am):



vii° chord (or ii° chord) (Bdim):



When learning the fundamentals of music theory, I suggest forgetting about altering the roman numeral numbering system for minor keys (which is what you see in the parentheses), and simply

treat every key as a major key. This will solidify your understanding of the relative major/minor concept. Not too mention it's less confusing when you do things that way.

Just as there are several methods of fretboard visualization to help you to learn the diatonic scale and pentatonic scale patterns, there are also methods to help you learn and internalize these arpeggios shapes.

Of course, just as the scale patterns are movable, so are these arpeggio/chord shapes. EVERYTHING on the guitar is movable!

Using these arpeggio shapes as your framework, within the overall key/scale, you will find that your leads sound much more connected to the underlying chord progression.

You can shred through the scale patterns over top of a chord progression as well, but that can sometimes result in your lead playing sounding somewhat disconnected from the rest of the song.

Of course you can mix and match between “shredding through scale patterns”, “targeting chord tones” and/or “sweeping through arpeggio shapes”. The sky is the limit.

Understanding the theory is only the first step. You will spend the remainder of your life attempting to master it.

What about 7ths, 9ths, 11ths, etc.?

Focusing on arpeggios beyond just the major and minor triads is beyond the scope of this book.

Why?

Because there are SOOOO many chord possibilities out there, and this extends well beyond “guitar music theory 101”. If you would like to further your study on extended chords and their respective arpeggios, you might want to pick up a Jazz theory book.

However, that's not to say that you can't still do a TON of awesome stuff with just the basic major and minor arpeggios.

Here's how I view things...

- You have your triad chord tones
- You have your other scale tones that are part of the scale, but are not part of the triad of the underlying chord

When you are improvising or composing a solo over a chord progression, you have the choice to either play chord tones or non-chord tones. In this context, “chord tones” refers to just the major or minor triad, excluding any chord extensions. Therefore, you could also refer to them as “triad tones”.

Triad tones will ALWAYS sound good.

Non-triad tones can also sound good as well, and they can add a lot of flavor and personal style to your playing.

More often than not however, you want to be landing on triad tones of the underlying chord within the chord progression in order to keep your leads sounding connected to the rhythm section. You would use the scale tones as “paths” to help you walk from one triad tone to the next, following along with the chord progression.

The scale becomes your road, and the triad tones become your destination.

You want to have the ability to be able to consciously land on triad tones on command.

You also want to have the ability to be able to consciously land on NON-triad tones on command as well. Non-triad tones are what create all of the beautiful, melodic chord extensions to the basic major and minor triads. For the purposes of this book you can simply use your ear to help guide you towards which non-triad tones you would like to use, when you choose to purposely not land on triad tones.

Getting to the point in which you have an awareness of whether or not you are playing a “triad tone within the scale” or a “non-triad tone within the scale” as you solo over a chord progression is a massive undertaking in and of itself. Having the ability to do this will place you amongst the 'advanced' guitarists.

Modes

There are 2 approaches that can be taken regarding modes...

Approach 1 – Relating Modes Back to Their Parent Major Scale

When you wake up in the morning, sometimes you may be in a bad mood for whatever reason. You might consider yourself to be in your 'angry mode' then.

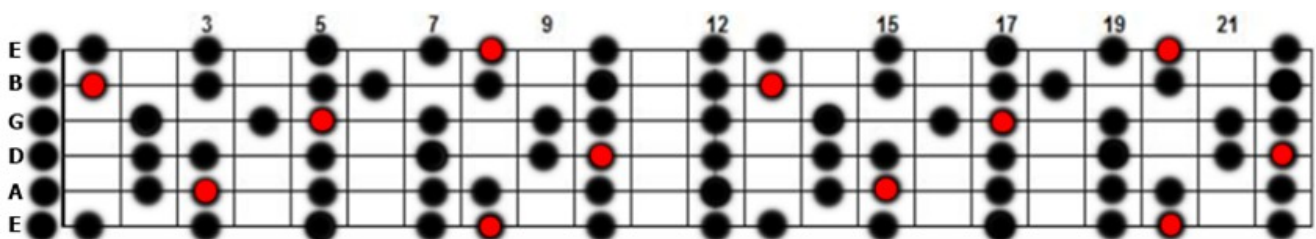
Maybe you find that you are in your most blissful state of mind when you are sitting on the beach on a warm, sunny day. You might consider yourself then to be in your 'blissful mode'.

Maybe your girlfriend/boyfriend just broke up with you, and you are extremely sad and depressed. You don't often get like this, but when you do, you consider this to be your 'depressed mode'.

You have many different 'modes' to you, but the one thing that remains constant is that you are always YOU. You as a whole remains unchanged, but you go through your life in different modes.

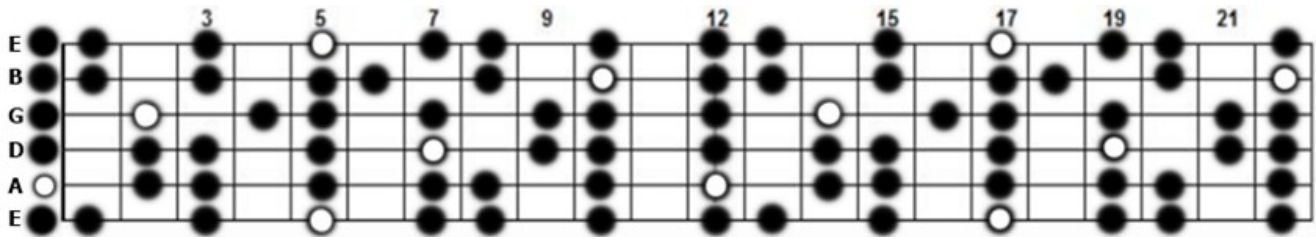
The same thing applies to the diatonic scale.

Let's take a look at the C major diatonic scale spanned across the entire fretboard:



The tonic note is 'C', and when this scale is played with the tonal center revolving around the note 'C', everything has a happy, uplifting, cheerful sound to it.

Now let's take a look at the same exact diatonic scale spanned across the entire fretboard, but from the minor perspective:



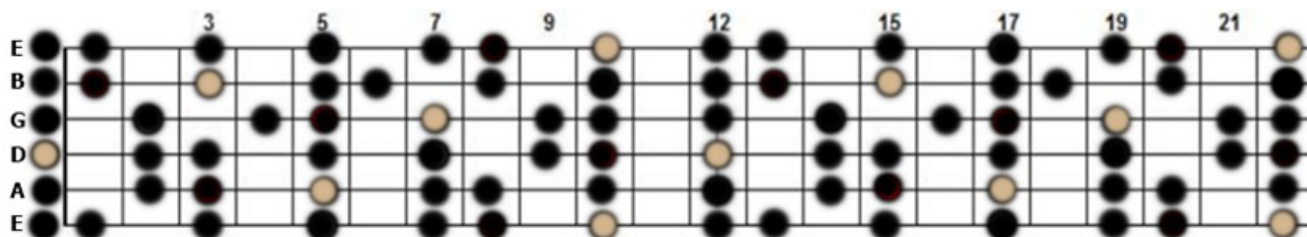
The tonic note, or tonal center, is now the note 'A'. When playing this scale in this manner, everything has a sadder, darker sound to it.

Overall, the framework remained 100% unchanged. However, by simply shifting the tonal center of the scale patterns from the note 'C' to the note 'A', the overall sound that is produced changes significantly.

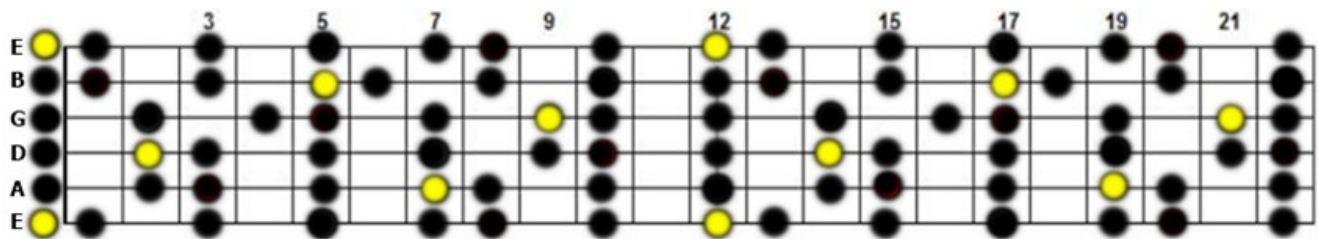
When your focal point is on the 1st scale degree of the diatonic scale, which in this case is the note 'C', you are playing in the **Ionian Mode**. You can use the phrases “major key” and “Ionian mode” interchangeably.

When your focal point is on the 6th scale degree of the diatonic scale, which in this case is the note 'A', you are playing in the **Aeolian mode**. You can use the phrases “minor key” and “Aeolian mode” interchangeably.

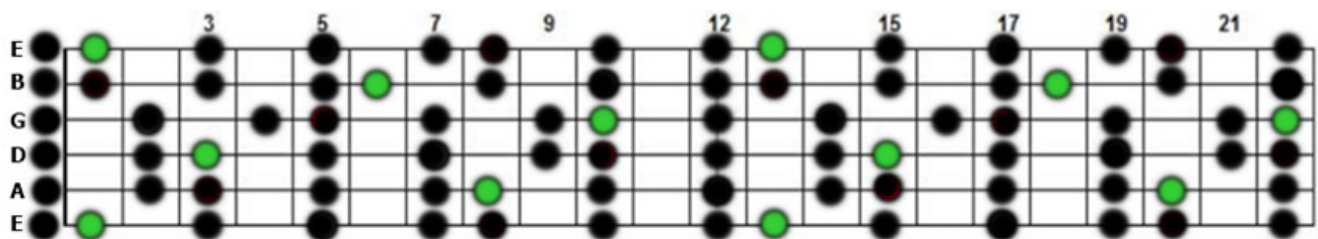
Since there are 7 notes in every diatonic scale, there are 7 possible 'tonal centers' for each diatonic scale.



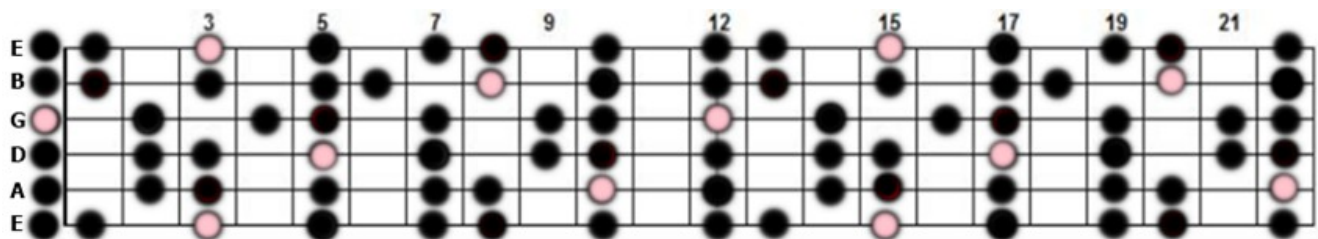
E Phrygian mode:



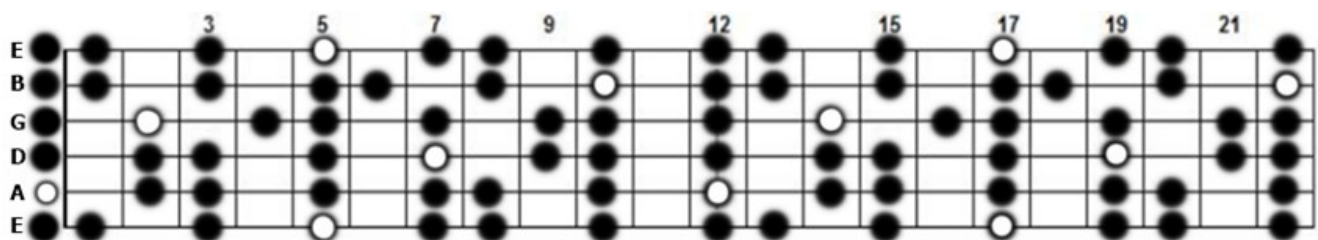
F Lydian mode:



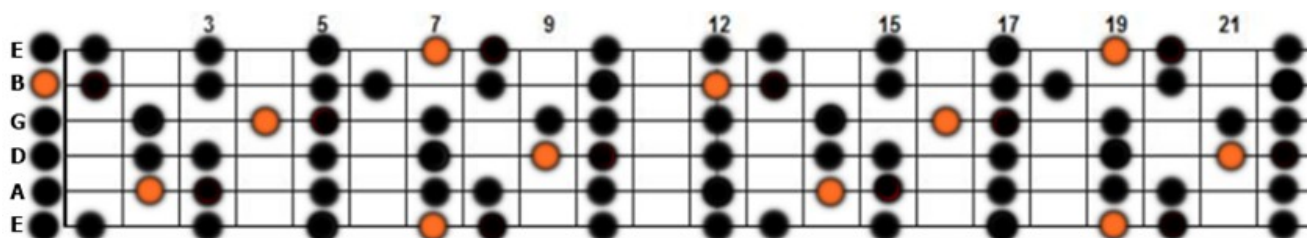
G Mixolydian mode:



A Aeolian mode:



B Locrian Mode:



Throughout this book and all of the lessons found on *Zombie Guitar*, the coloring scheme will always remain consistent. So when you see a yellow dot, it means you are viewing a fretboard diagram from the perspective of the Phrygian mode; when you see a pink dot it's the Mixolydian mode, etc.

Also, if you don't understand what I mean by 'tonal center' or 'the sound that is being produced', take a look at some of the lessons found on the modes page of *Zombie Guitar*:

As you already know, there are 12 keys in music. Each key comes from a 7-note scale known as the diatonic scale. Therefore, each of the 12 scales has 7 modes to it.

The major scale from which a particular mode is derived is called the **Parent Major Scale**.

In the example that we just looked at, C major is the parent major scale of the following 7 modes:

C Ionian
D Dorian
E Phrygian
F Lydian
G Mixolydian
A Aeolian
B Locrian

Here is a chart showing you each of the 7 modes for each of the 12 major keys:

Parent Major Key	Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Locrian
C	C	D	E	F	G	A	B
G	G	A	B	C	D	E	F#
D	D	E	F#	G	A	B	C#
A	A	B	C#	D	E	F#	G#
E	E	F#	G#	A	B	C#	D#
B	B	C#	D#	E	F#	G#	A#
F#/Gb	F#/Gb	G#/Ab	A#/Bb	B/Cb	C#/Db	D#/Eb	F
Db	Db	Eb	F	Gb	Ab	Bb	C
Ab	Ab	Bb	C	Db	Eb	F	G
Eb	Eb	F	G	Ab	Bb	C	D
Bb	Bb	C	D	Eb	F	G	A
F	F	G	A	Bb	C	D	E

Modes are one of those things that are difficult for some people to comprehend.

Despite the fact that they may be somewhat difficult to understand in theory, the application of modes is actually very simple.

As long as you know the one single scale that you need to know on the guitar – the diatonic scale – then you also know how to jam/improvise/compose solos in any of the 7 modes. The patterns are all exactly the same.

Here are some common uses for each of the 7 modes:

Ionian Mode – Use over major chords maj7 chords, or entire chord progressions in a major key

Dorian Mode – Use over minor chords or m7 chords

Phrygian Mode – Use over minor chords or m7 chords

Lydian Mode – Use over major chords or maj7 chords **Mixolydian Mode** – Use over major chords or 7 chords

Aeolian Mode – Use over minor chords, m7 chords, or entire chord progressions in a minor key

Locrian Mode – Use over diminished triads or half-diminished chords

Modes can be used for other applications as well, such as “modal chord progressions”, but their most common use is over single chords.

Example:

Let's say for example that your band told you that there would be a section in which they jam on a D minor chord for a few bars. Here you might want to try and experiment with some modal sounds.

You decide that you want to play either the D Dorian mode, D Phrygian Mode, or D Aeolian Mode over top of what the rhythm section is doing.

Rather than trying to think in terms of 3 different scales, all you really need to do is think of 1 single scale – the diatonic scale.

Let's say that you've mastered the diatonic scale up and down the neck of the guitar. You know the patterns like the back of your hand. You can easily play the diatonic scale in any of the 12 keys since all the patterns on the guitar are exactly the same for every key...with just a simple “shift” in your reference positions.

Well, you can apply this concept to modal playing by first determining the parent major scale of whatever mode you want to jam in and then just playing those 'patterns' that you are already familiar with.

Also for each mode chart that is given at the end of this book, the parent major scale is always referenced.

So now let's determine the parent major scale for each of the 3 modes that you wanted to experiment with:

D Dorian → C Major

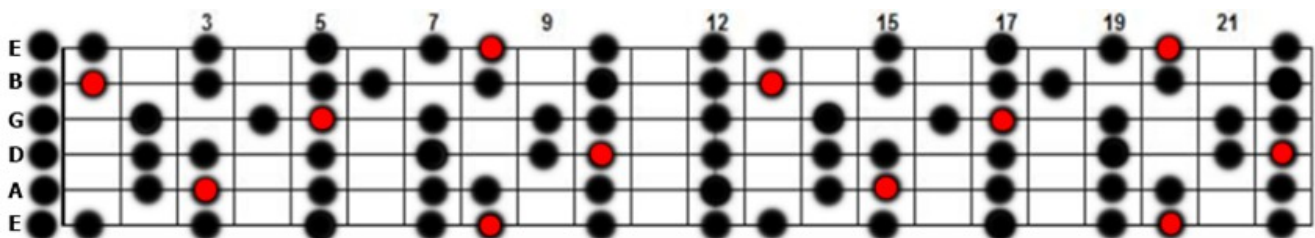
D Phrygian → Bb Major

D Aeolian → F Major

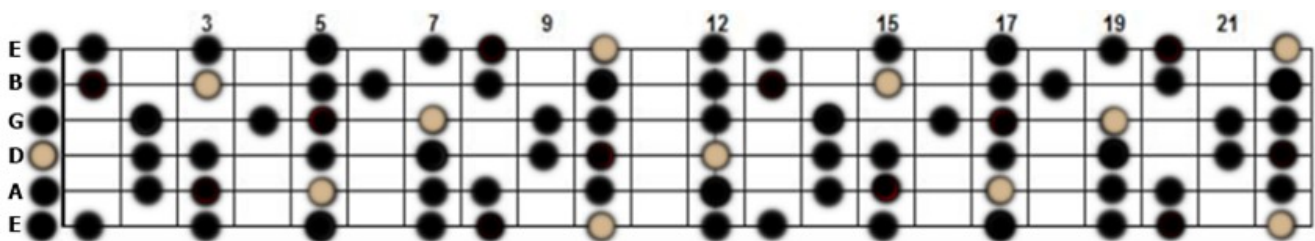
You can verify that this is correct by looking at the above chart.

So if you wanted to create a 'Dorian sound' in your lead playing, as the band jammed on the D minor chord, you could simply just play the C major scale all over the neck of the guitar. You would just have to make sure to focus on the note 'D' within the scale patterns.

So instead of playing this:



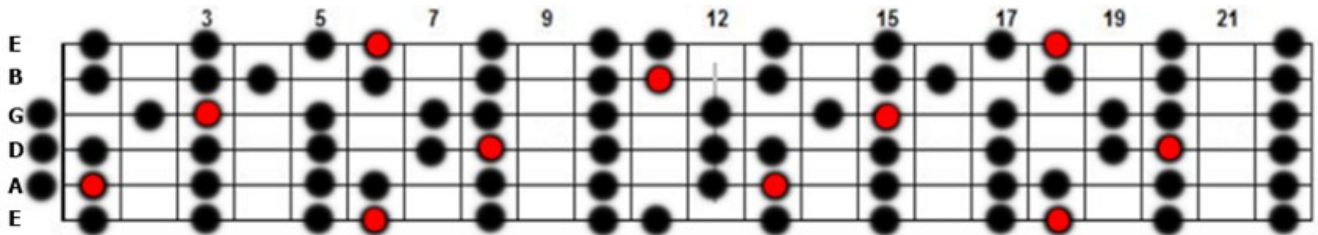
You would play this:



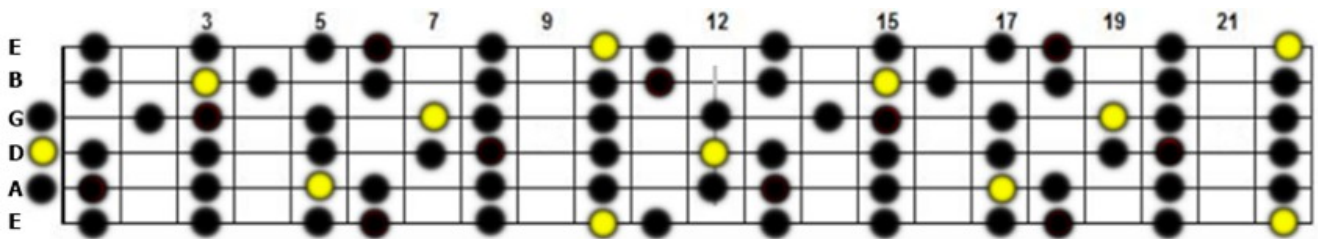
It's all exactly the same. The only difference is your tonal center.

Likewise, if you wanted to play the D Phrygian Mode over top of the band jamming on the D minor chord, you could simply just play the Bb major scale, but instead of focusing on the note 'Bb' within the patterns, you would simply focus on the note 'D'.

So instead of playing:



You would play:

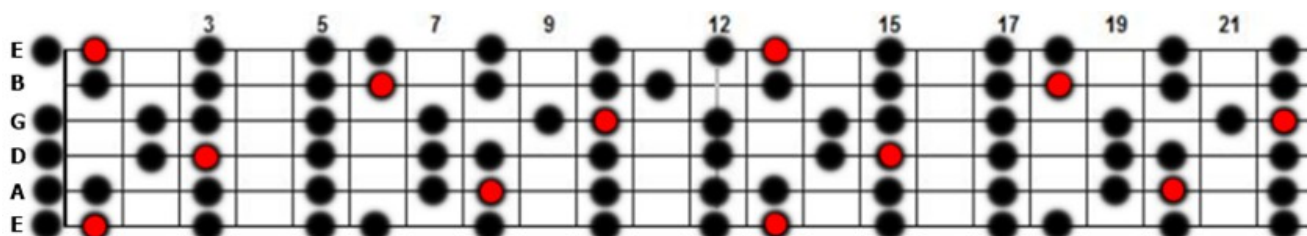


Again, it's the same framework, but just a different tonal center within the patterns.

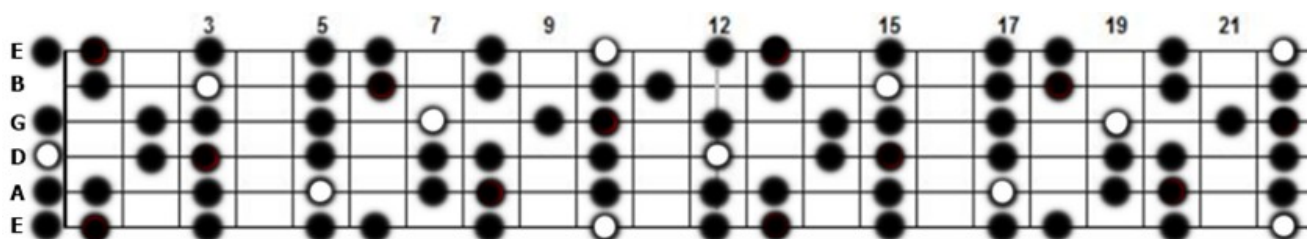
Lastly, let's say you wanted to play the D Aeolian mode over top of the band jamming on the D minor chord.

You could simply just play the F major scale, but just focus on the note 'D' within the scale patterns.

Instead of playing this:



You would instead play this:



Again, it all comes down to just one single, movable scale – the diatonic scale.

Once you have fully grasped this concept, you can begin looking at modes in parallel to one another, which is what Approach 2 is all about...

Approach 2 – Treating Modes as Their Own Unique Scale

It is critical that you have a solid understanding of everything that was written in 'Approach 1' before moving onto 'Approach 2'.

The theory is still all exactly the same, and every mode still comes from a particular parent major scale. The main difference is that you are now looking at each mode as an alteration of the major scale, with its' own unique scale formula and intervals.

The Ionian Mode (aka. The Major Scale), has a scale formula of:

Ionian Mode Scale Formula: 1 – 2 – 3 – 4 – 5 – 6 – 7

The other most commonly used mode is the Aeolian Mode (aka. The Natural Minor Scale), which has a scale formula of:

Aeolian Mode Scale Formula: 1 – 2 – b3 – 4 – 5 – b6 – b7

Applying this to a key, let's say 'C major' for example:

C Ionian: C – D – E – F – G – A – B

You could keep the same scale root of 'C', and apply the Aeolian Mode Scale Formula to it, resulting in:

C Aeolian: C – D – Eb – F – G – Ab – Bb

Here are the scale formulas for each of the 7 modes:

Ionian Mode Scale Formula: 1 – 2 – 3 – 4 – 5 – 6 – 7

Dorian Mode Scale Formula: 1 – 2 – b3 – 4 – 5 – 6 – b7

Phrygian Mode Scale Formula: 1 – b2 – b3 – 4 – 5 – b6 – b7

Lydian Mode Scale Formula: 1 – 2 – 3 – #4 – 5 – 6 – 7

Mixolydian Mode Scale Formula: 1 – 2 – 3 – 4 – 5 – 6 – b7

Aeolian Mode Scale Formula: 1 – 2 – b3 – 4 – 5 – b6 – b7

Locrian Mode Scale Formula: 1 – b2 – b3 – 4 – b5 – b6 – b7

So if you wanted to look at each of the 7 modes in parallel to one another, keeping the root as 'C' and treating each as its' own unique scale. The result would be:

C Ionian Mode: C – D – E – F – G – A – B

C Dorian Mode: C – D – Eb – F – G – A – Bb

C Phrygian Mode: C – Db – Eb – F – G – Ab – Bb

C Lydian Mode: C – D – E – F# – G – A – B

C Mixolydian Mode: C – D – E – F – G – A – Bb

C Aeolian Mode: C – D – Eb – F – G – Ab – Bb

C Locrian Mode: C – Db – Eb – F – Gb – Ab – Bb

With regards to improvisation, it's helpful to categorize modes as either “major types of modes” or “minor types of modes”.

- Major types of modes contain a '3' interval
- Minor types of modes contain a 'b3' interval

3 Major Modes:

Ionian (aka. “Major Key”)

Lydian

Mixolydian

4 Minor Modes:

Aeolian (aka. “Natural Minor Key”)

Dorian

Phrygian

Locrian**

****The Locrian Mode is actually neither major nor minor, since the "every other note trick" applied to the Locrian scale formula forms a diminished triad.**

Locrian Mode Scale Formula: 1 – b2 – b3 – 4 – b5 – b6 – b7

The 'i chord' would therefore contain the notes: 1 – b3 – b5, which is a diminished triad. A diminished triad is neither major nor minor.

It is for this reason that the Locrian Mode isn't used very often.

Neither approach is right or wrong. However, you should have a solid understanding of both of them.



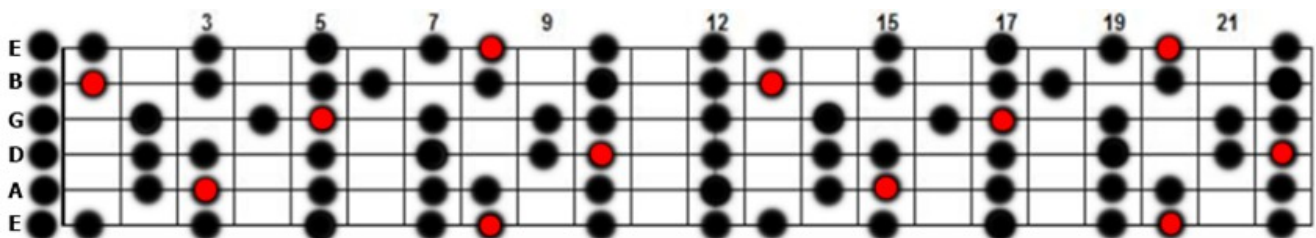
Non-Diatonic Notes

Everything that we have done so far has been 100% diatonic.

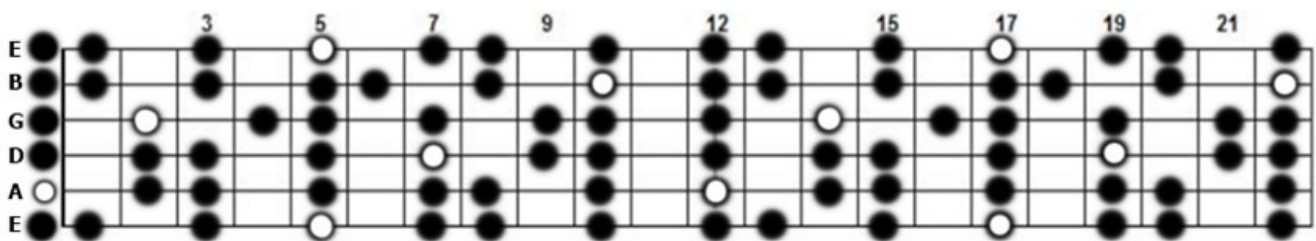
You know that there are 12 keys in music. You can take any one of those 12 keys and analyze it, and the same theory will apply to any other key. Due to the movable nature of the guitar, you can easily switch keys in both your rhythm and lead playing without needing to think much or memorize any note names. All that is required is some pattern memorization.

So let's take a look at how we've analyzed the diatonic scale so far. Again, we will use the 'key of C major' as our example, but any of the other 12 keys would look identical, with just a “shift” up or down the fretboard.

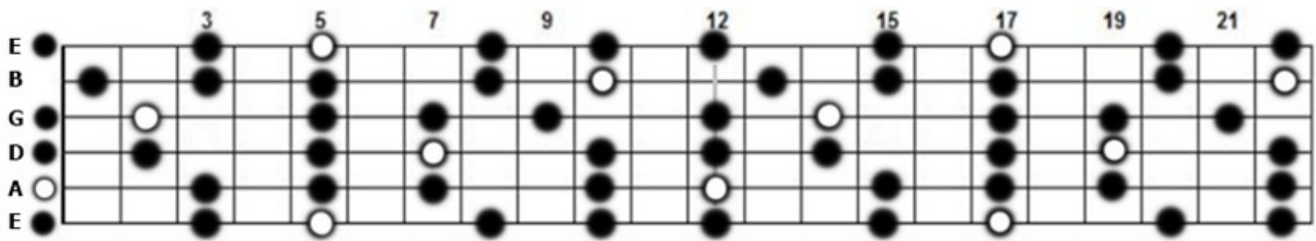
Here you have your C major diatonic scale:



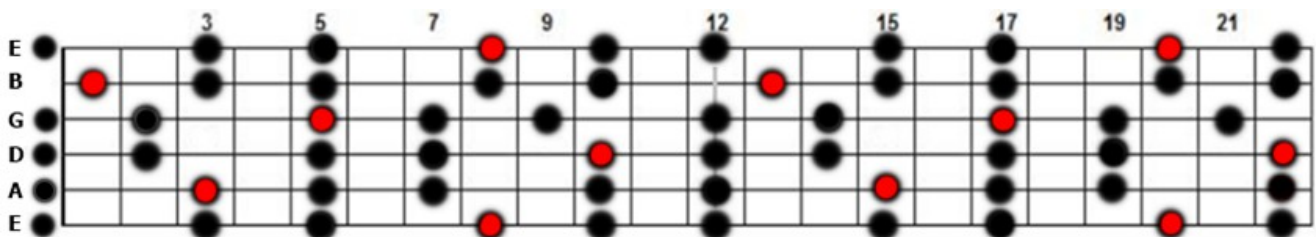
This can also be viewed from the minor perspective:



This full diatonic scale could be reduced to the pentatonic scale, by removing some notes:

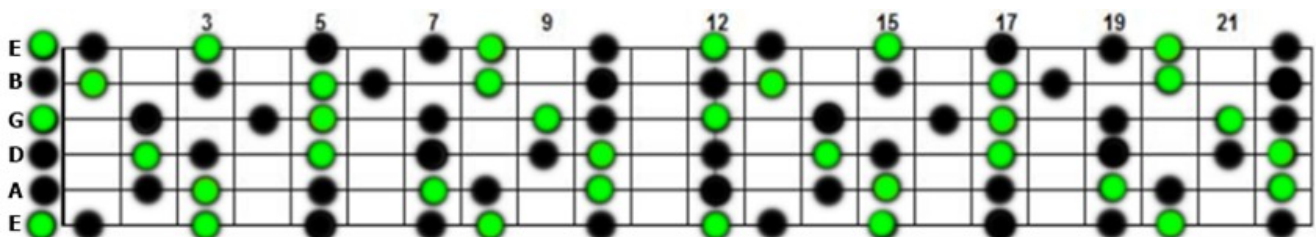


Or, this could be viewed from the major perspective as well:

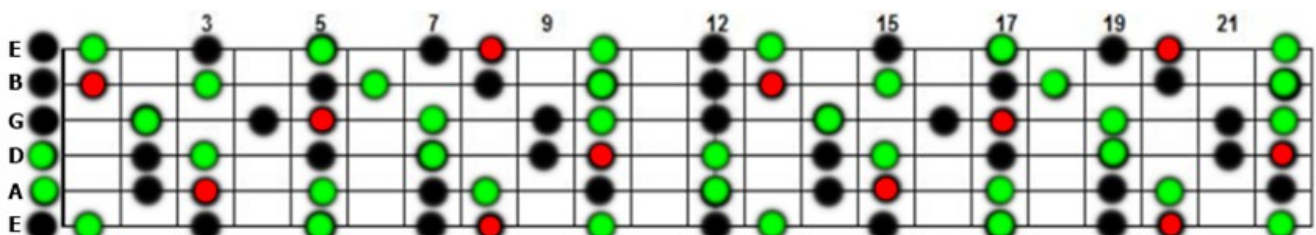


We could also look deeper within the diatonic scale, and find the 7 diatonic arpeggios....

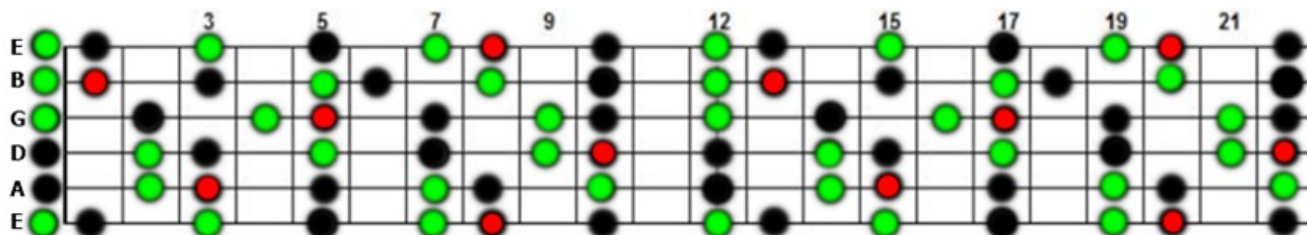
I chord:



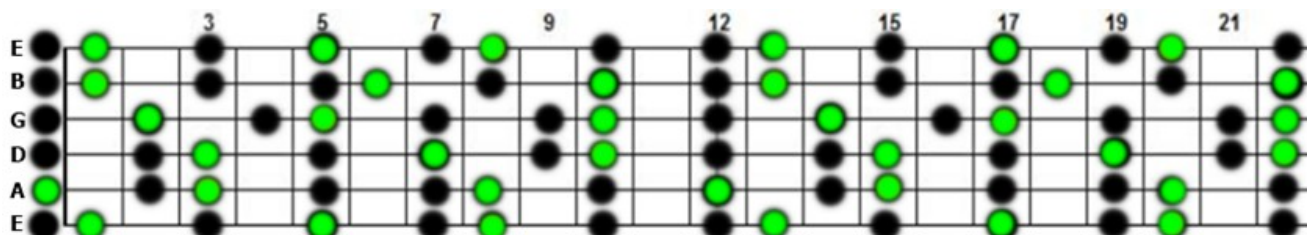
ii chord:



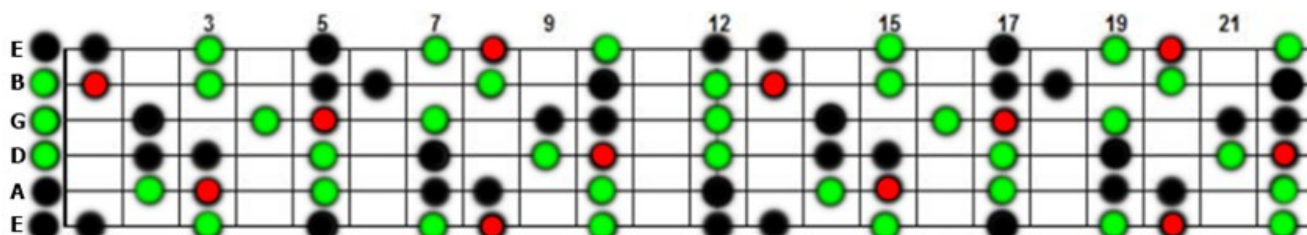
iii chord:



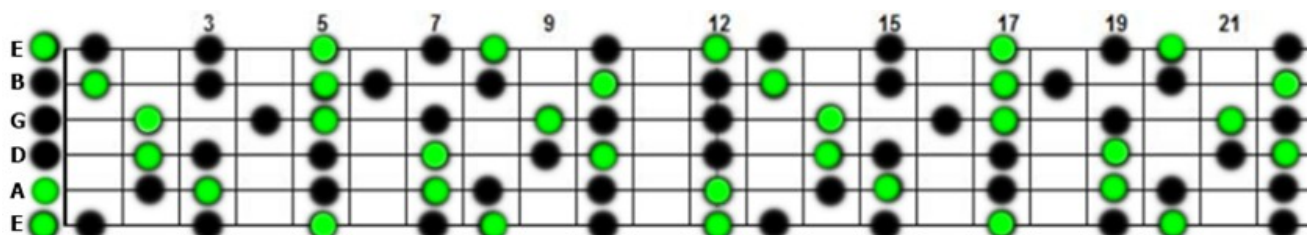
IV chord:



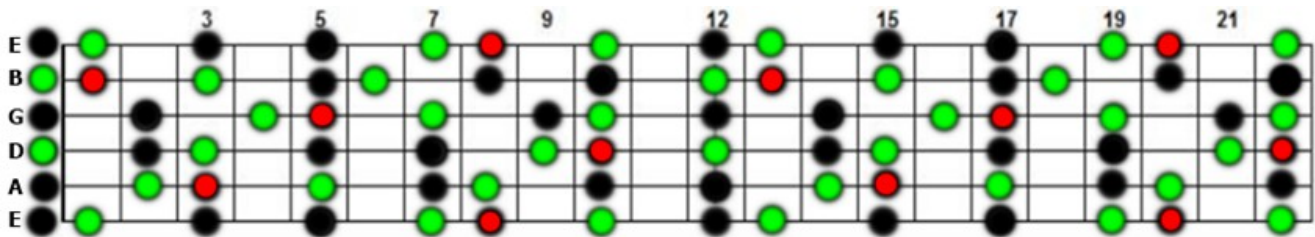
V chord:



vi chord:

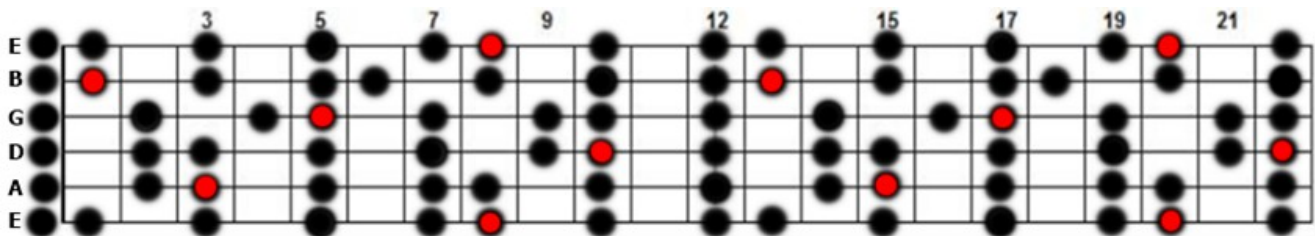


vii° chord:

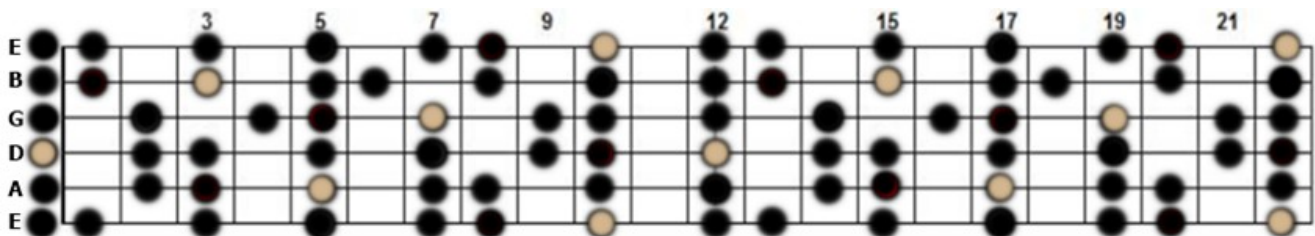


We could also take this diatonic scale and view it in its' 7 different modes...

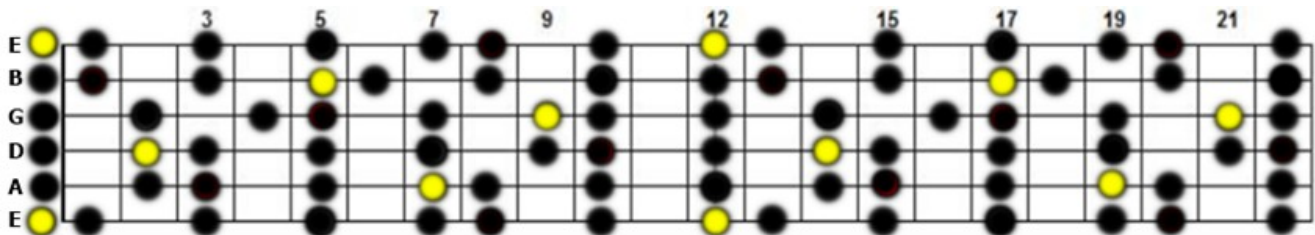
C Ionian mode:



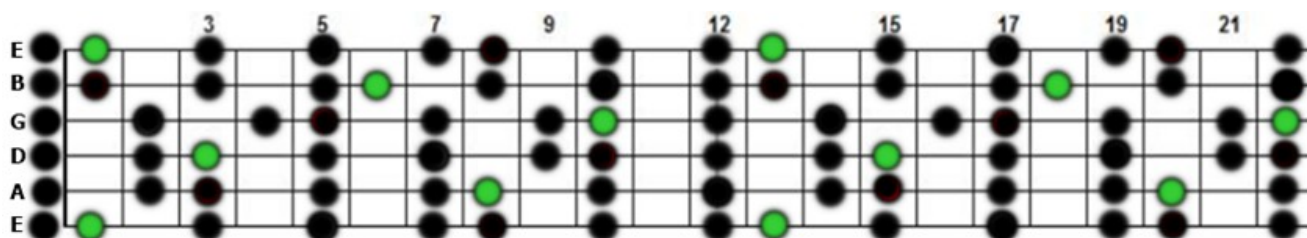
D Dorian mode:



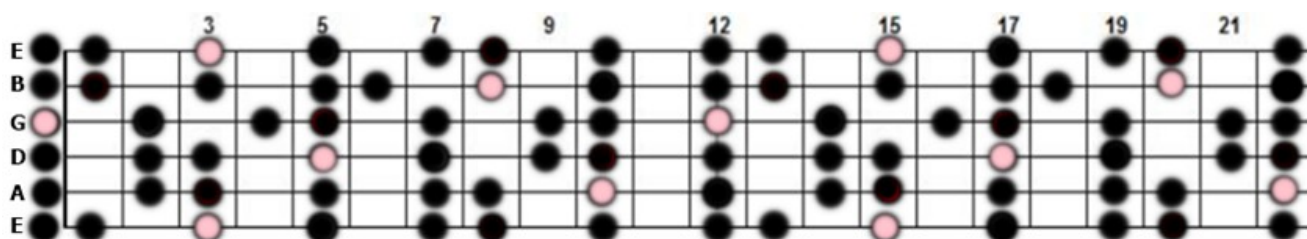
E Phrygian mode:



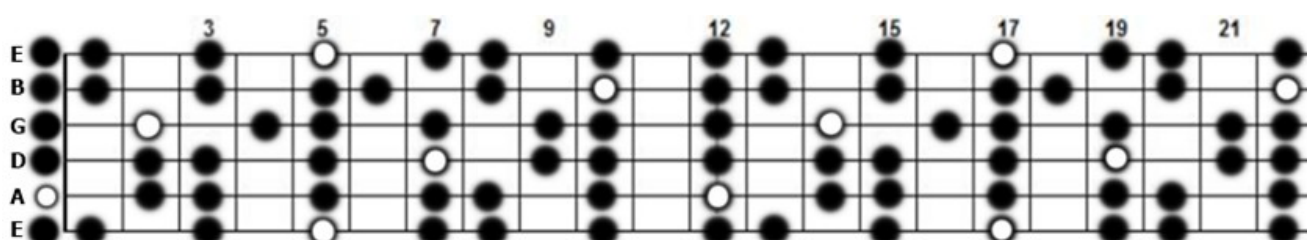
F Lydian mode:



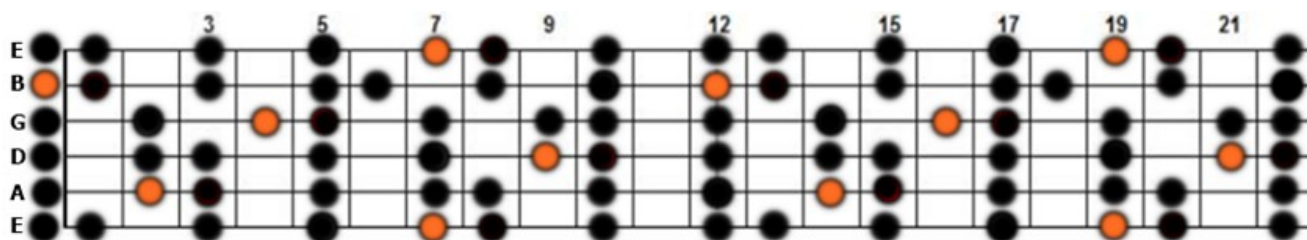
G Mixolydian mode:



A Aeolian mode:



B Locrian Mode:



So far, everything has remained 100% diatonic. You can get VERY creative with just this much information. Every other day there is a new 3-chord song that makes it to the charts. The lead vocal line, the

guitar solos, the verses, the choruses, etc. most of the time stays 100% diatonic to the key.

Even some of the best classic rock songs ever written remain 100% diatonic.

Remember...“Minutes to learn, a lifetime to master.”

However, once you know the rules of how to remain diatonic to a key, you can tastefully break them. Once you have the ability to compose/improvise solos and leads “in key”, and you can do so without really needing to think too much, you can then PURPOSELY add in non-diatonic notes to your playing.

You want to be able to do this at will. This is much different then listening to a guitarist who knows absolutely no theory attempt to improvise a solo - You will hear a lot of flaws and unintentional “sour notes” in their playing.

However, if you make sure to first learn and understand the rules of how to play within a diatonic key, you can then purposely throw in “wrong notes” giving your playing its' own unique flavor.

Non-diatonic notes work best in 2 instances:

- 1.) When used as a *passing tone* in which you walk from one diatonic note (usually a chord tone) to another diatonic note
- 2.) When the non-diatonic note is a chord tone of an underlying non-diatonic chord that is found in the song or chord progression

Guitarists at the beginning levels tend to think primarily in terms of “scales” and “keys”. They don't really pay much attention to the underlying chords. So long as they know the key of the chord progression, then they just improvise using their scales and scale patterns.

More advanced guitarists focus not only on scales and keys, but also on the underlying chords that are occurring within the chord progression of the song. Therefore, when they become aware of the presence of a non-diatonic chord within the song or chord progression, they will bring attention to this chord by purposely playing chord tones of it in their composed or improvised solo.

Regardless of your skill level, it still holds true that you must first know the rules before you can break them. You must first get very comfortable with playing “in key”...to the point that it becomes blatantly obvious to you when a note is “out-of-key”.

One of the most common non-diatonic notes that is used is **The Blue Note**. In fact, it is so common that they created a whole new scale out of it known as **The Blues Scale**.

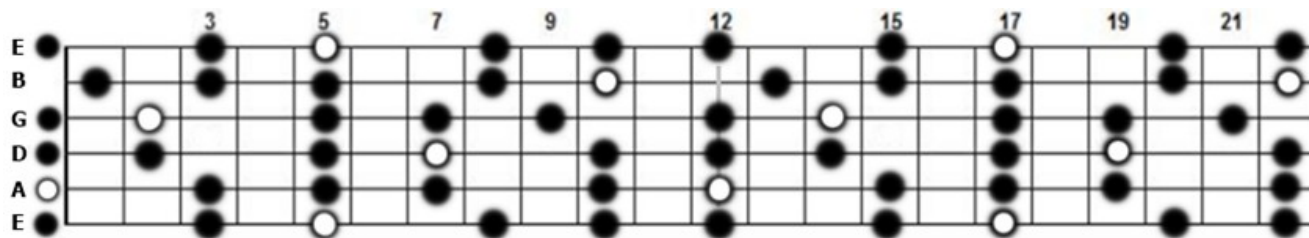
In reality, the blues scale is simply just the pentatonic scale with one additional note added.

...And as you already know, the pentatonic scale is just a simplified version of the full diatonic scale.

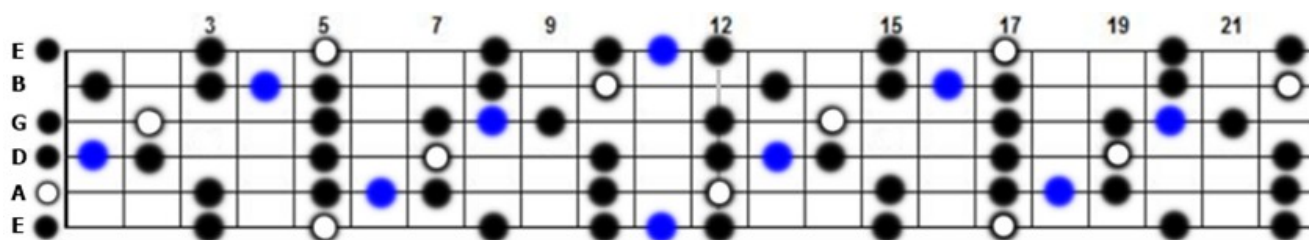
Well, the “blues scale” simply just takes the pentatonic scale and adds a single “non-diatonic” note.

Let's take a look at some fretboard diagrams...

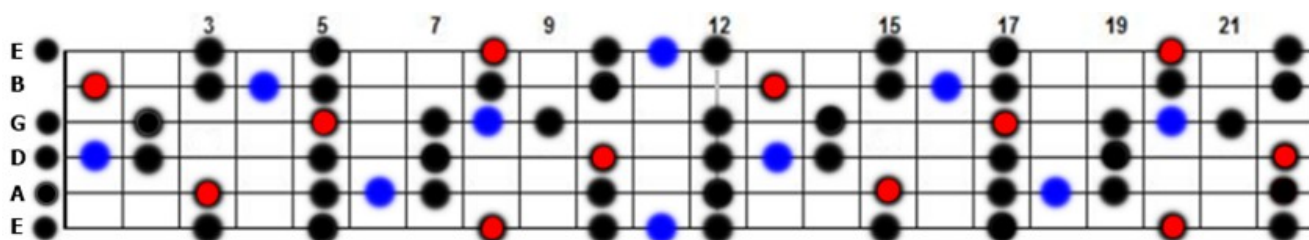
Let's take a look at the A minor pentatonic scale:



Now, let's go ahead and add this non-diatonic “blue note”:



Of course, this could also be viewed from the major perspective as well:



Notice that the “blue note” remains in the same exact place for both the key of A minor and the key of C major.

Of course, this scale is also movable just like everything else on the guitar.

Feel free to experiment with other non-diatonic notes as well. This particular non-diatonic note gets its' own scale because it's so cool, but you can certainly create some very interesting sounds and phrases by using other non-diatonic notes as well!

Learn the rules, break the rules, experiment with the rules, etc. Just make sure that everything that you do is intentional.

Scale Combining

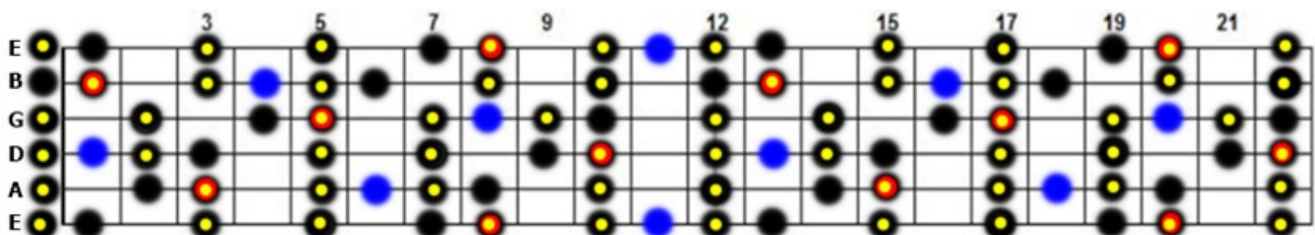
The last type of diagrams that you see in this book will combine the following scales together:

- The full diatonic scale
- The pentatonic scale
- The blues scale

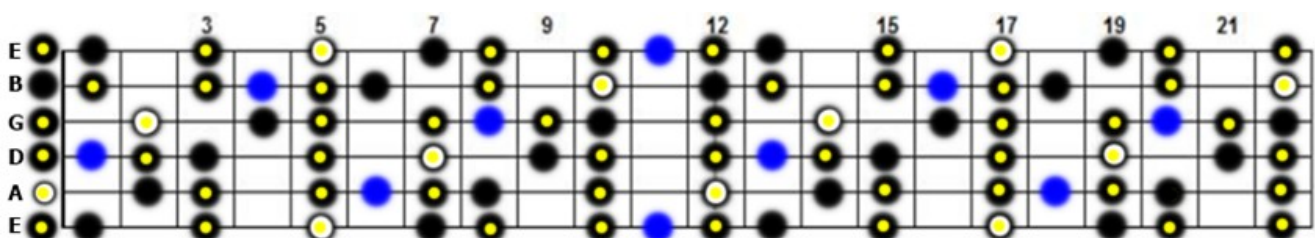
There are more scales that exist in music, but for the purposes of this book we are keeping everything diatonic with the exception of the “blue note”. Since the blue note is such a special non-diatonic note, that it got its' own scale named after it, I figured that I would include that bad Larry in here too.

The “scale combined” diagrams will be given for all 12 keys viewed from both a major perspective and a minor perspective. Here are 2 examples, C major and A minor:

C major scale combined:



A minor scale combined:



It looks like a lot is going on there, but it's simply just the diatonic scale, with the blue note added in. Additionally, it is showing you which notes are the part of the pentatonic scale, which is just a simplified version of the full diatonic scale.

- Any fret that has a dot on it is part of the diatonic scale, with the exception of the one special non-diatonic note, the “blue note”
- The yellow dots indicate the pentatonic scale
- The blue dots indicate the “blue note”
- If there is a red dot, it indicates the tonic note of the scale when the key is viewed from the major perspective
- If there is a white dot, it indicates the tonic note of the scale when the key is viewed from the minor perspective

As long as you know what key you are playing in, whether it be a major key or a minor key:

- You can use the pentatonic scale for those fast, flashy licks that everybody loves....like the ones in the “Freebird” solo.
- You can throw in the additional diatonic notes in order to make your playing sound more melodic
- You can use the “blue note” as a quick passing note between one scale tone and another scale tone
- Also, since these diagrams are essentially giving you “the rules” of how to stay completely diatonic to a key (with the exception of the blue note), you can “break the rules” by experimenting with some non-diatonic notes as well, which would function the same way as the blue note does

Most importantly, have fun!

...And that completes your music theory 101 for guitar

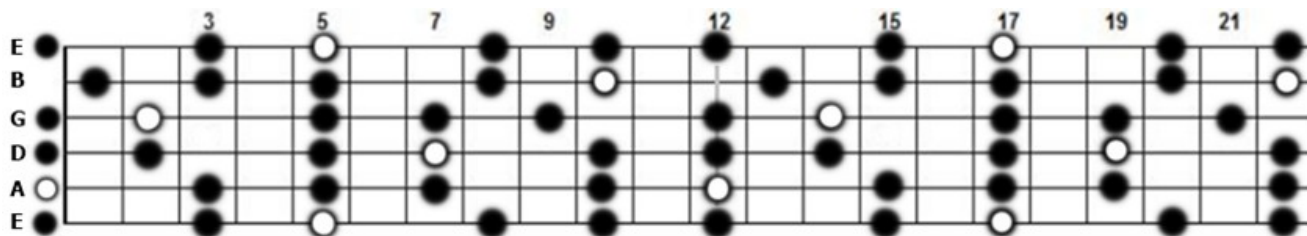
briefing. Now onto the fretboard diagrams...

FRETBOARD DIAGRAMS

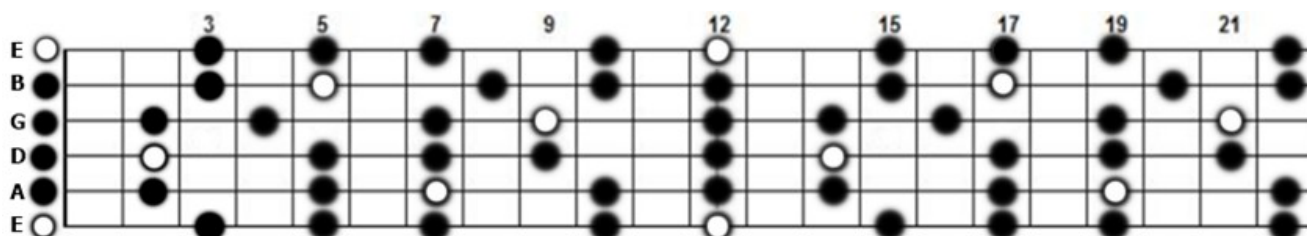
Minor Pentatonic Scales

White Dot = Tonic Note of Scale

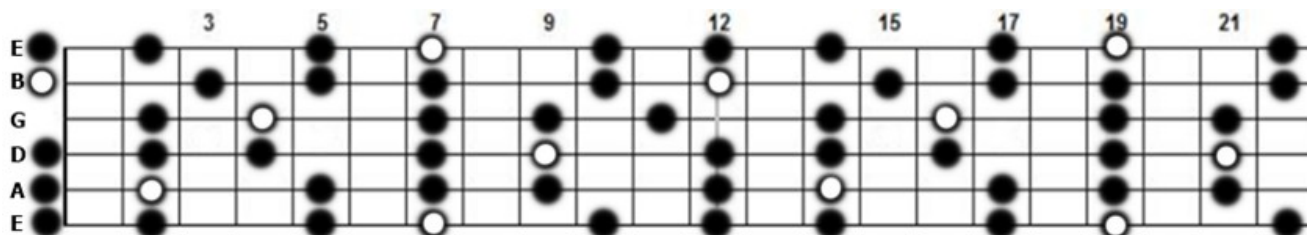
A minor pentatonic



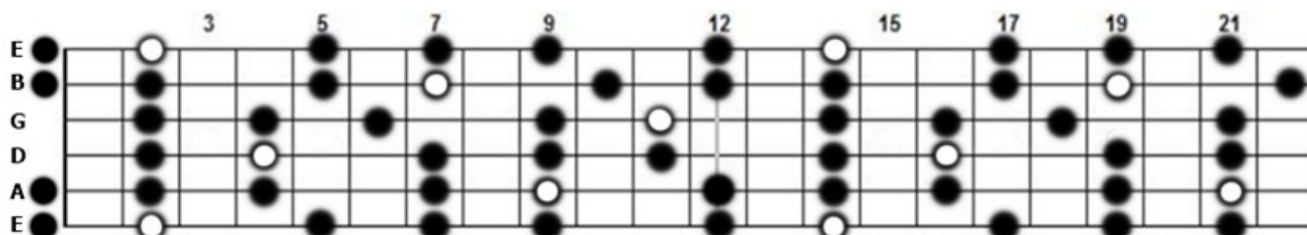
E minor pentatonic



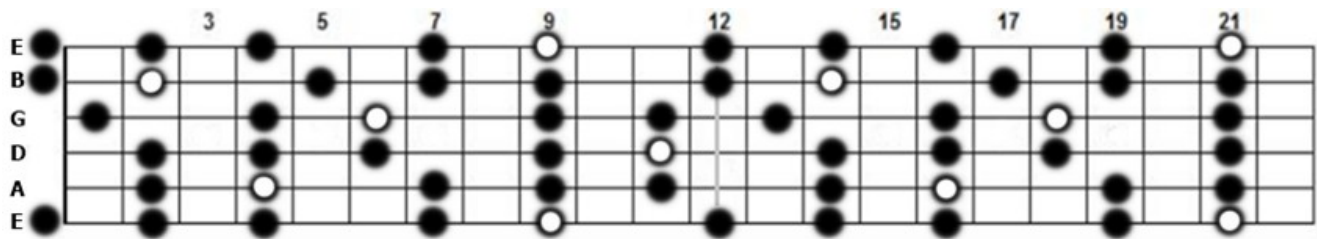
B minor pentatonic



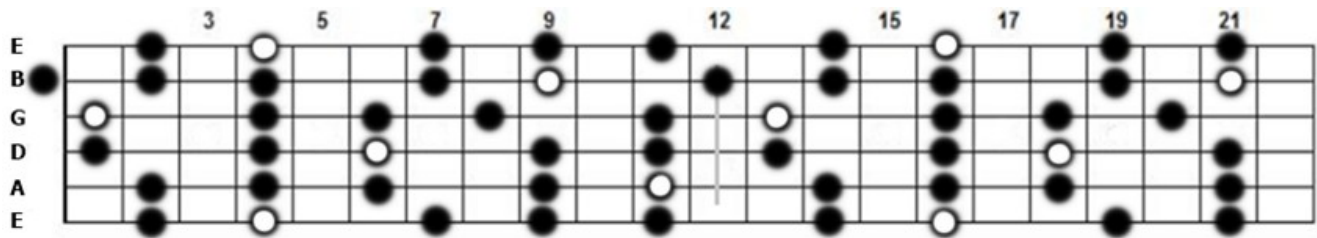
F# minor pentatonic



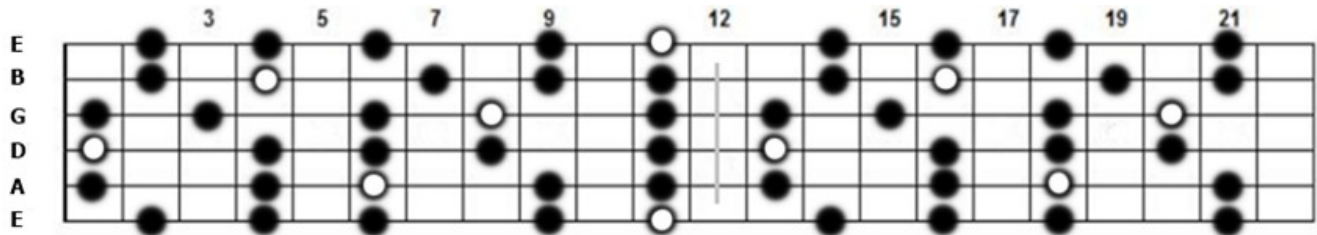
C# minor pentatonic



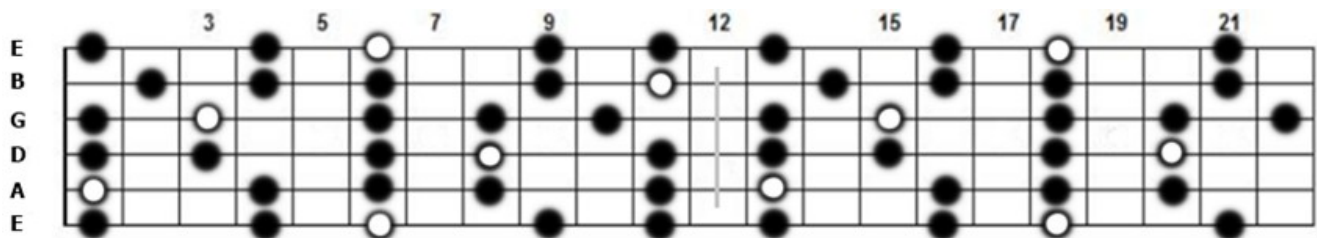
G# minor pentatonic



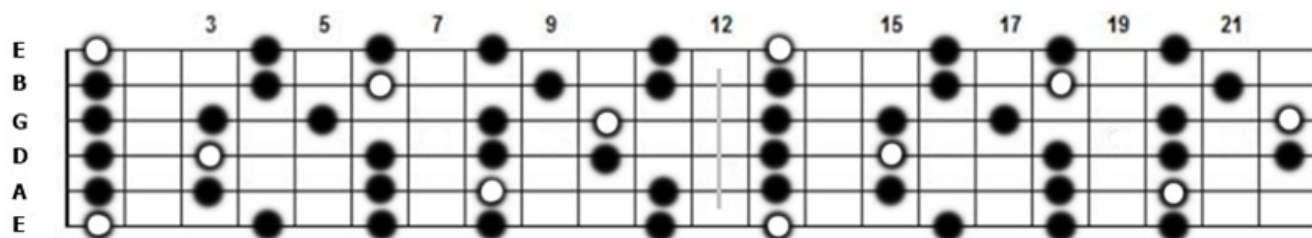
D# minor pentatonic



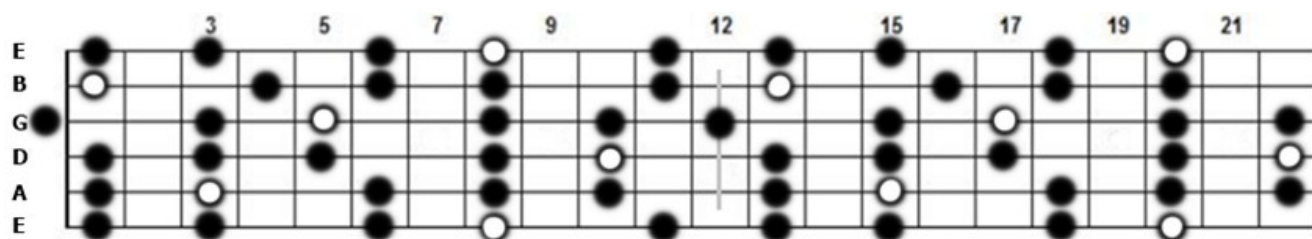
A#/Bb minor pentatonic



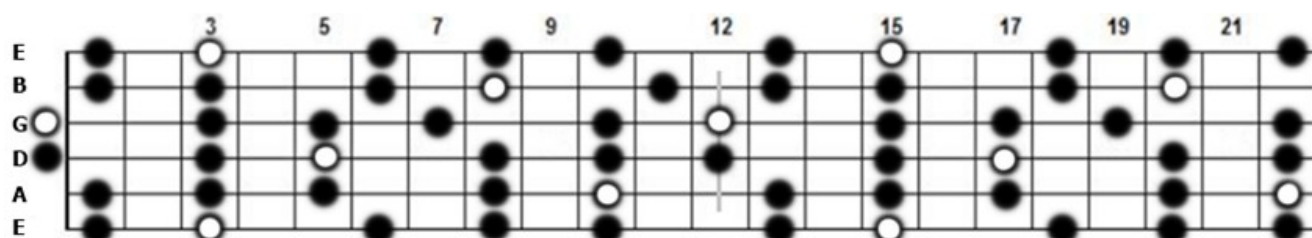
F minor pentatonic



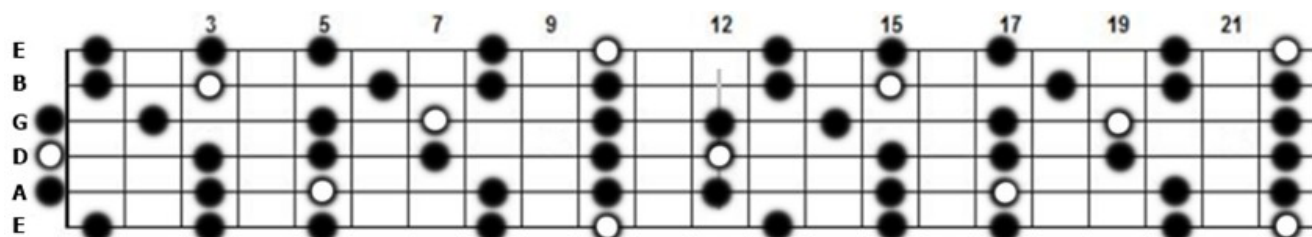
C minor pentatonic



G minor pentatonic



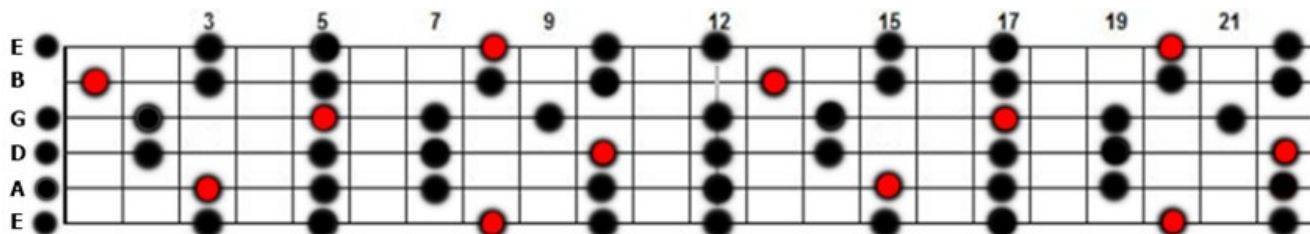
D minor pentatonic



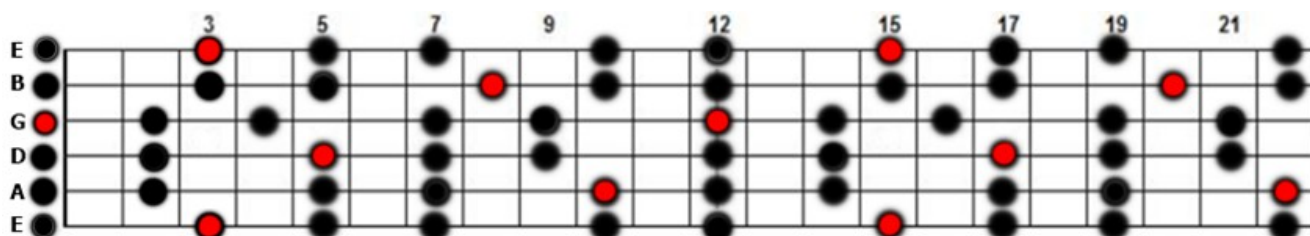
Major Pentatonic Scales

Red Dot = Tonic Note of Scale

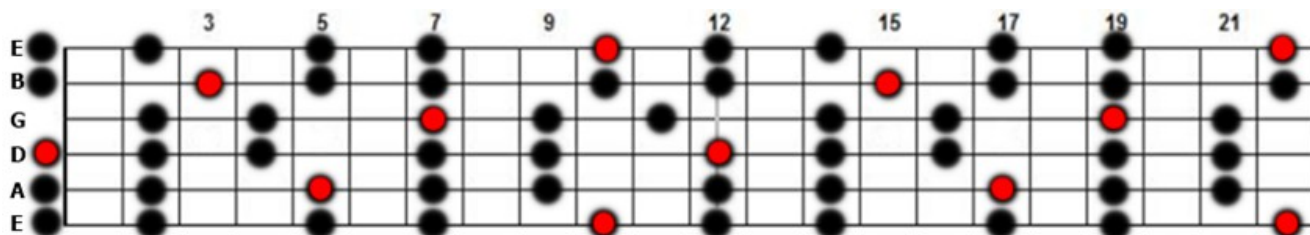
C major pentatonic



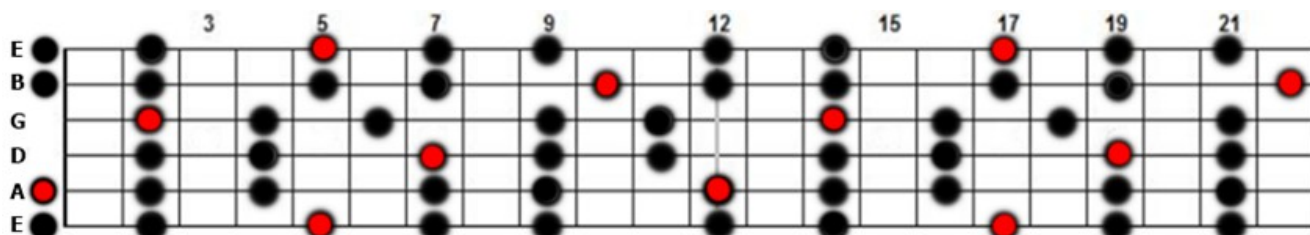
G major pentatonic



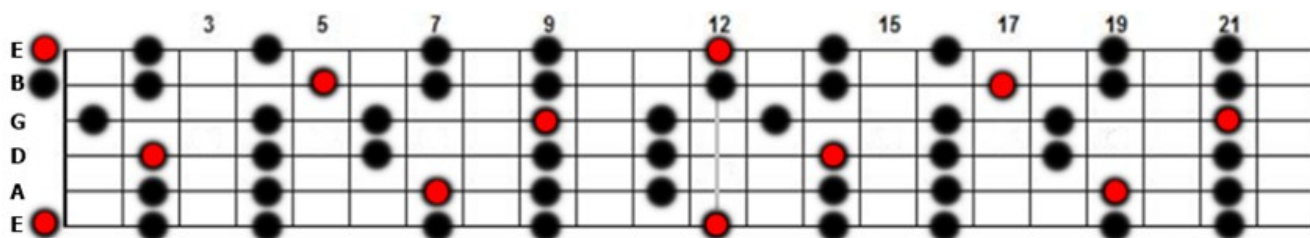
D major pentatonic



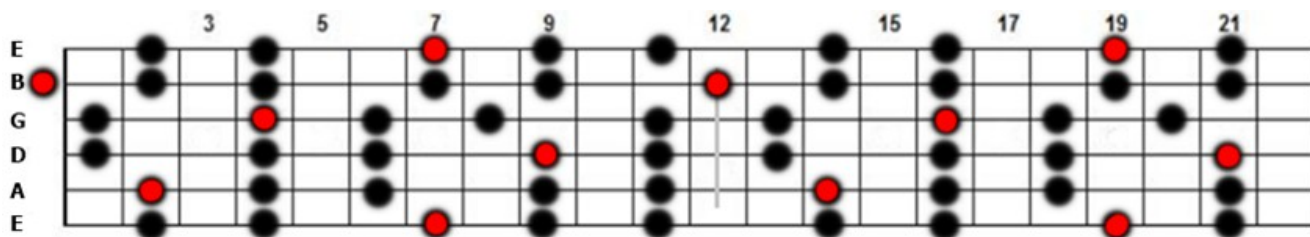
A major pentatonic



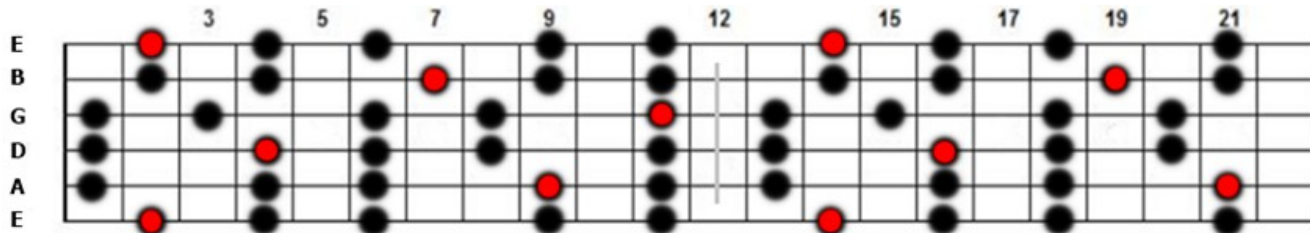
E major pentatonic



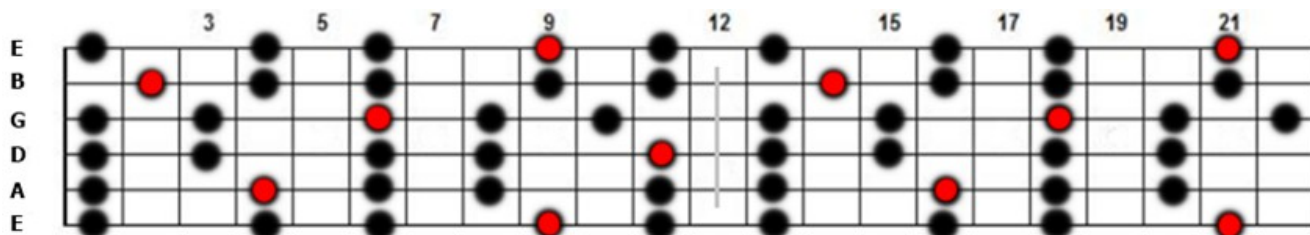
B major pentatonic



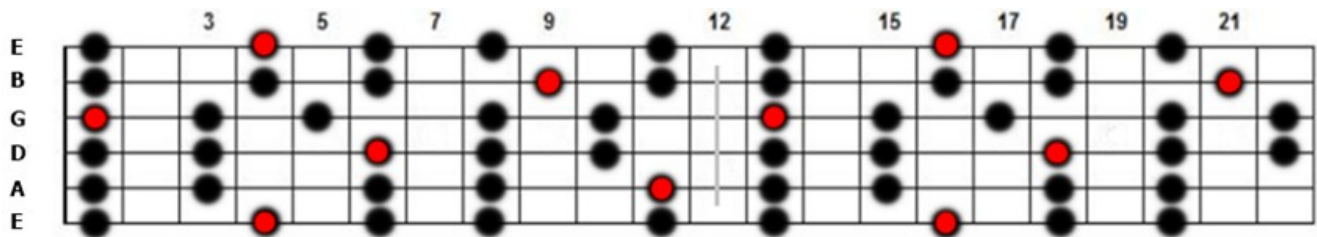
F#/Gb major pentatonic



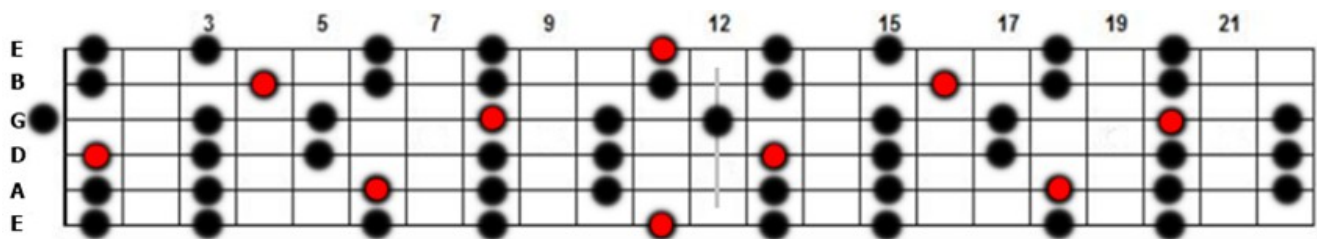
Db major pentatonic



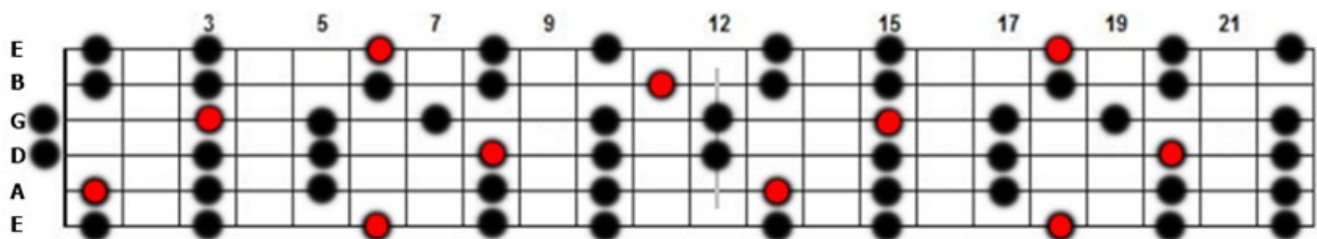
Ab major pentatonic



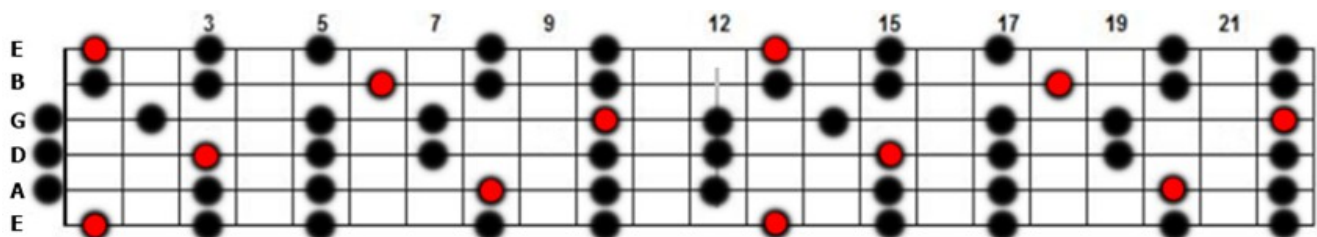
Eb major pentatonic



Bb major pentatonic



F major pentatonic

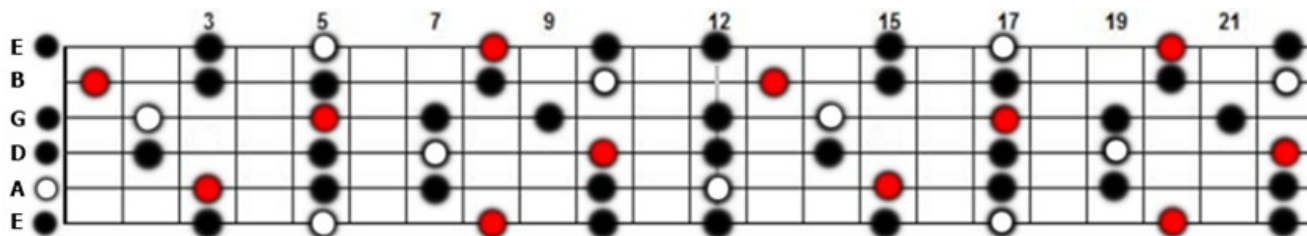


Relative Major-Minor Pentatonic Scales

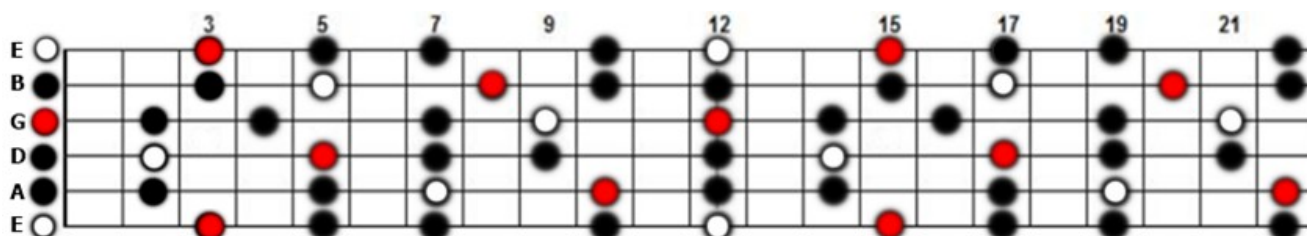
Red Dot = Major Scale Root

White Dot = Minor Scale Root

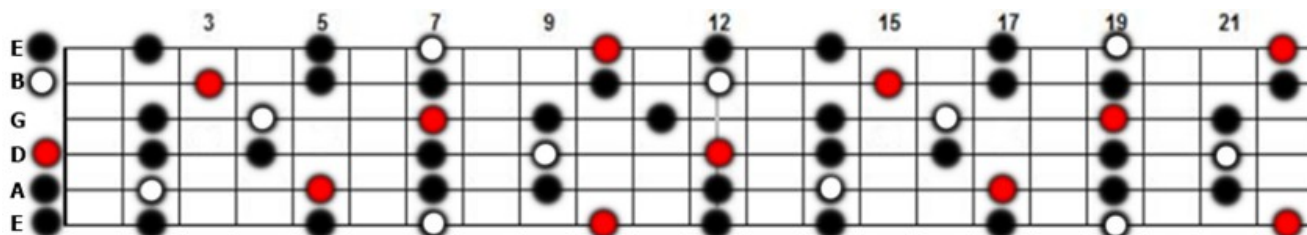
C major-A minor pentatonic



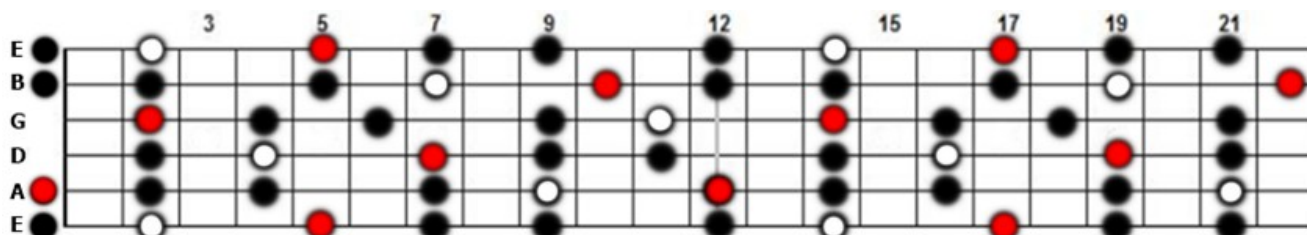
G major-E minor pentatonic



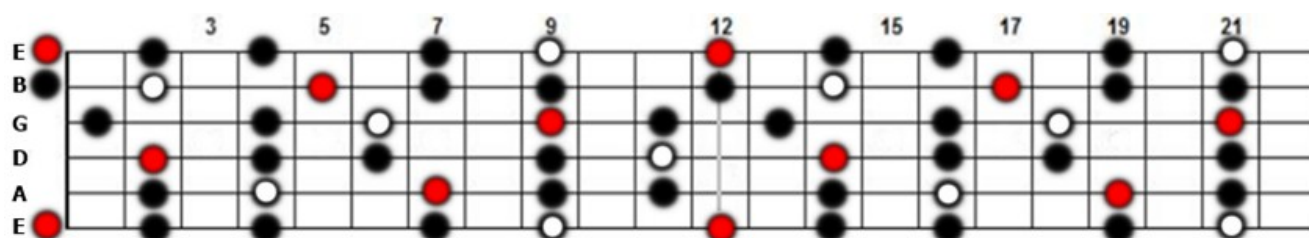
D major-B minor pentatonic



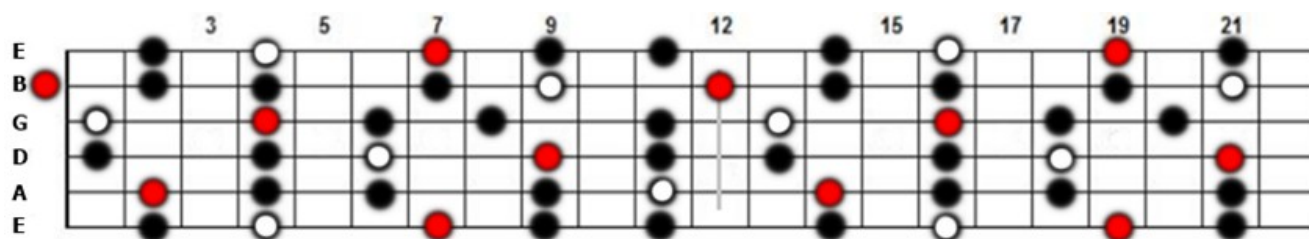
A major-F# minor pentatonic



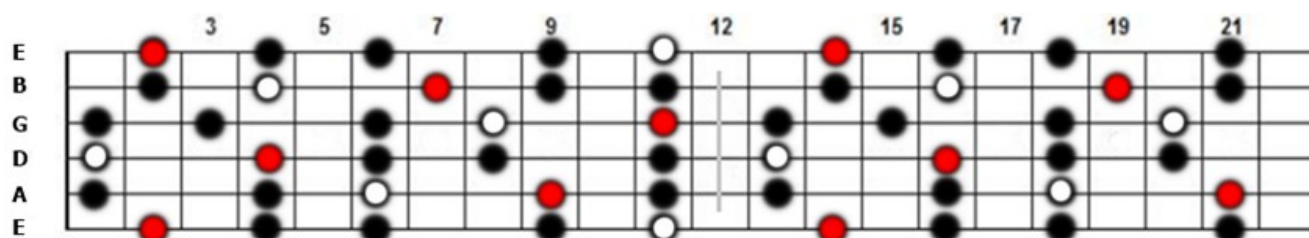
E major-C# minor pentatonic



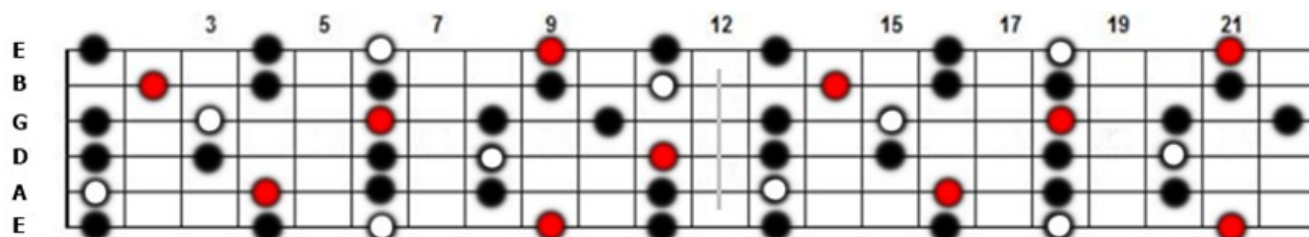
B major-G# minor pentatonic



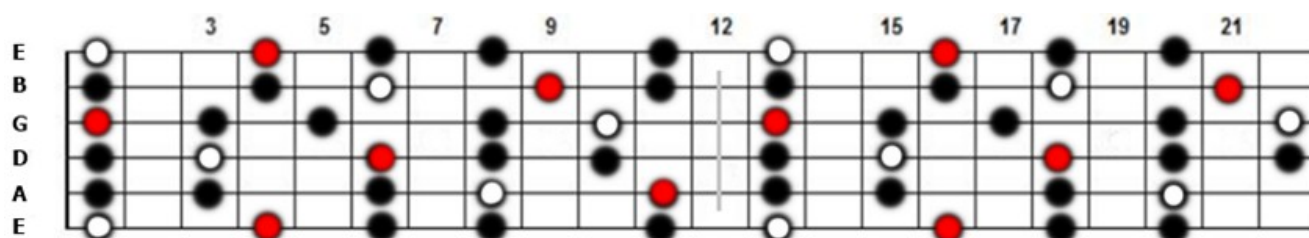
Gb major-D# minor pentatonic



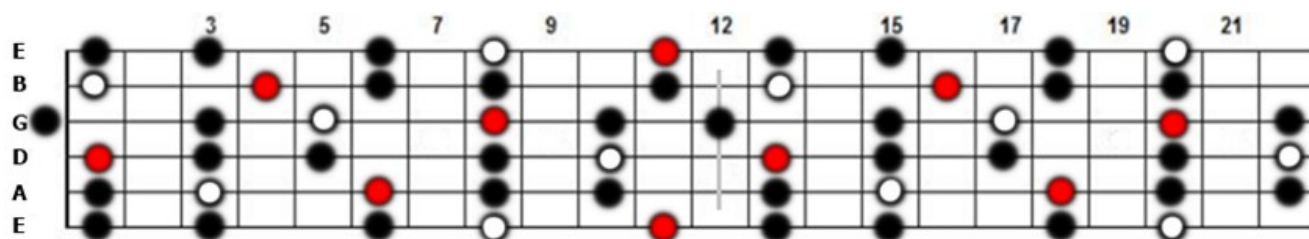
Db major-A# minor pentatonic



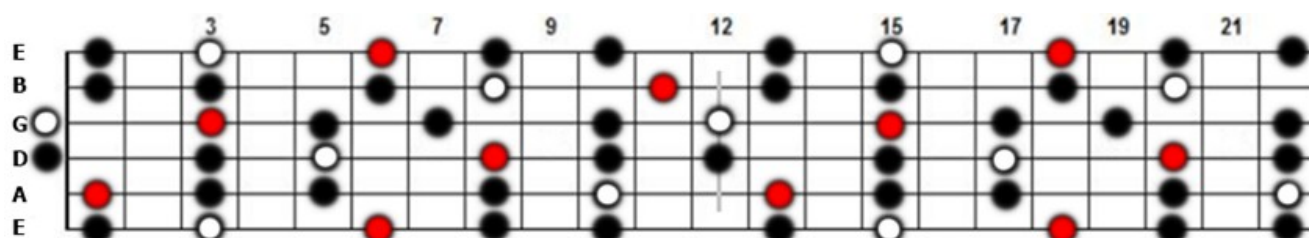
Ab major-F minor pentatonic



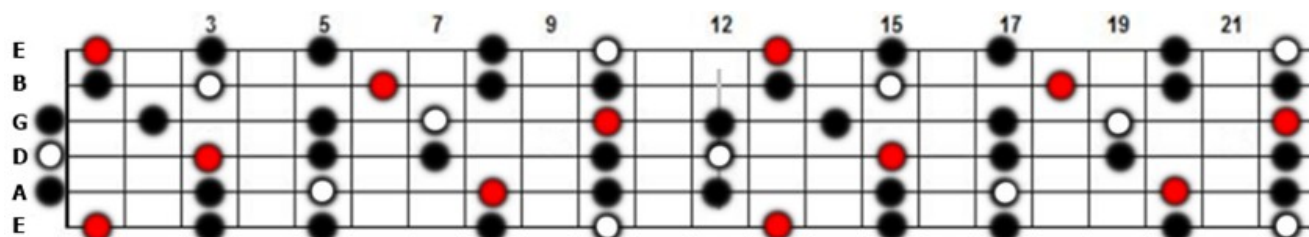
Eb major-C minor pentatonic



Bb major-G minor pentatonic



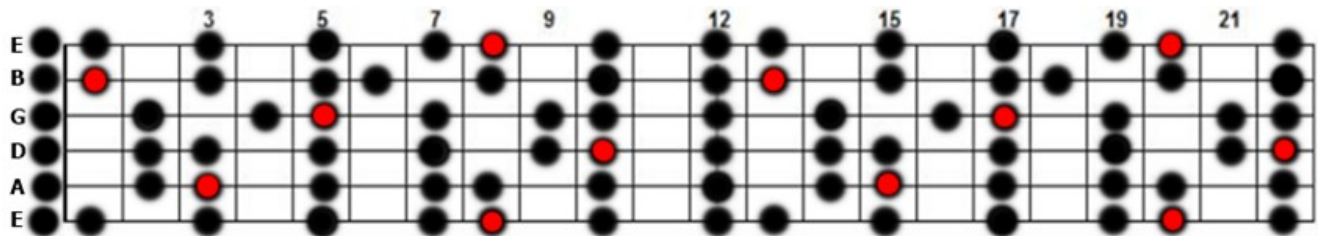
F major-D minor pentatonic



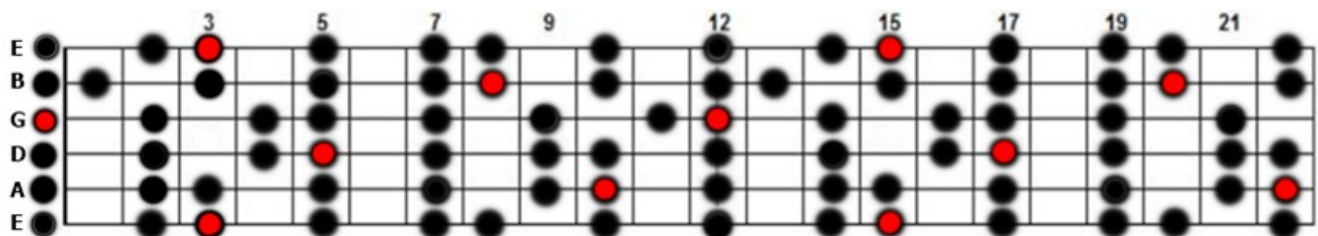
Major Diatonic Scales

Red Dot = Tonic Note of Scale

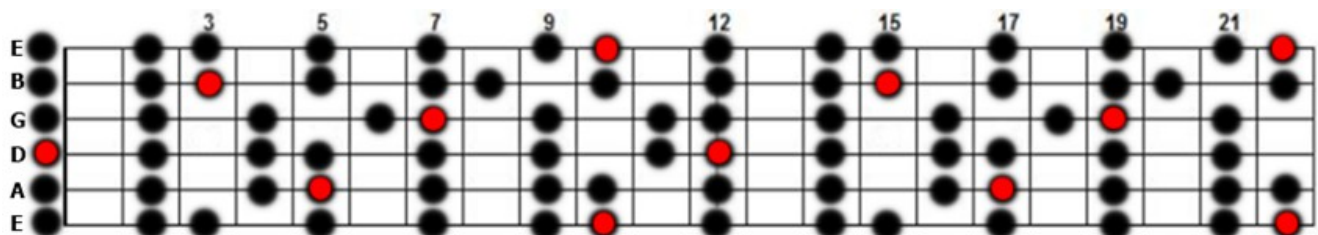
C major scale



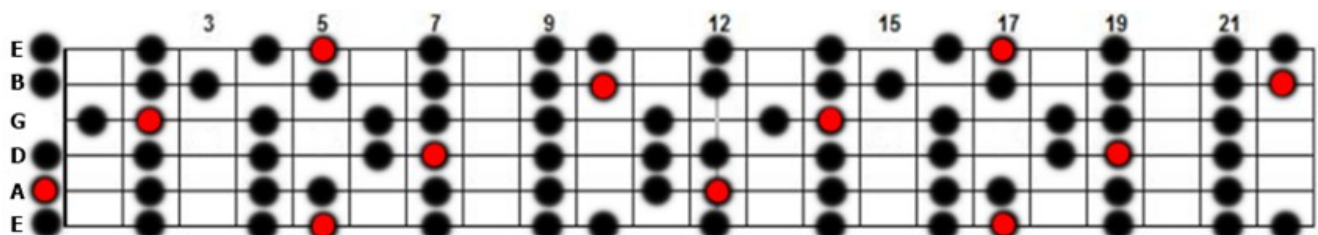
G major scale



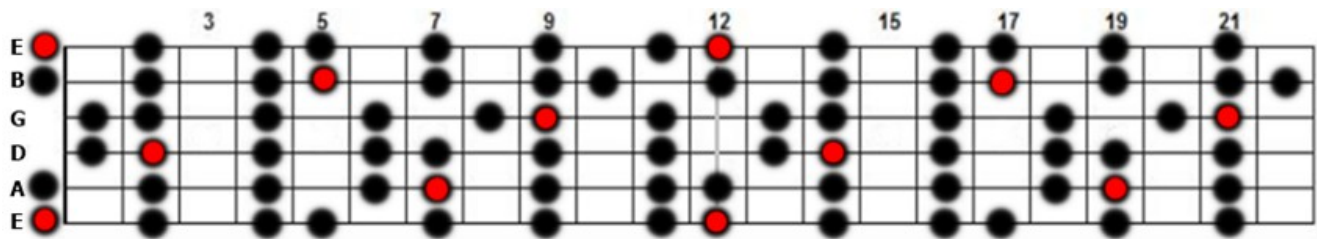
D major scale



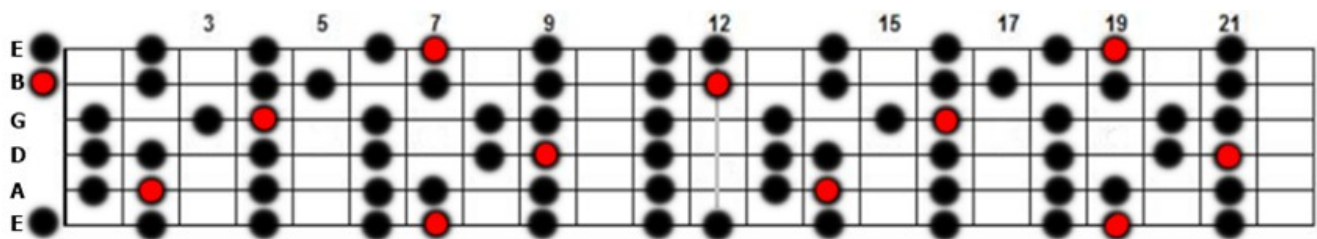
A major scale



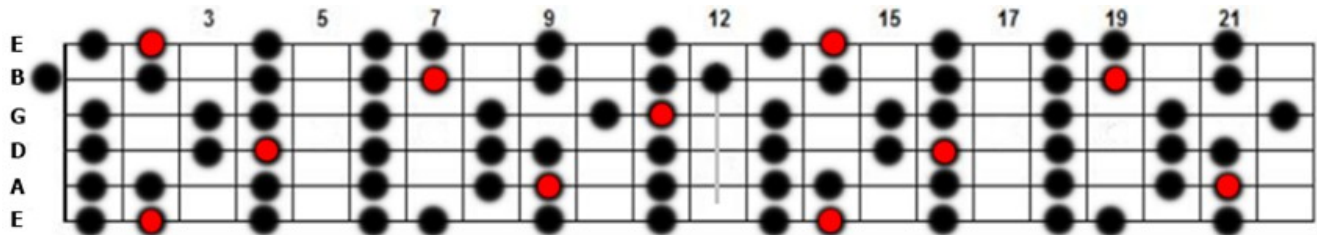
E major scale



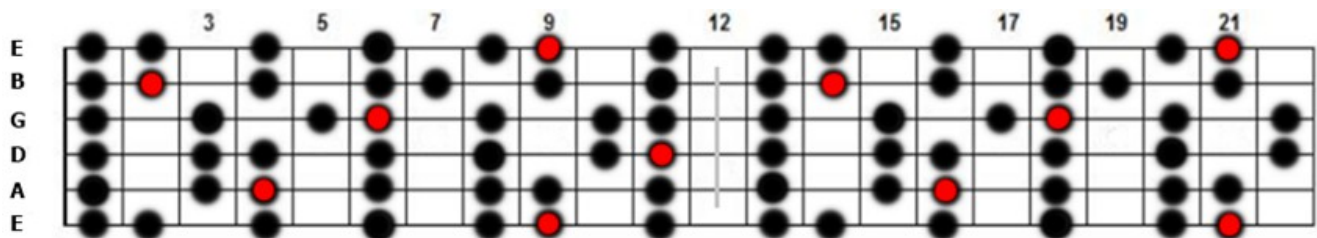
B major scale



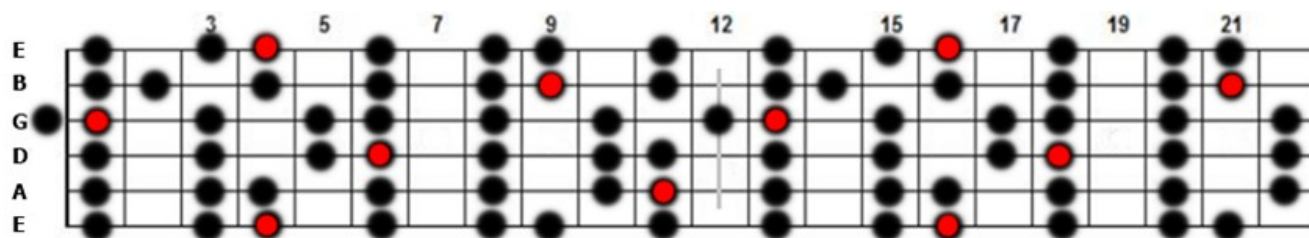
F#/Gb major scale



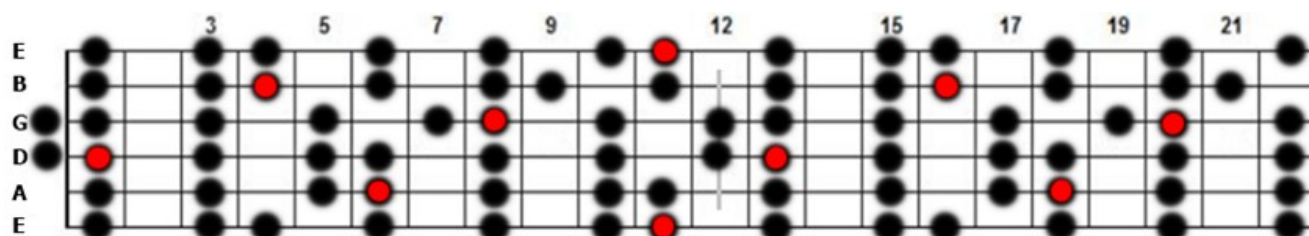
Db major scale



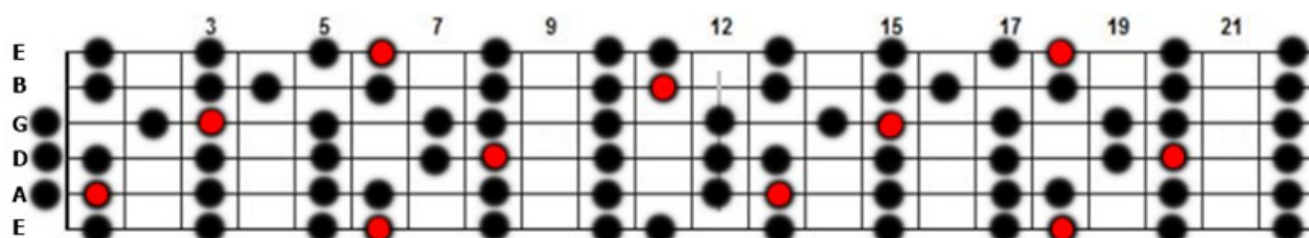
Ab major scale



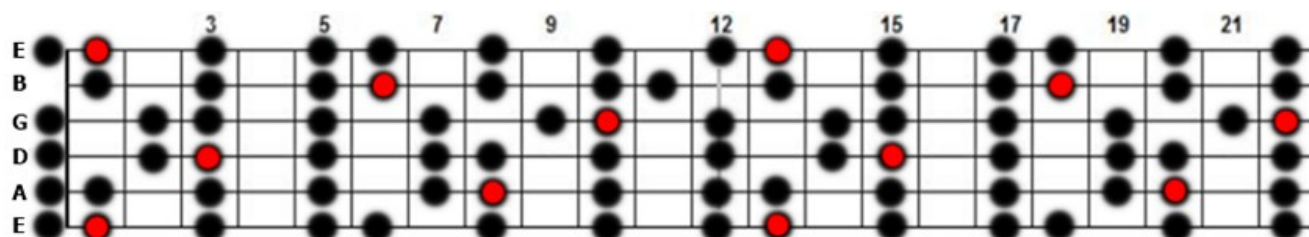
Eb major scale



Bb major scale



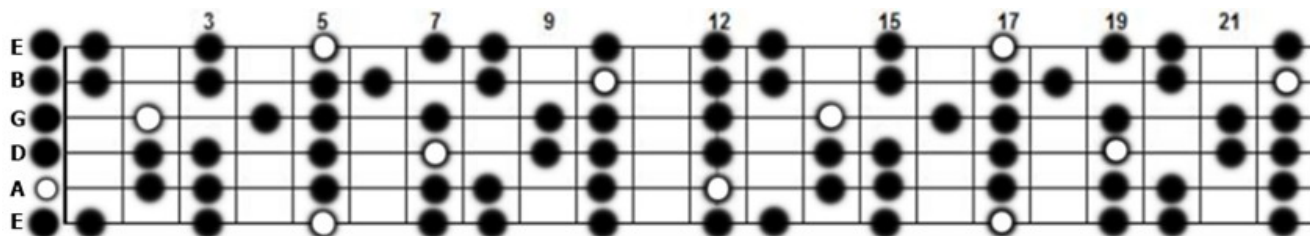
F major scale



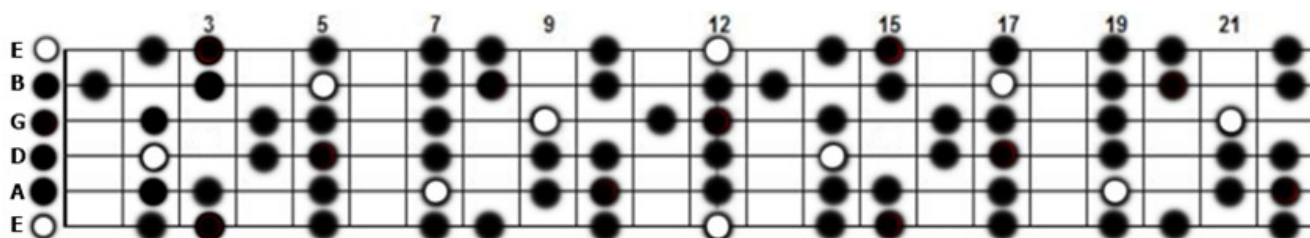
Minor Diatonic Scales

White Dot = Tonic Note of Scale

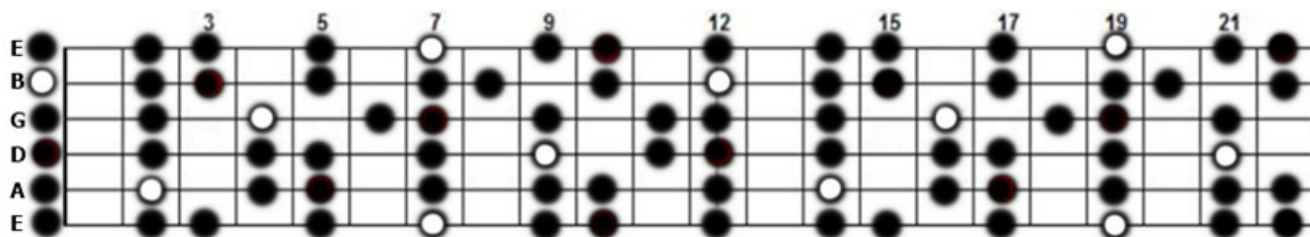
A minor scale



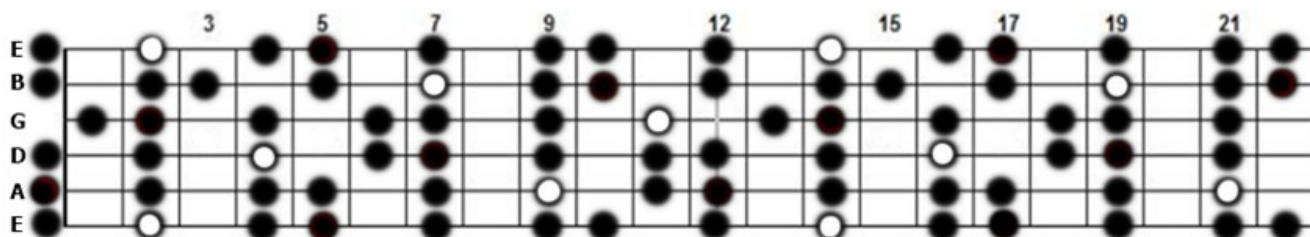
E minor scale



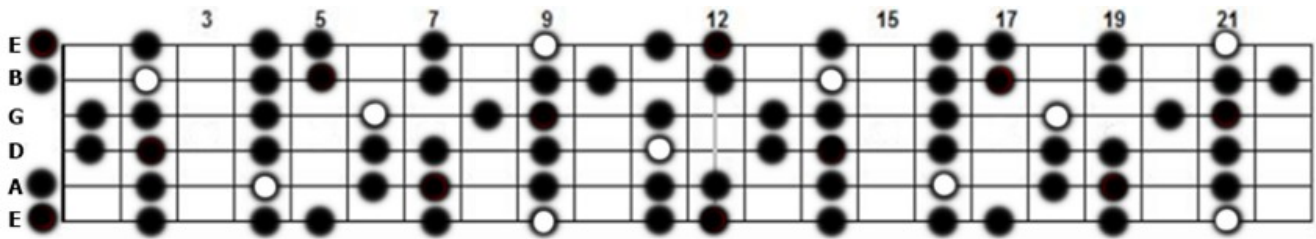
B minor scale



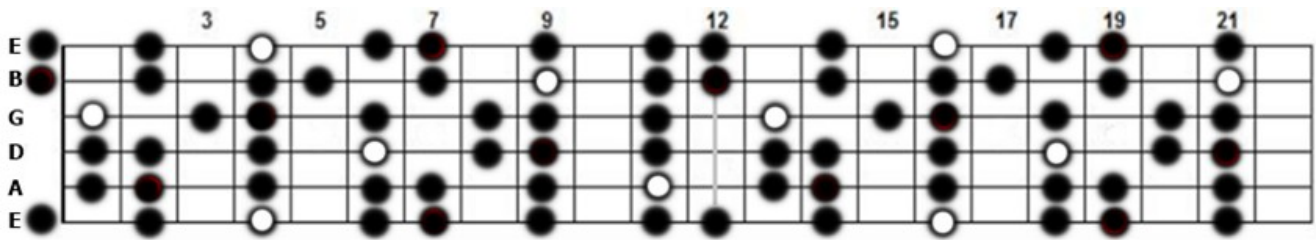
F# minor scale



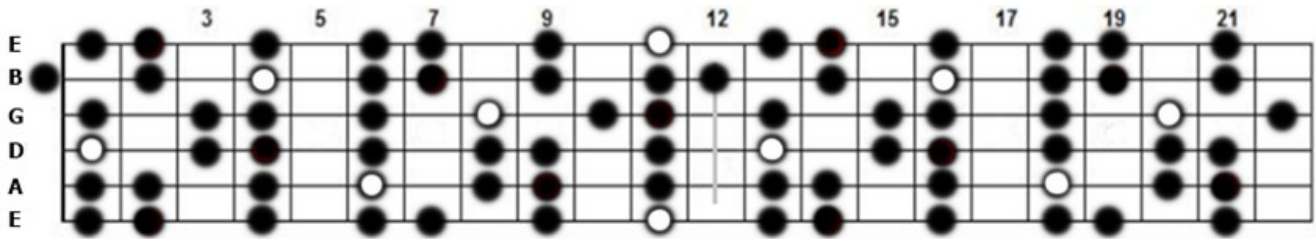
C# minor scale



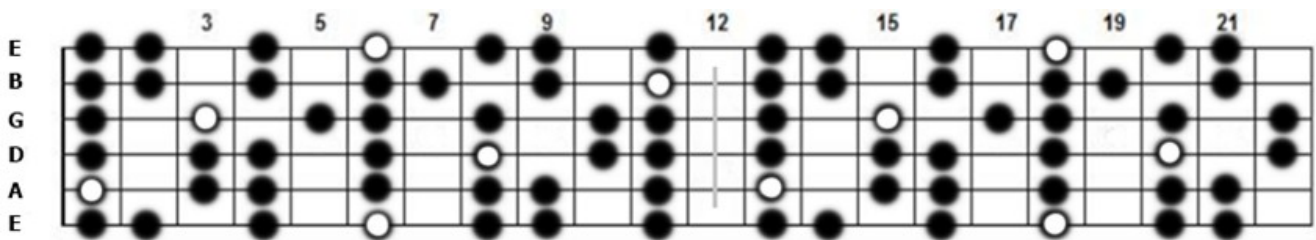
G# minor scale



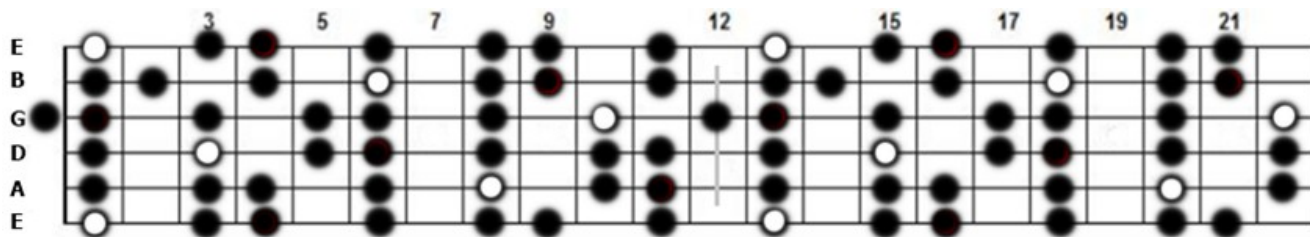
D# minor scale



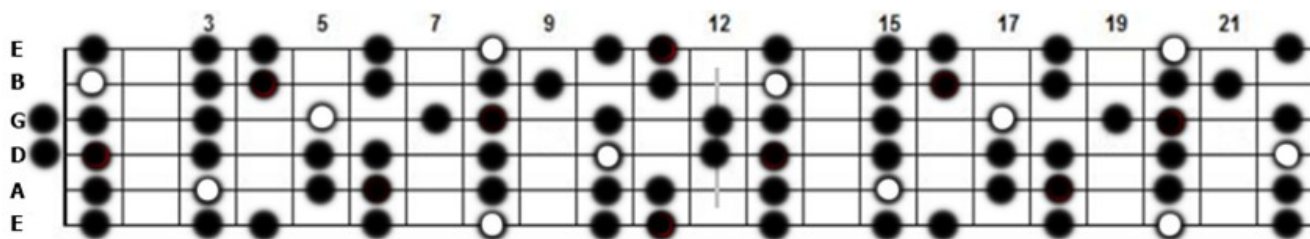
A#/Bb minor scale



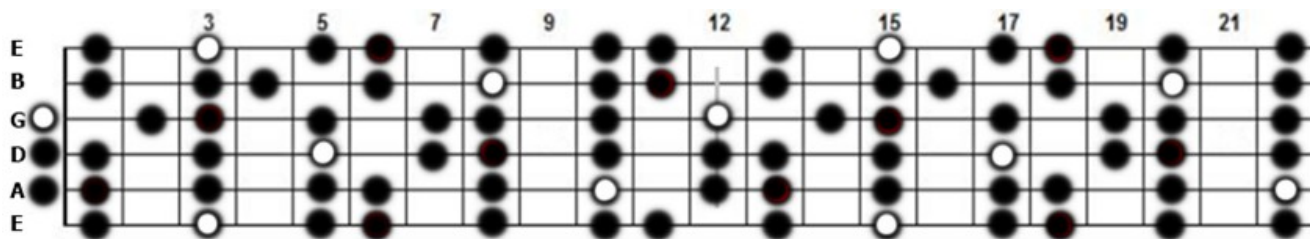
F minor scale



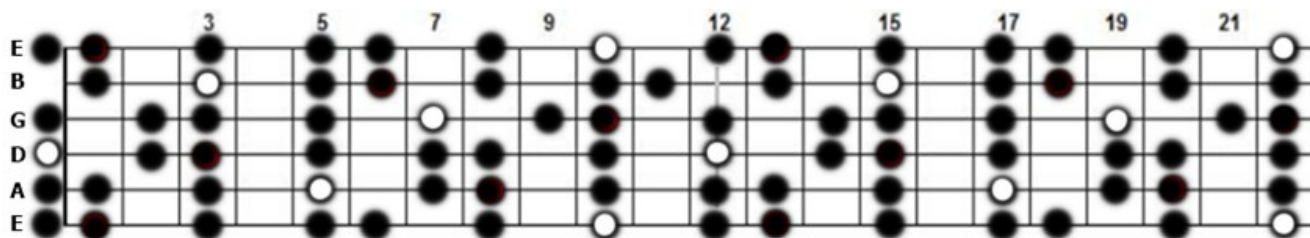
C minor scale



G minor scale



D minor scale

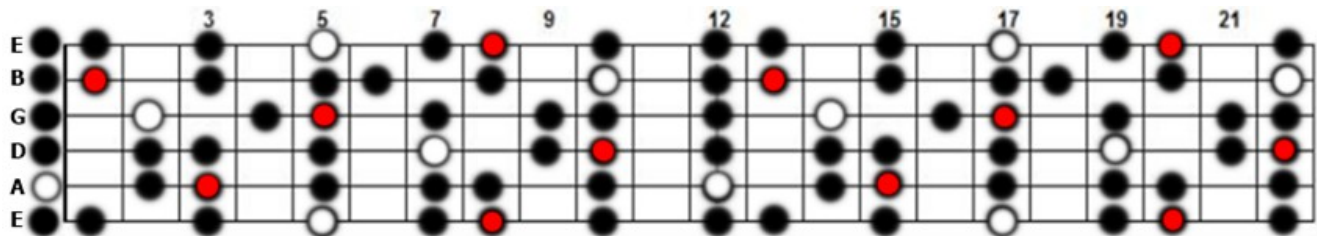


Relative Major-Minor Diatonic Scales

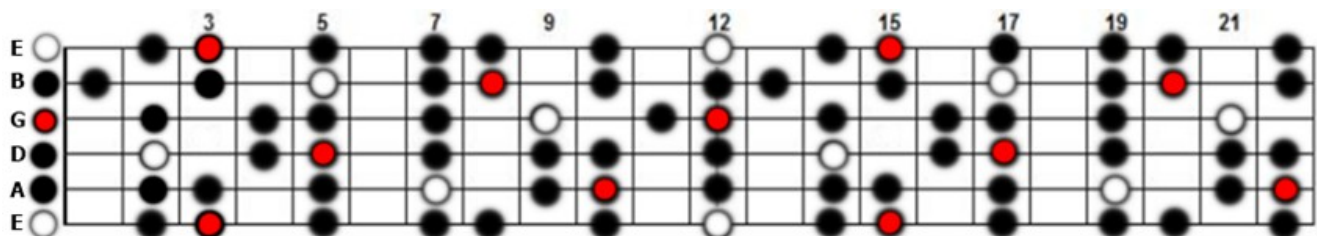
Red Dot = Major Scale Root

White Dot = Minor Scale Root

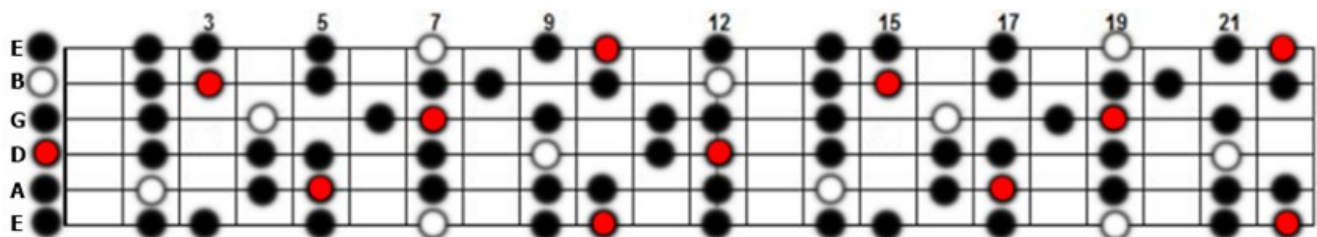
C major-A minor diatonic scale



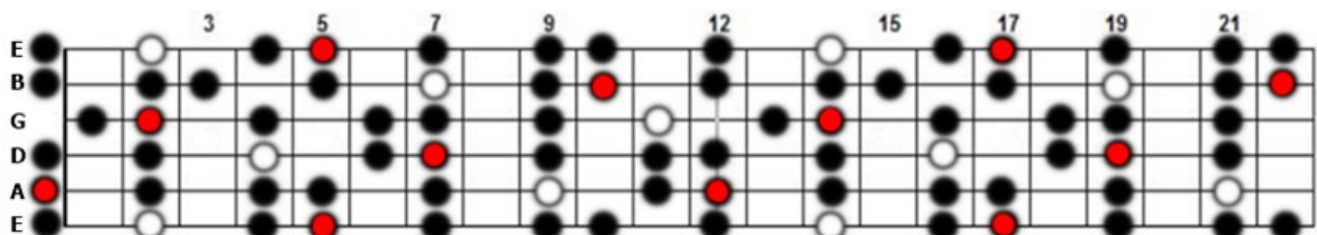
G major-E minor diatonic scale



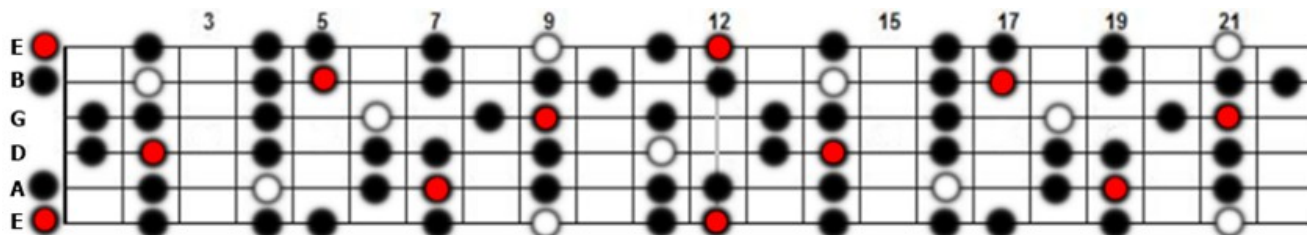
D major-B minor diatonic scale



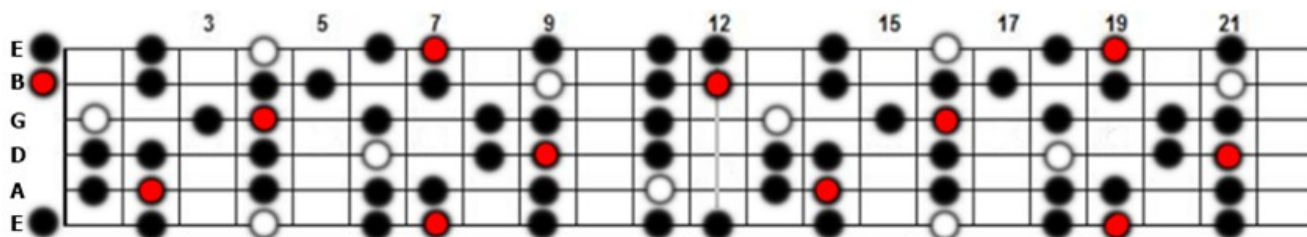
A major-F# minor diatonic scale



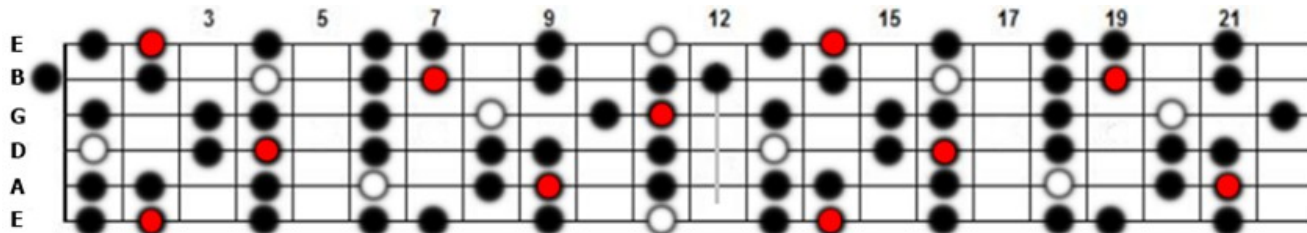
E major-C# minor diatonic scale



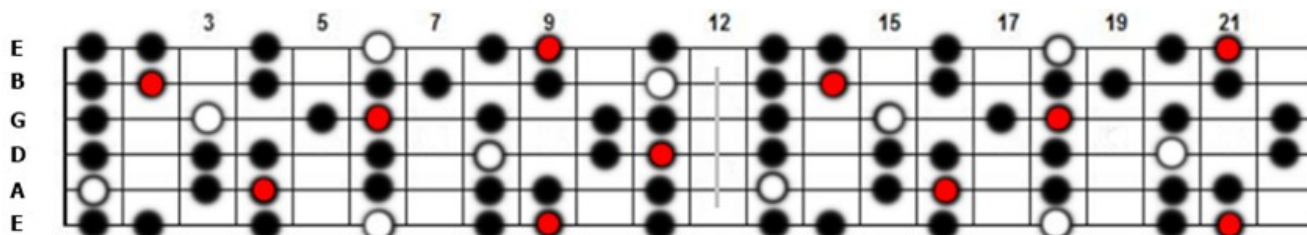
B major-G# minor diatonic scale



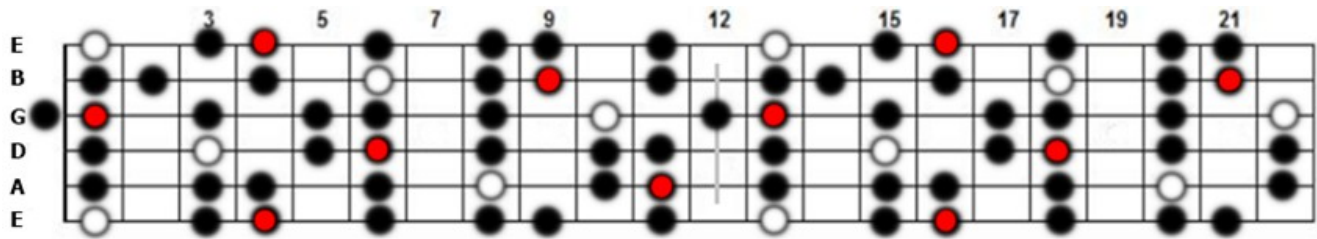
Gb major-D# minor diatonic scale



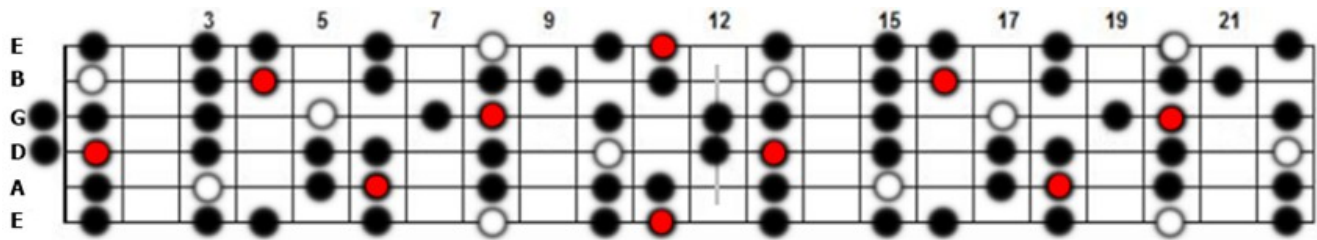
Db major-A# minor diatonic scale



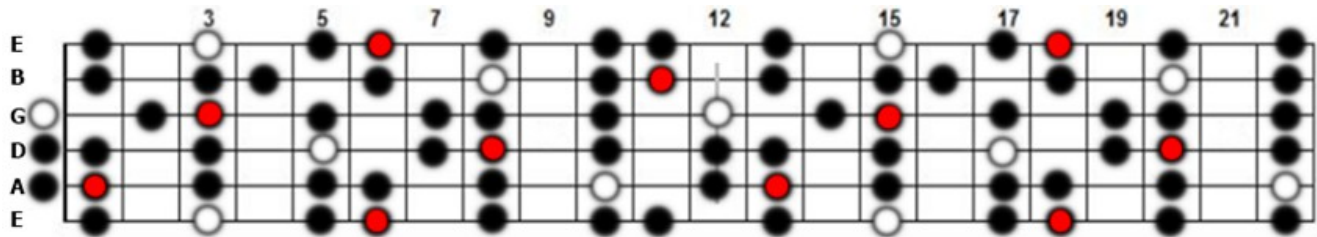
Ab major-F minor diatonic scale



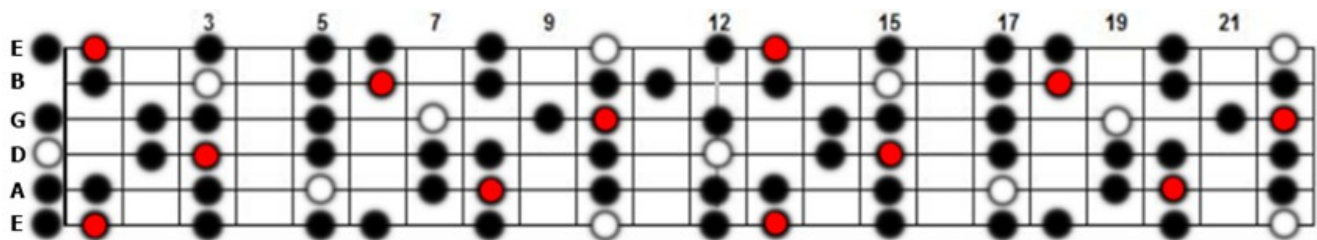
Eb major-C minor diatonic scale



Bb major-G minor diatonic scale



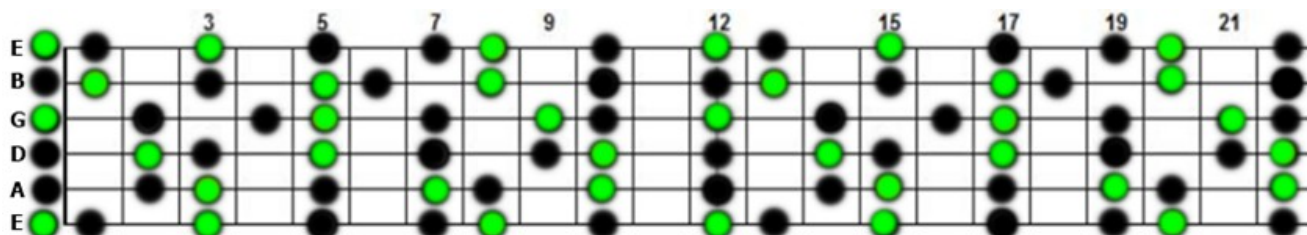
F major-D minor diatonic scale



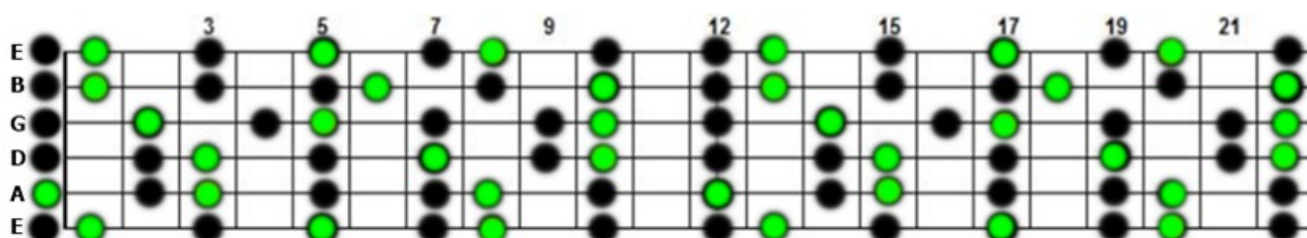
The 7 Diatonic Arpeggios in Each Major Key

Green Dots = Chord Tones/Arpeggios Within Scalar Framework
Red Dot = Tonic Note of Key/Scale

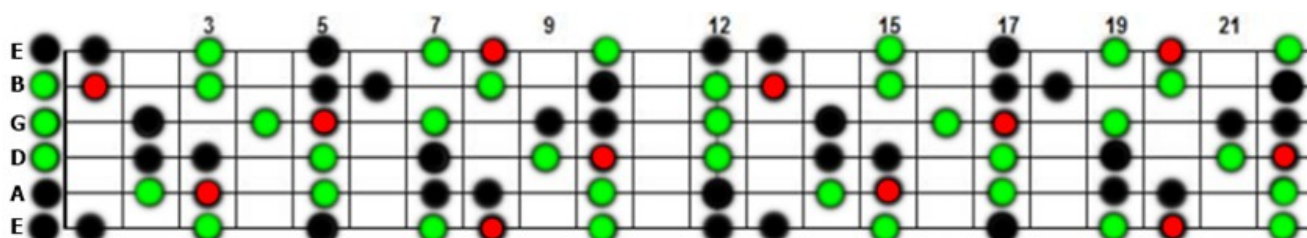
I chord in C major



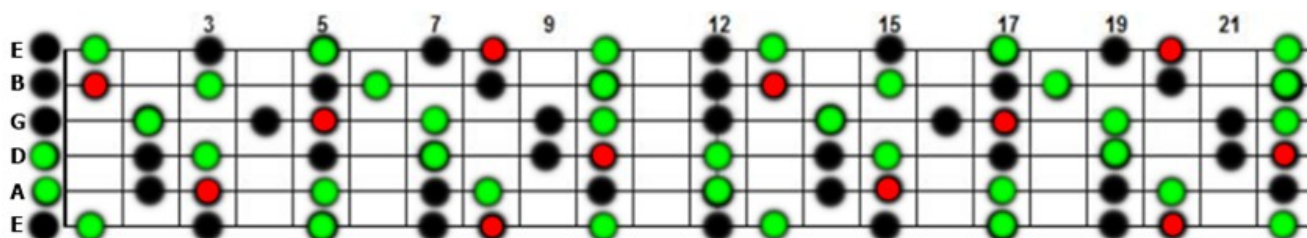
IV chord in C major



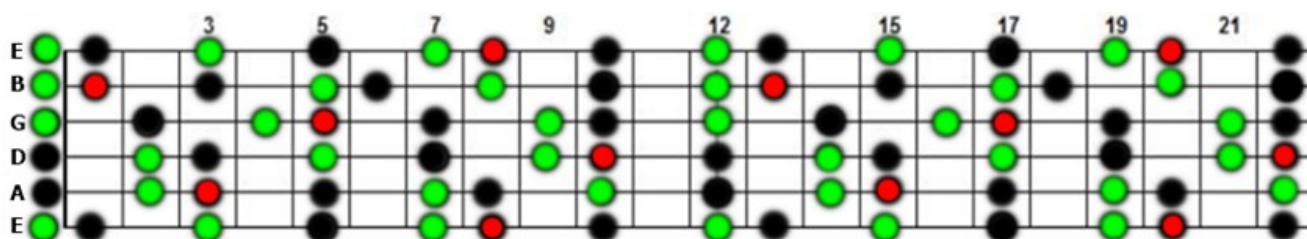
V chord in C major



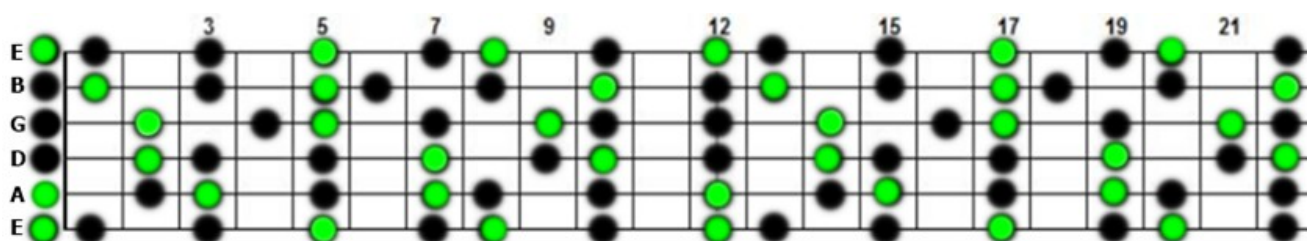
ii chord in C major



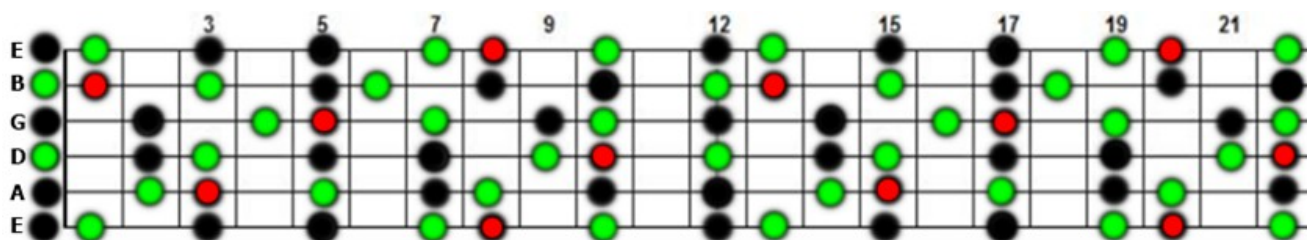
iii chord in C major



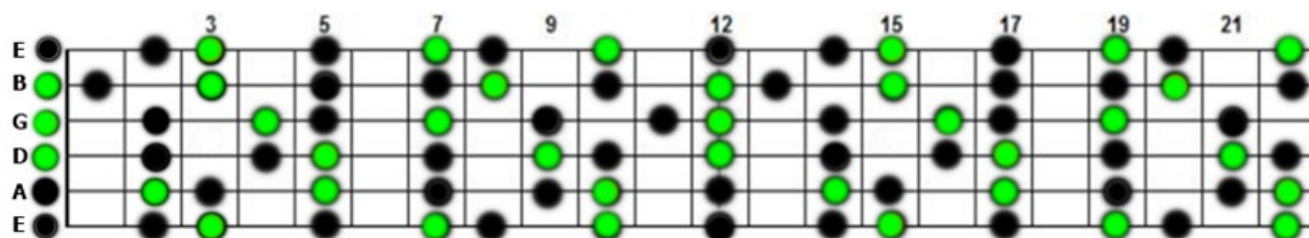
vi chord in C major



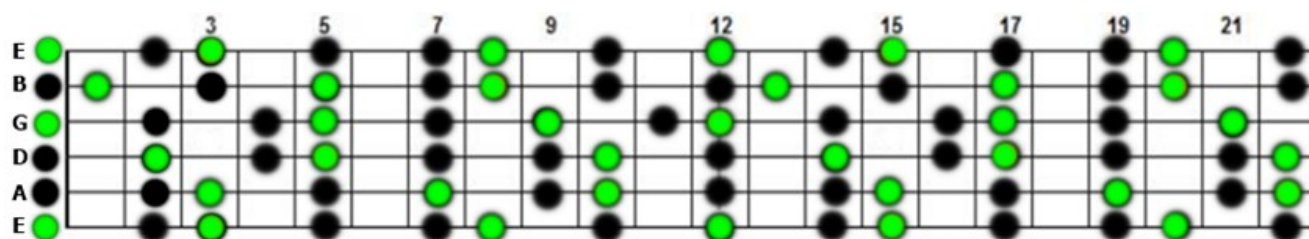
vii° chord in C major



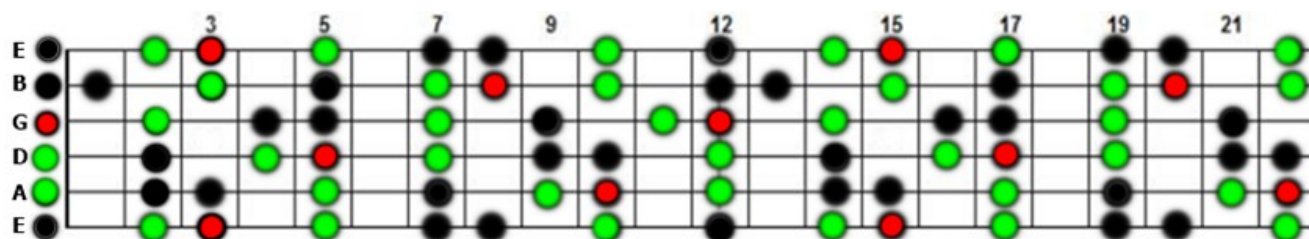
I chord in G major



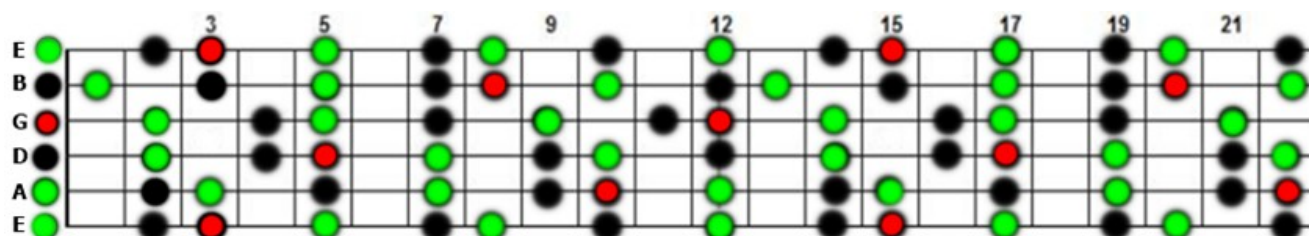
IV chord in G major



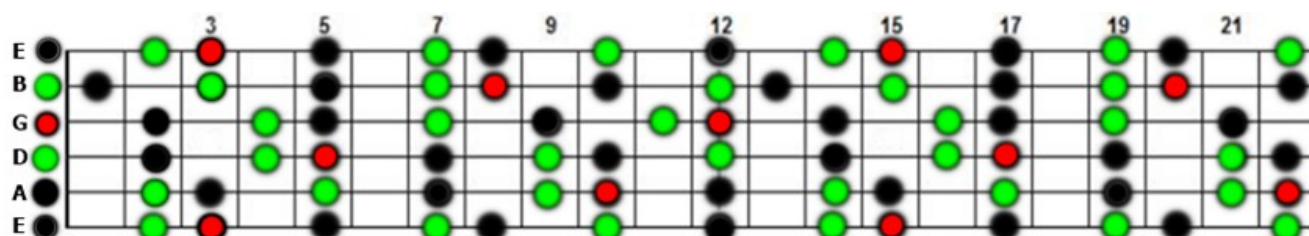
V chord in G major



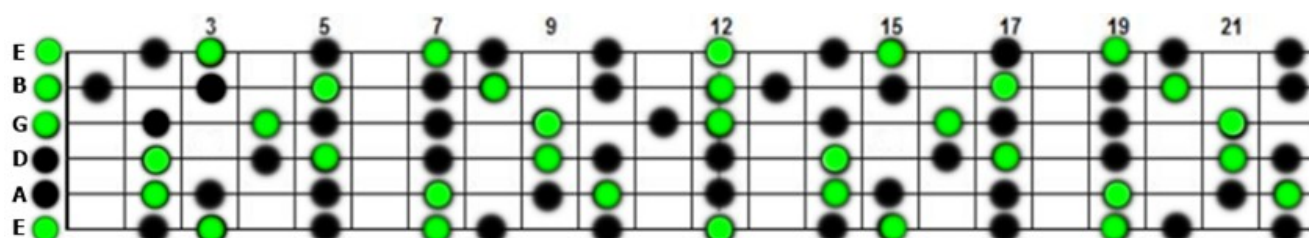
ii chord in G major



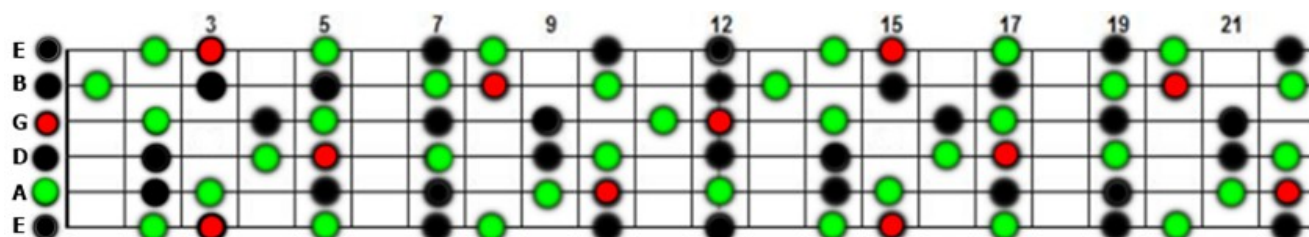
iii chord in G major



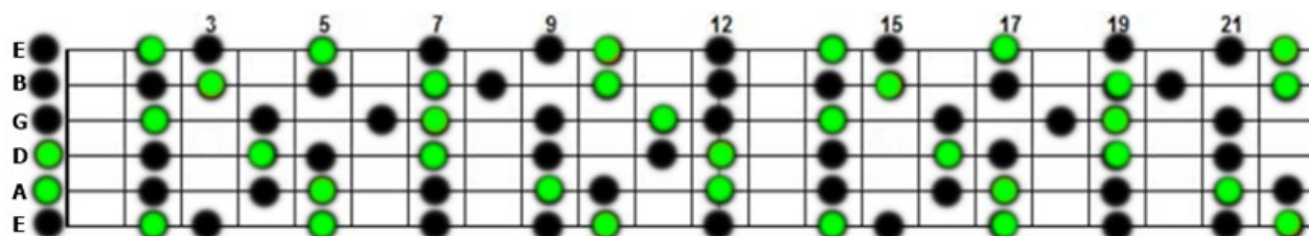
vi chord in G major



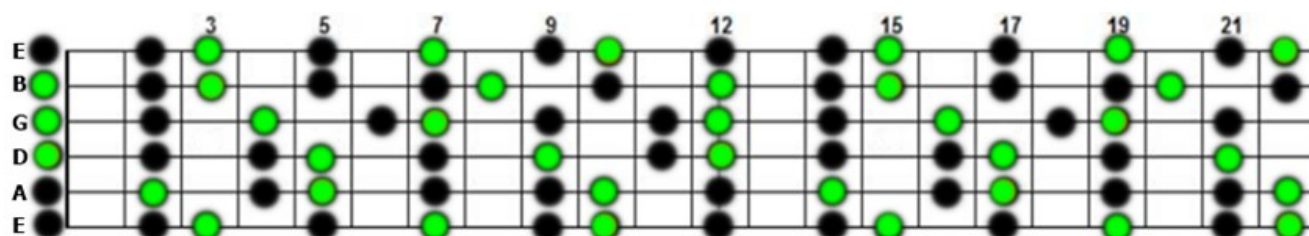
vii° chord in G major



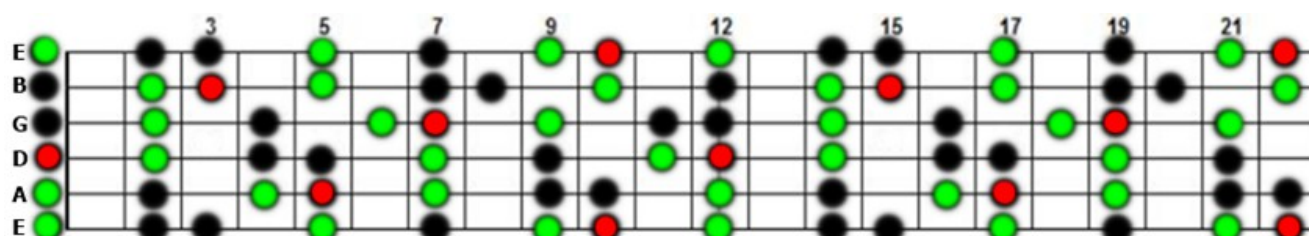
I chord in D major



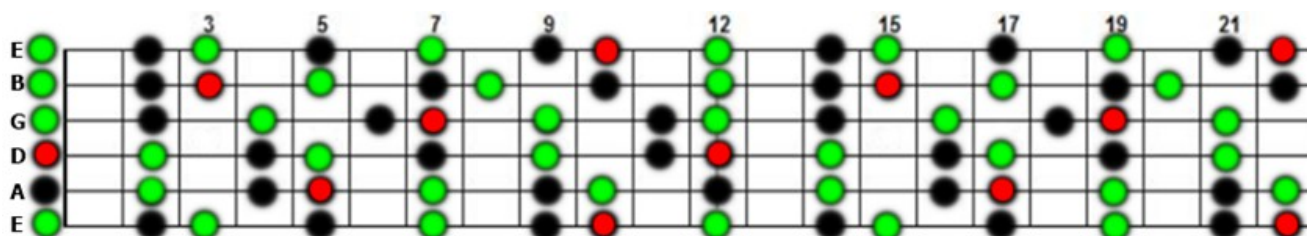
IV chord in D major



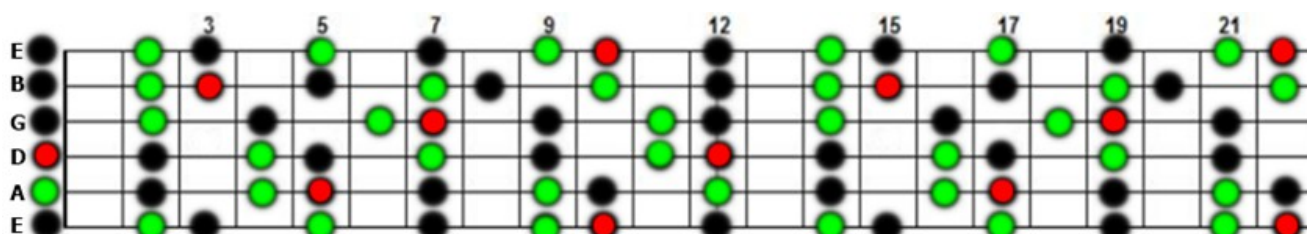
V chord in D major



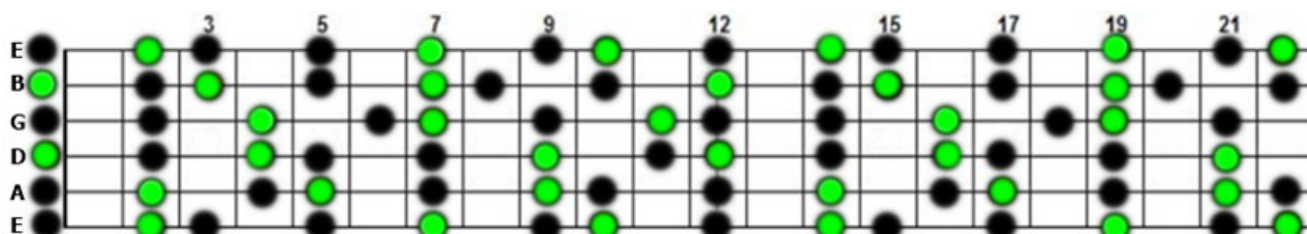
ii chord in D major



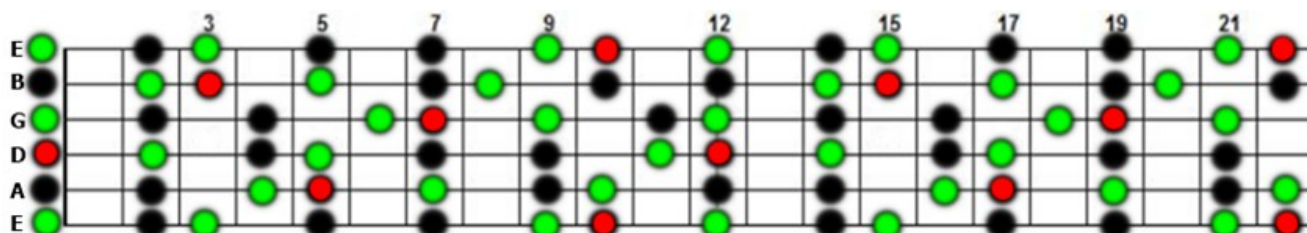
iii chord in D major



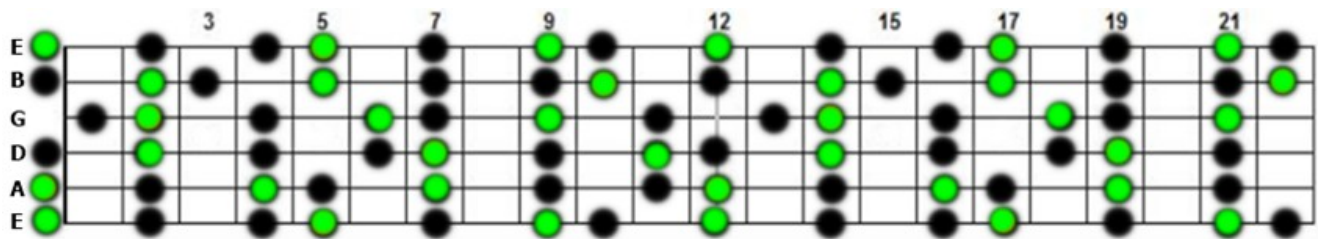
vi chord in D major



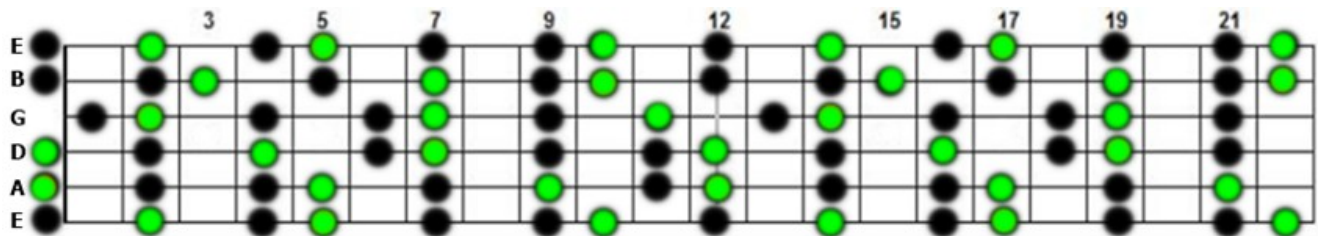
vii° chord in D major



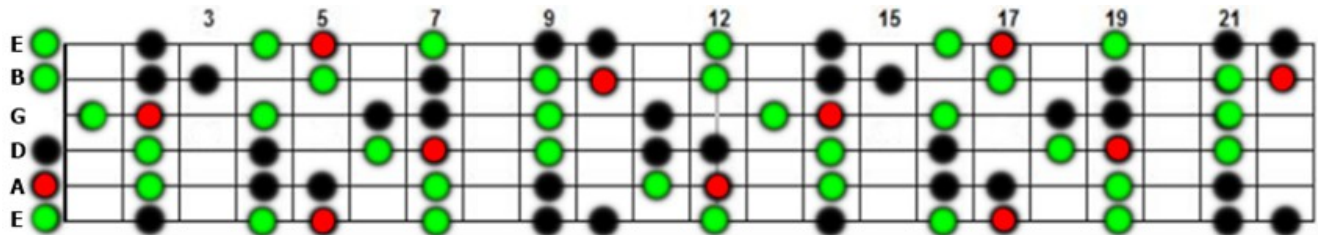
I chord in A major



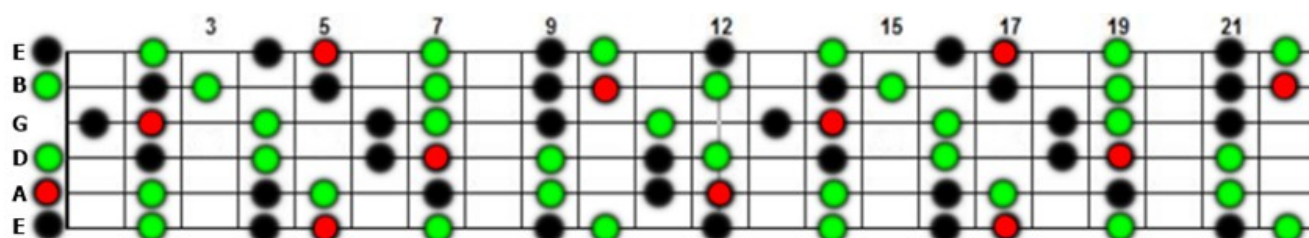
IV chord in A major



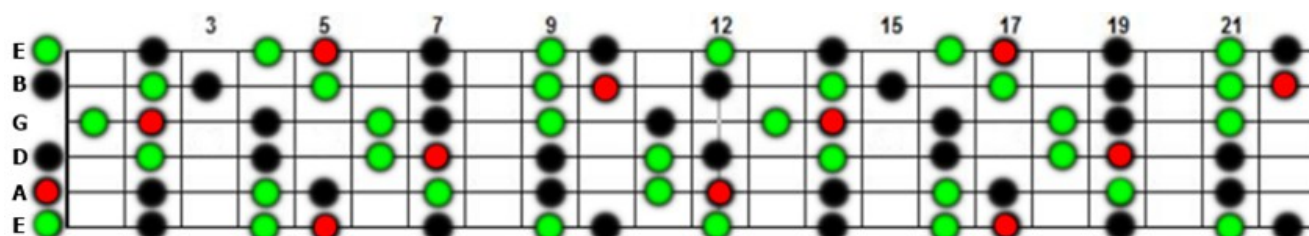
V chord in A major



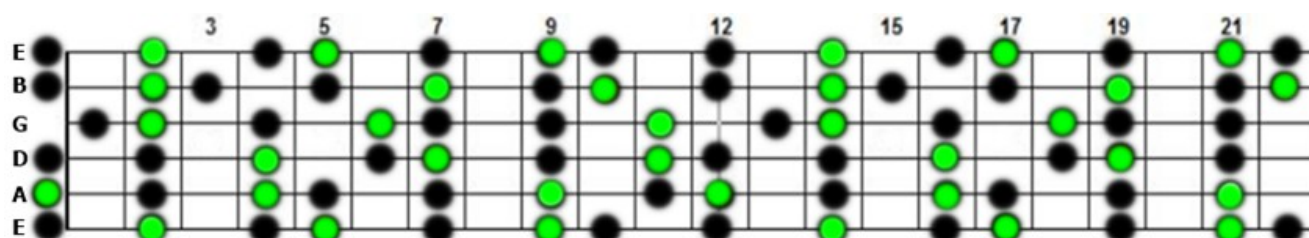
ii chord in A major



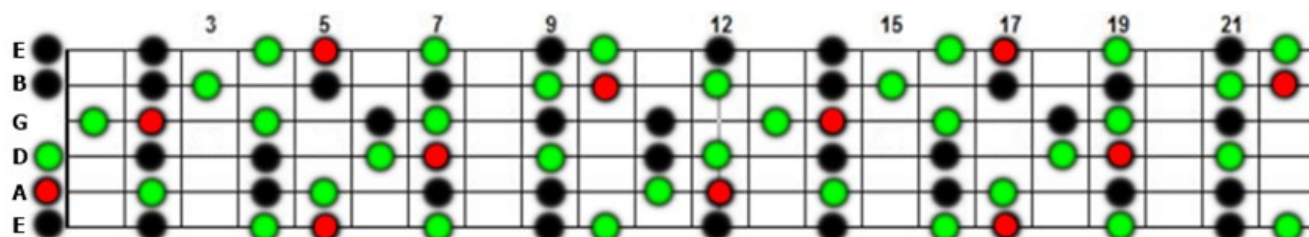
iii chord in A major



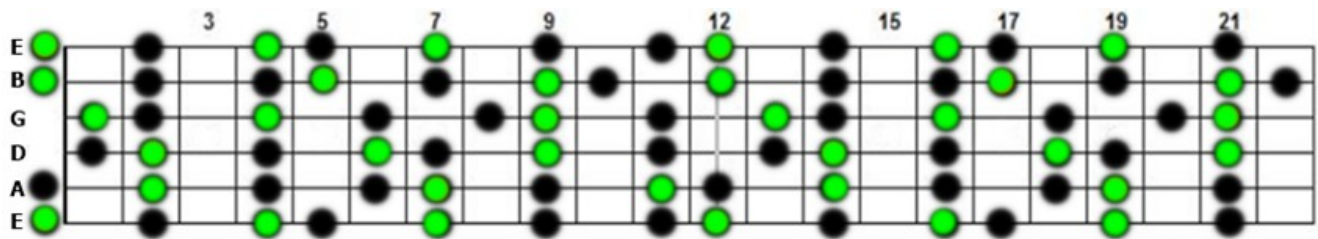
vi chord in A major



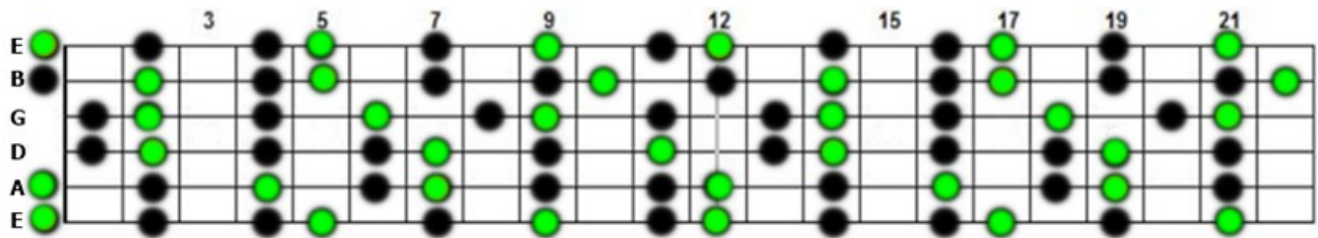
vii° chord in A major



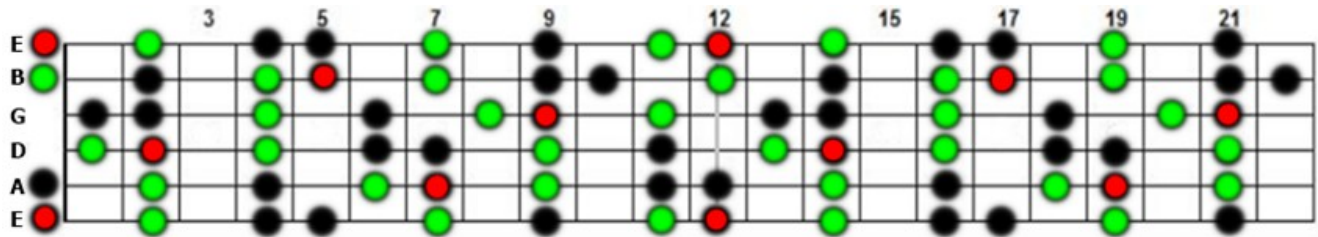
I chord in E major



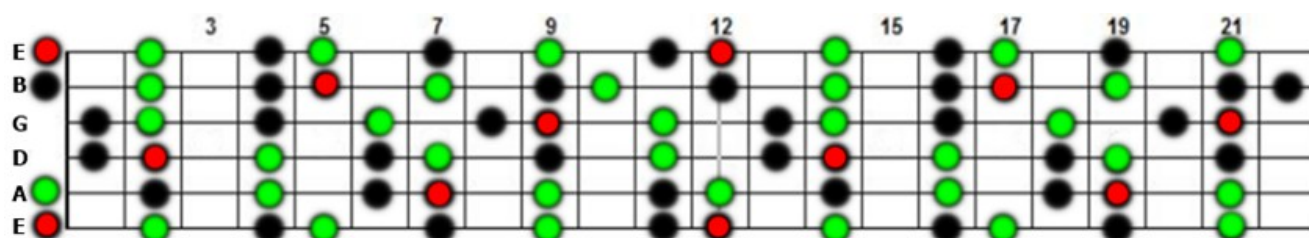
IV chord in E major



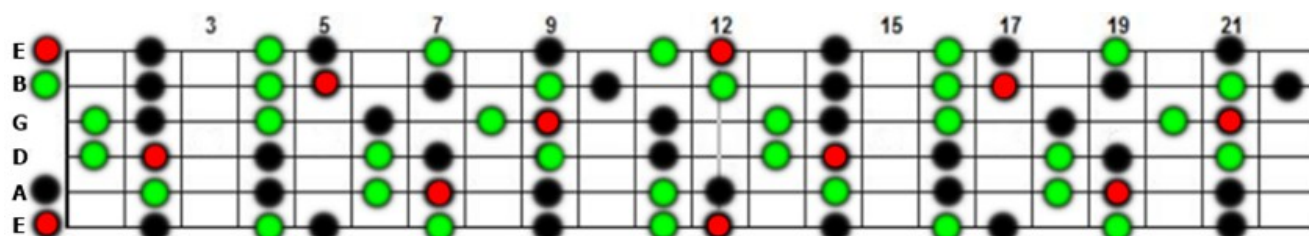
V chord in E major



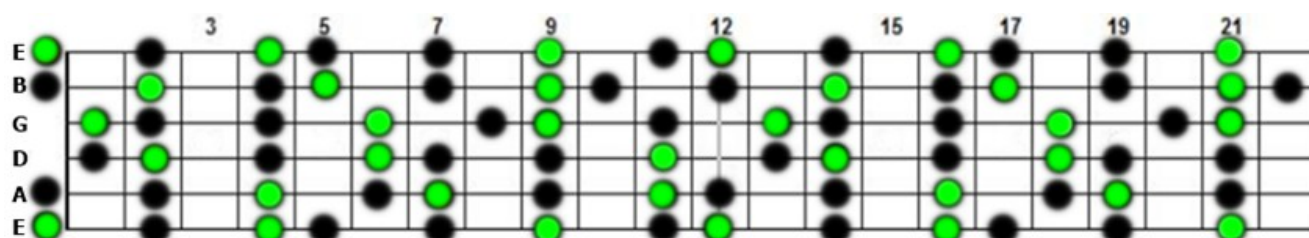
ii chord in E major



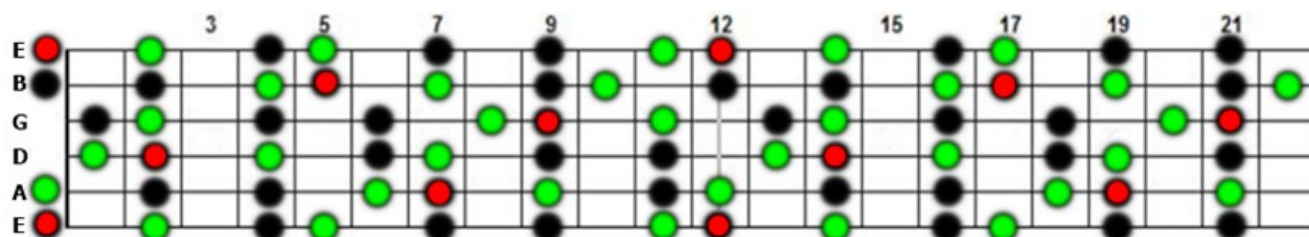
iii chord in E major



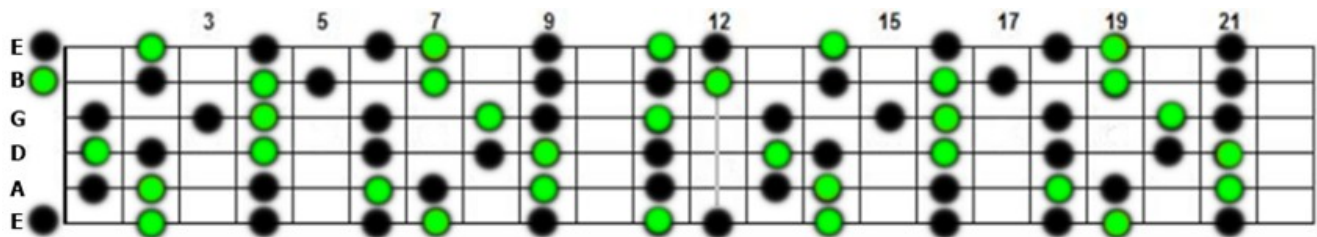
vi chord in E major



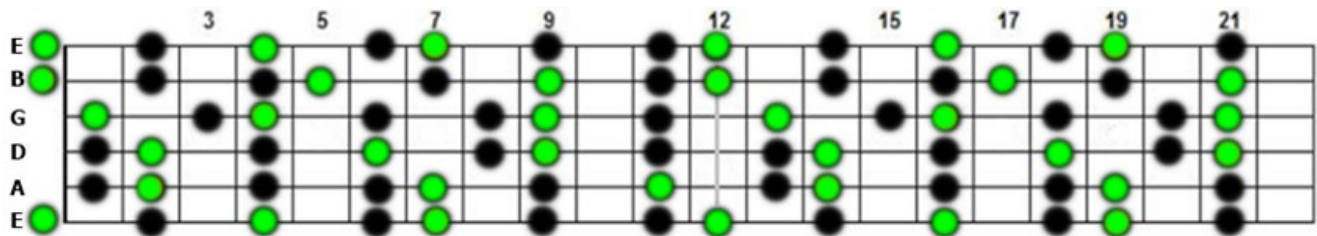
vii° chord in E major



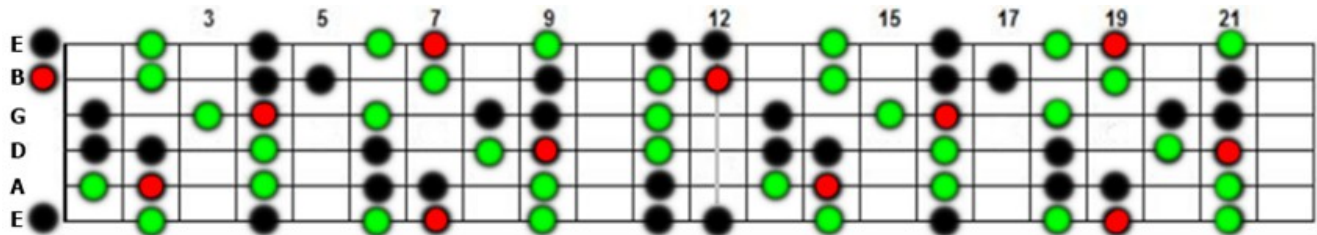
I chord in B major



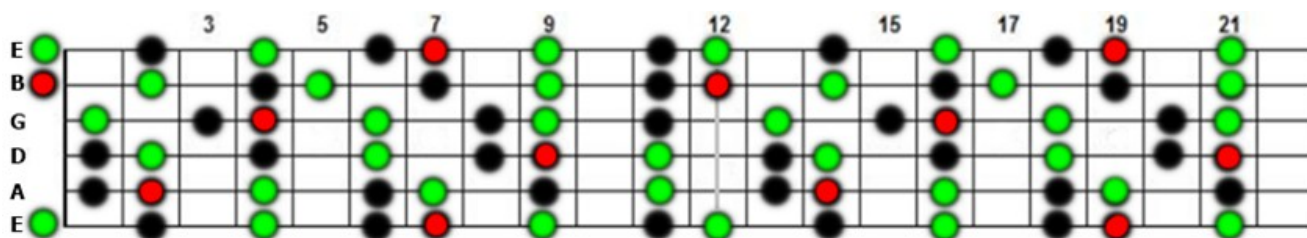
IV chord in B major



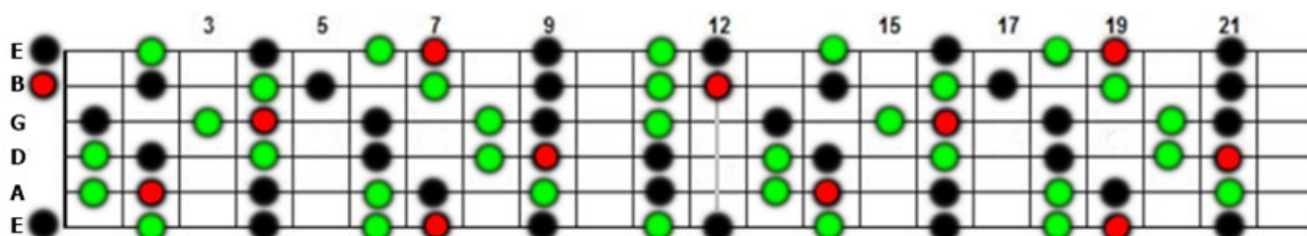
V chord in B major



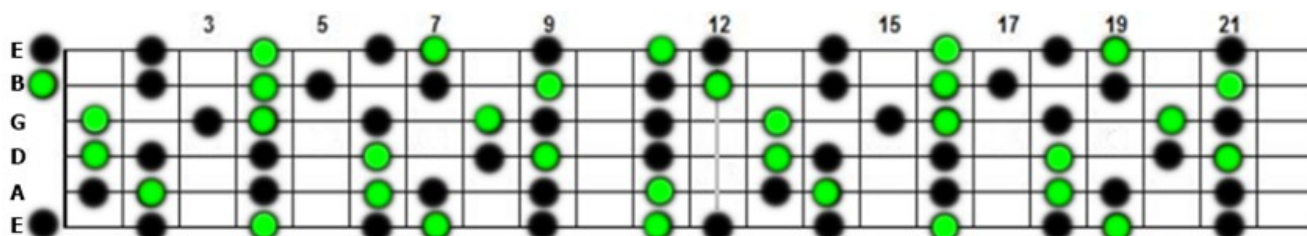
ii chord in B major



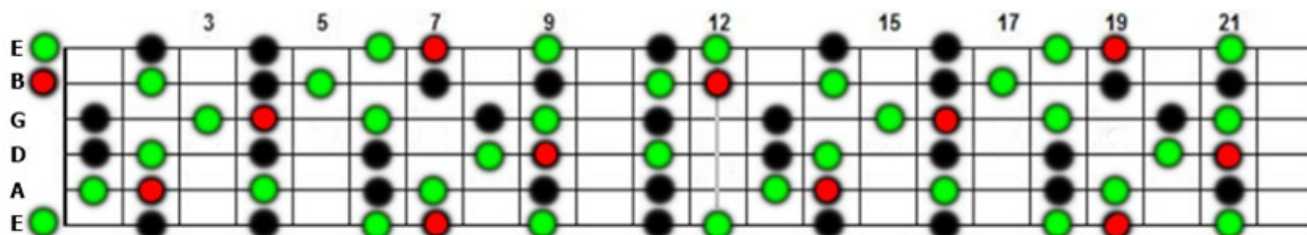
iii chord in B major



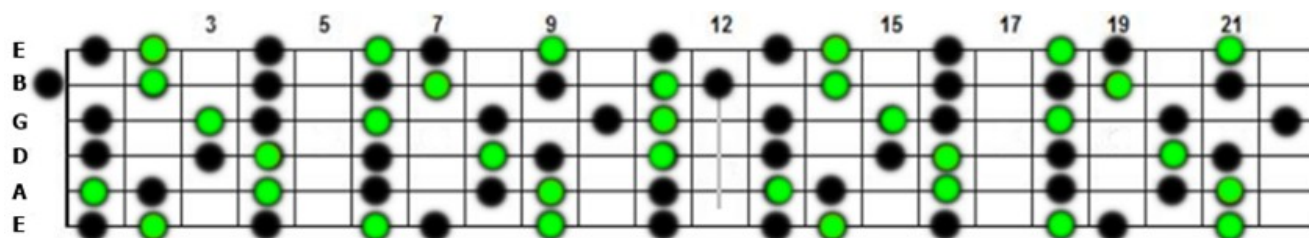
vi chord in B major



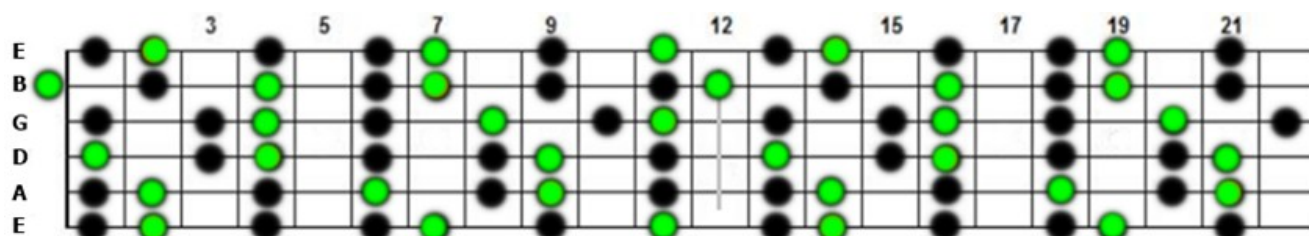
vii° chord in B major



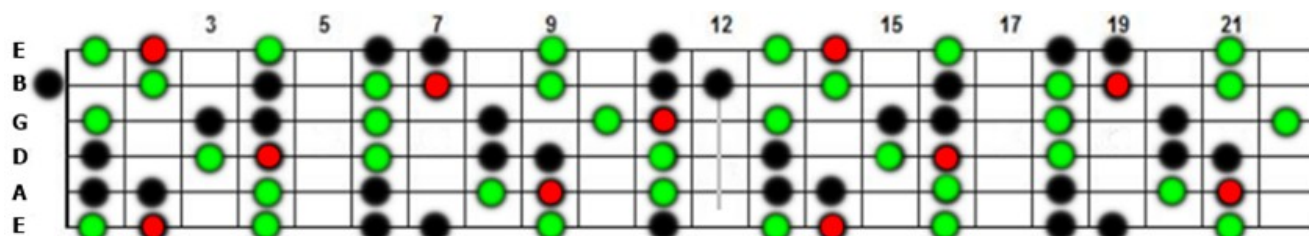
I chord in F#/Gb major



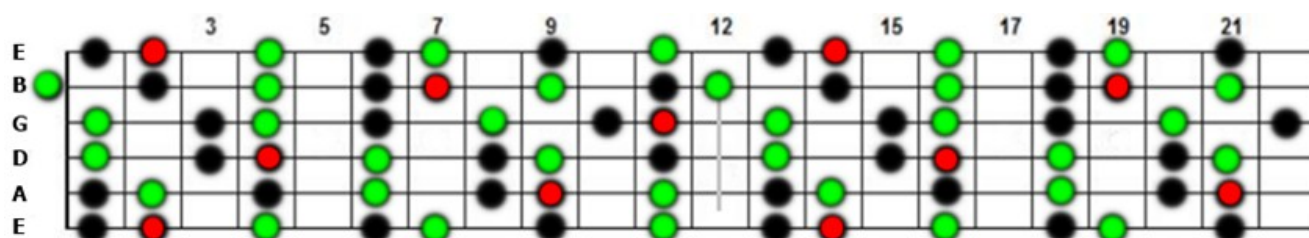
IV chord in F#/Gb major



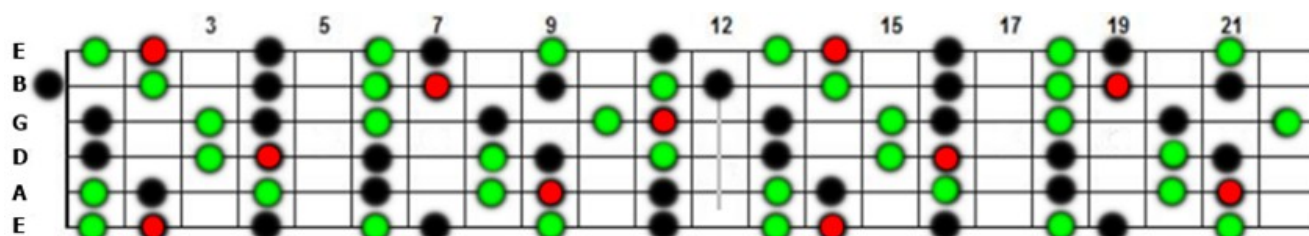
V chord in F#/Gb major



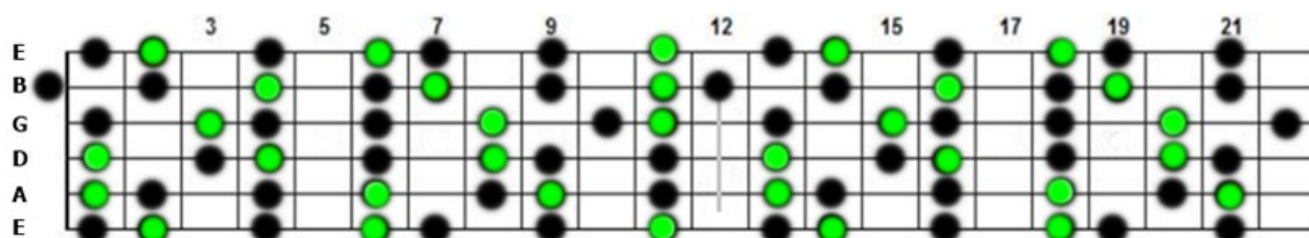
ii chord in F#/Gb major



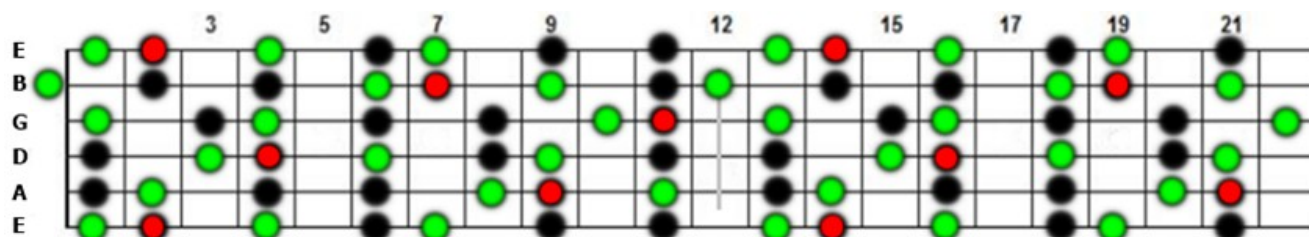
iii chord in F#/Gb major



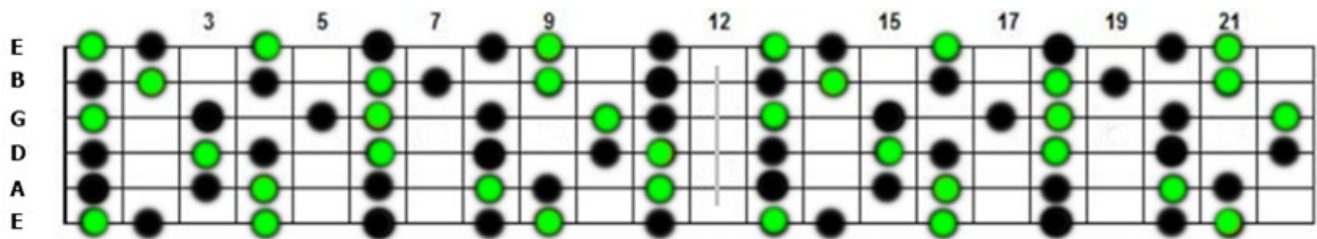
vi chord in F#/Gb major



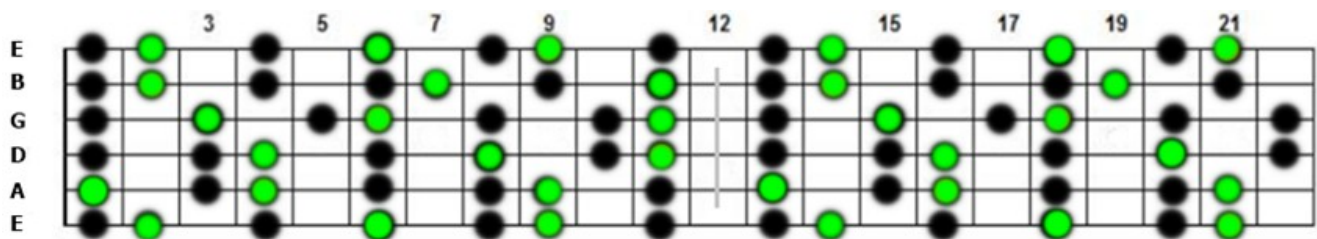
vii° chord in F#/Gb major



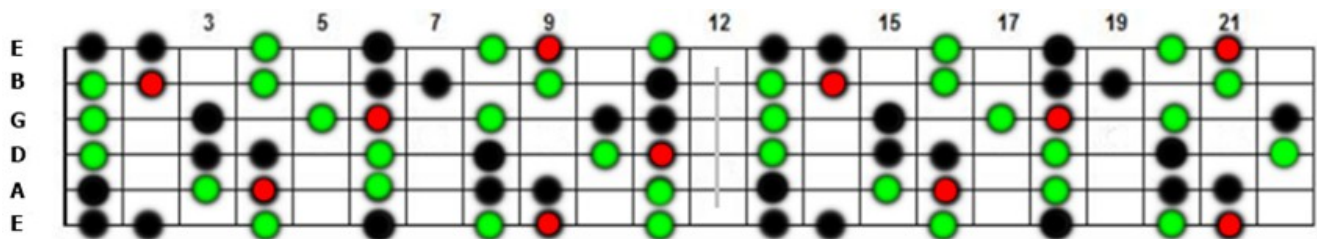
I chord in Db major



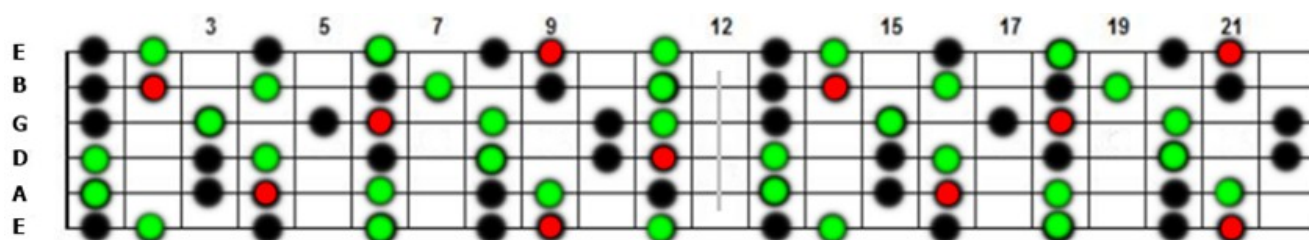
IV chord in Db major



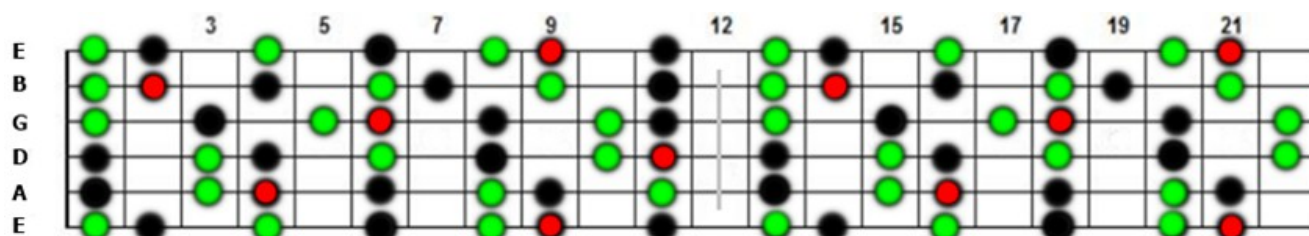
V chord in Db major



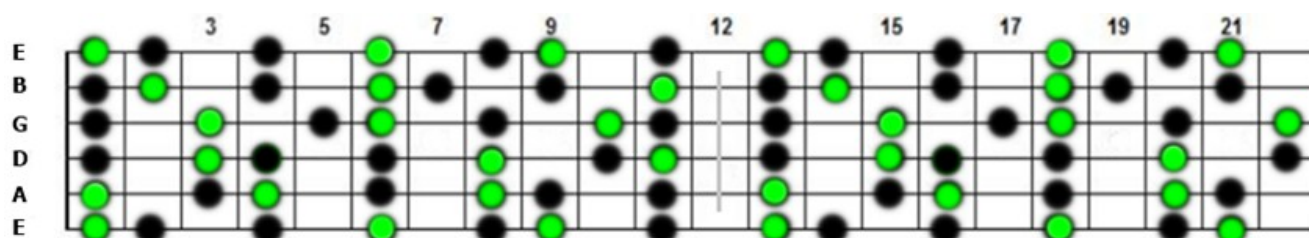
ii chord in Db major



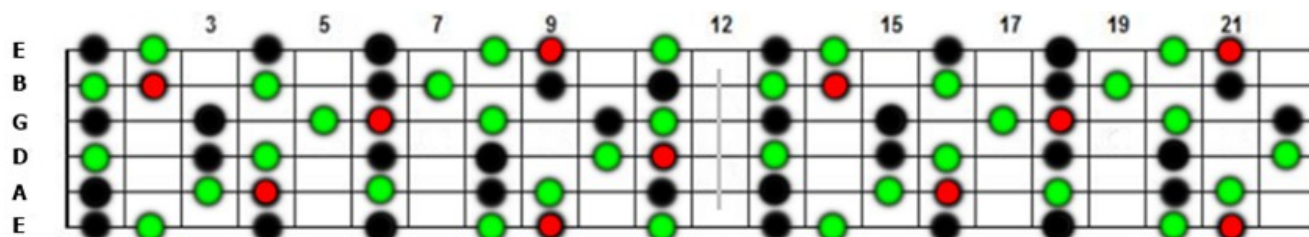
iii chord in Db major



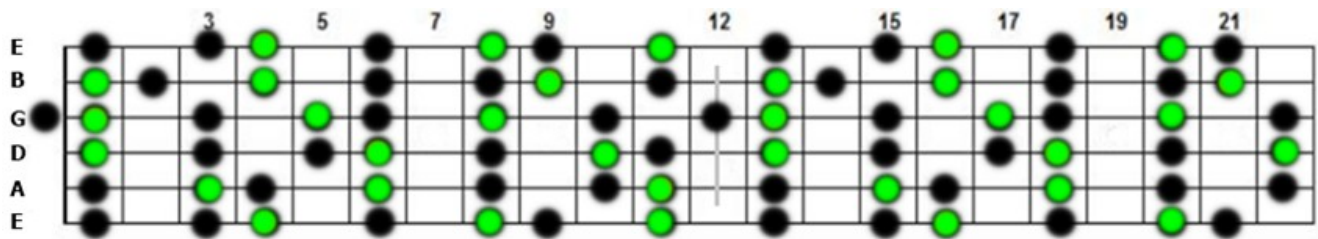
vi chord in Db major



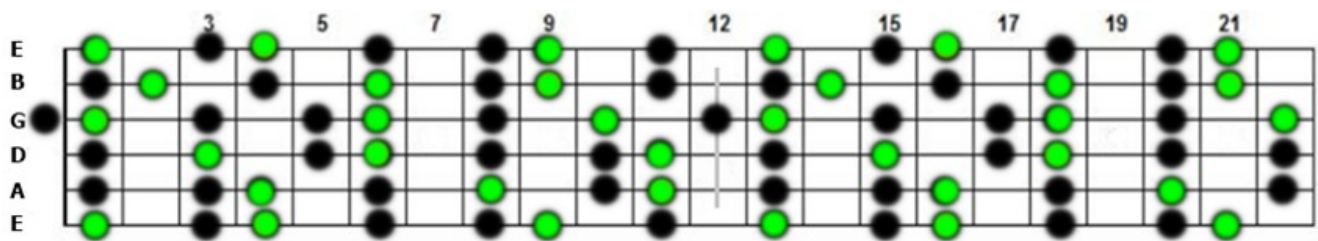
vii° chord in Db major



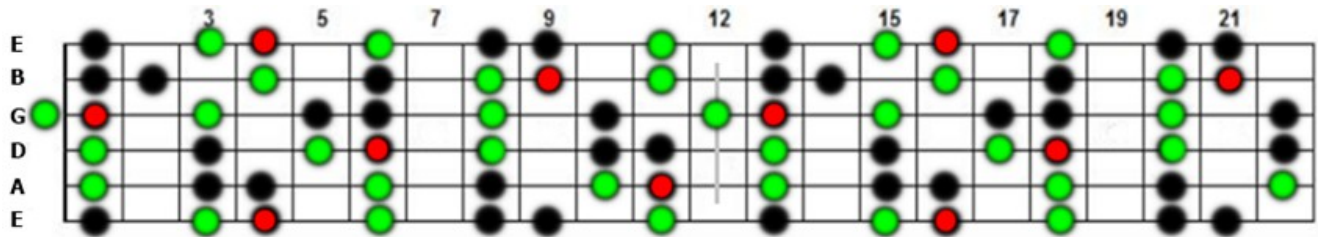
I chord in Ab major



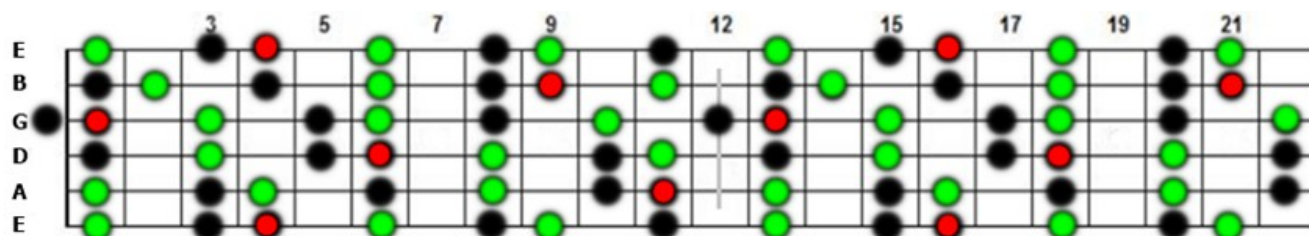
IV chord in Ab major



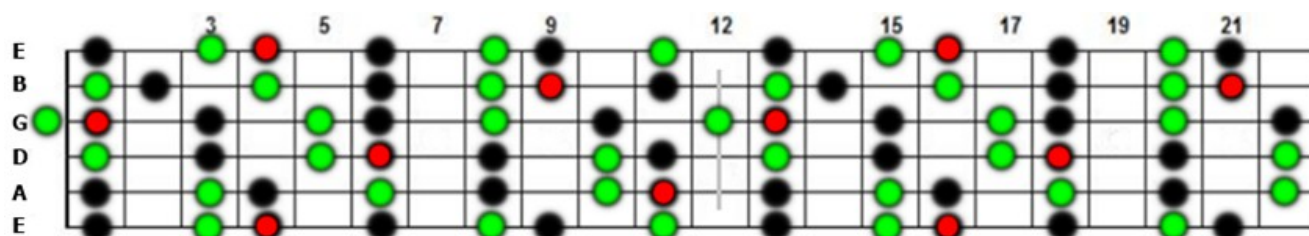
V chord in Ab major



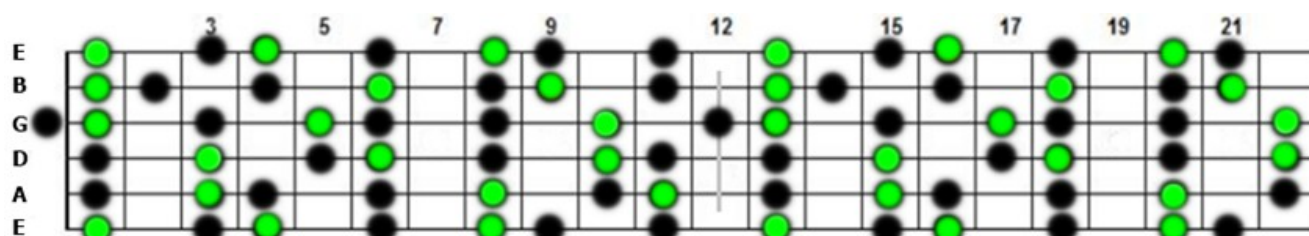
ii chord in Ab major



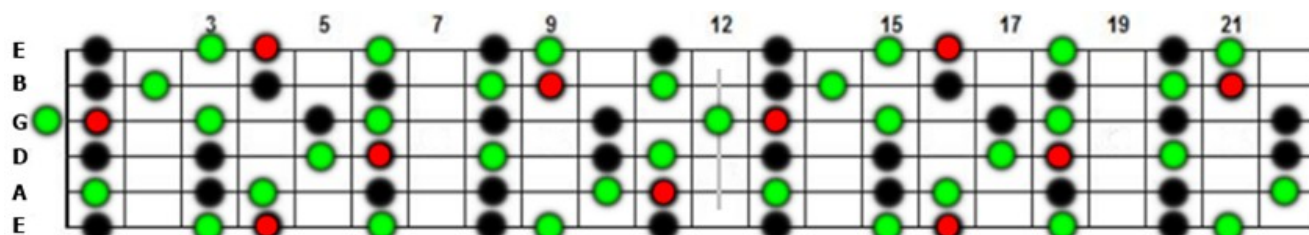
iii chord in Ab major



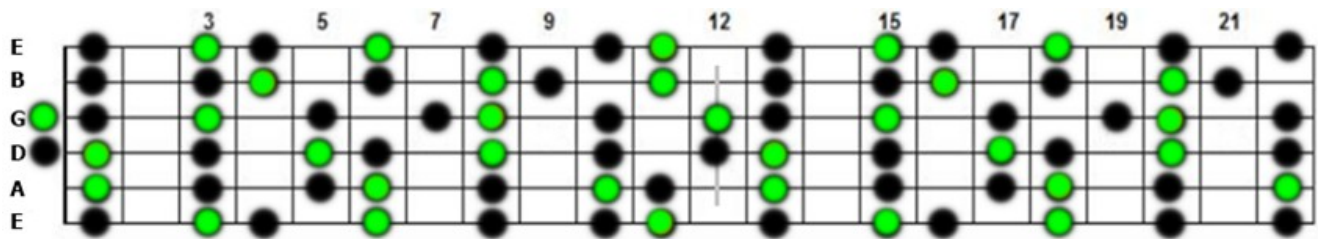
vi chord in Ab major



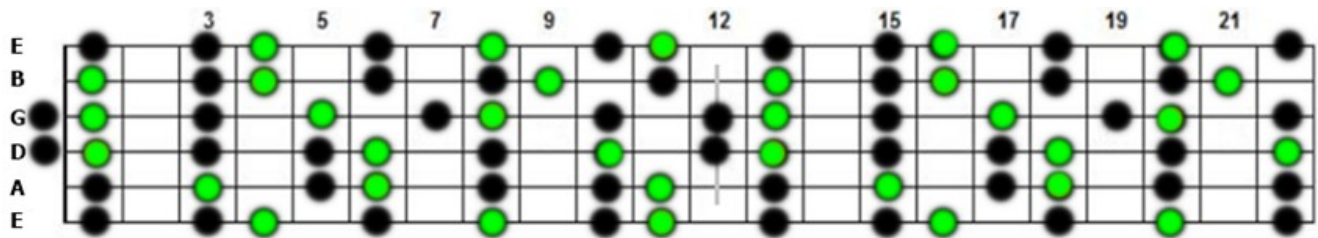
vii° chord in Ab major



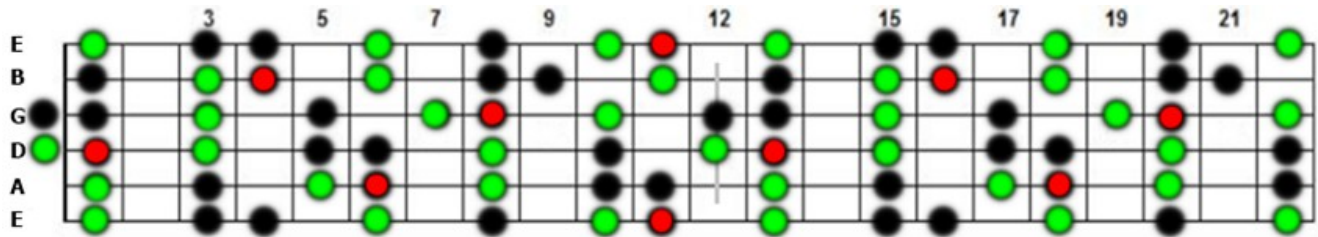
I chord in Eb major



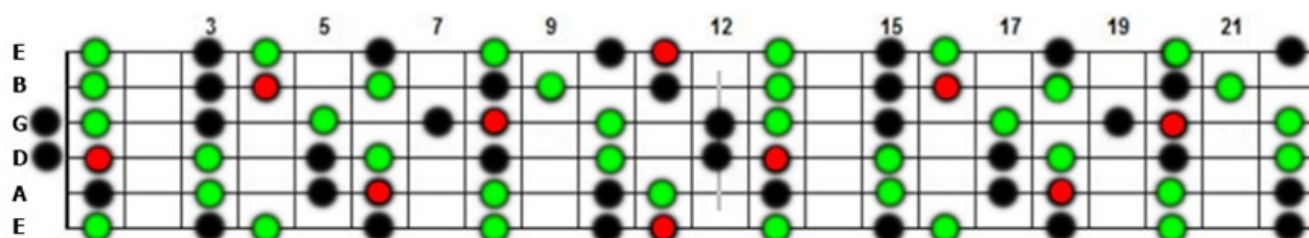
IV chord in Eb major



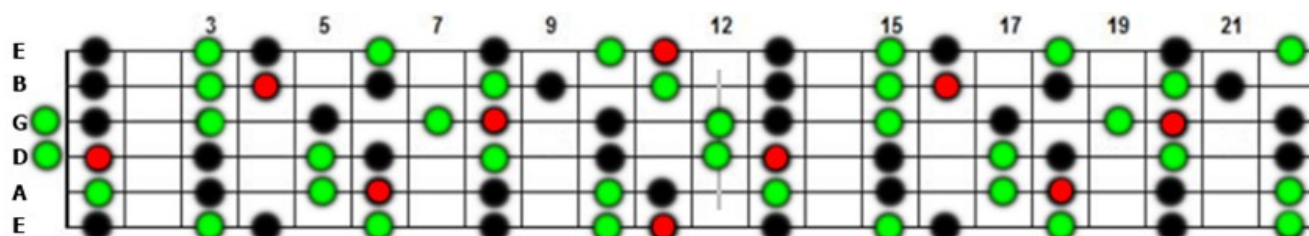
V chord in Eb major



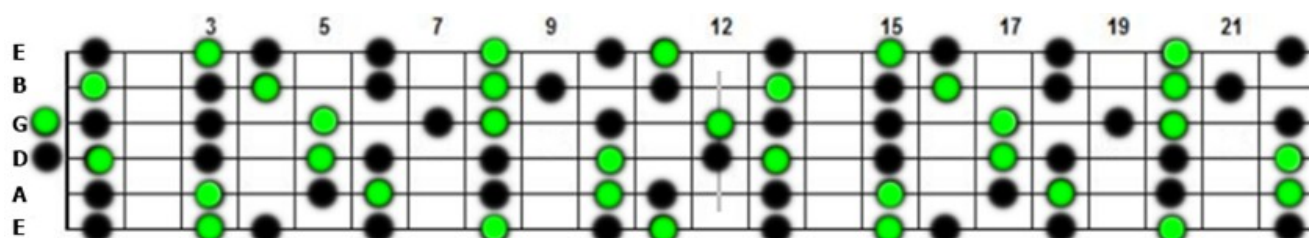
ii chord in Eb major



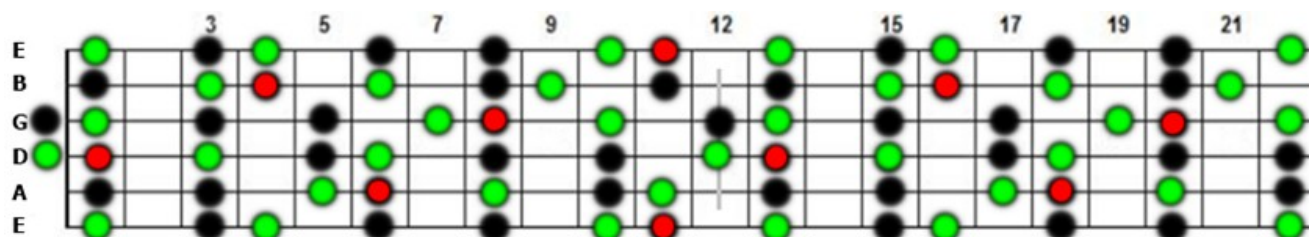
iii chord in Eb major



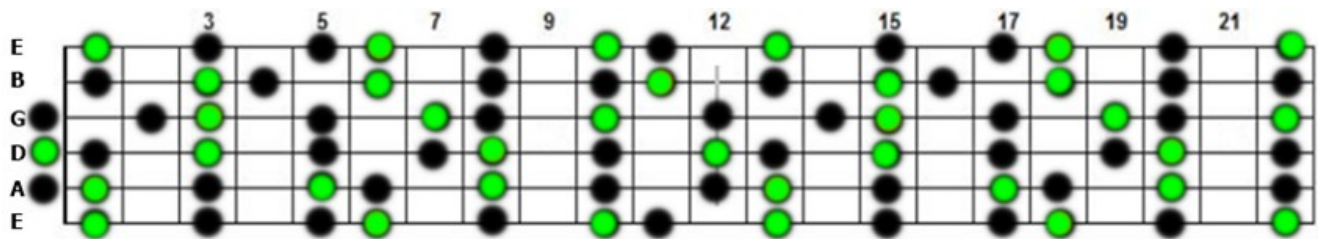
vi chord in Eb major



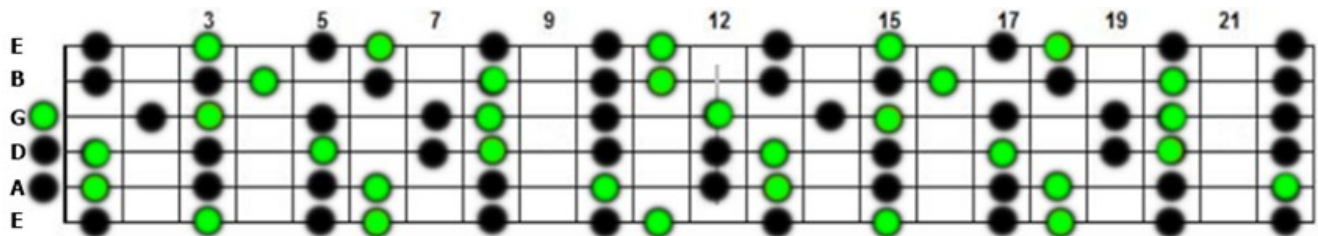
vii° chord in Eb major



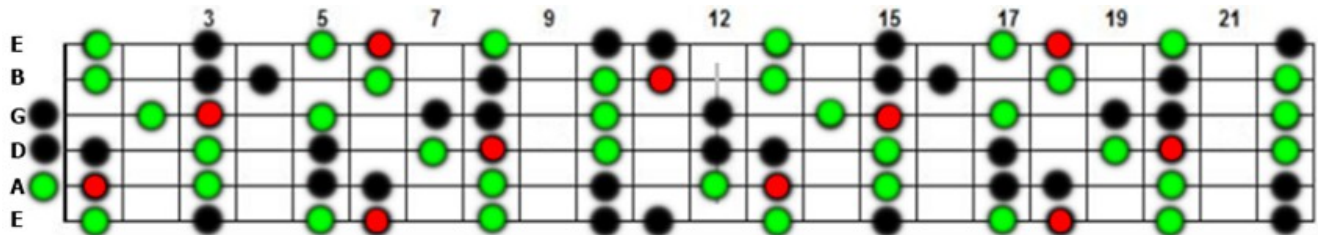
I chord in Bb major



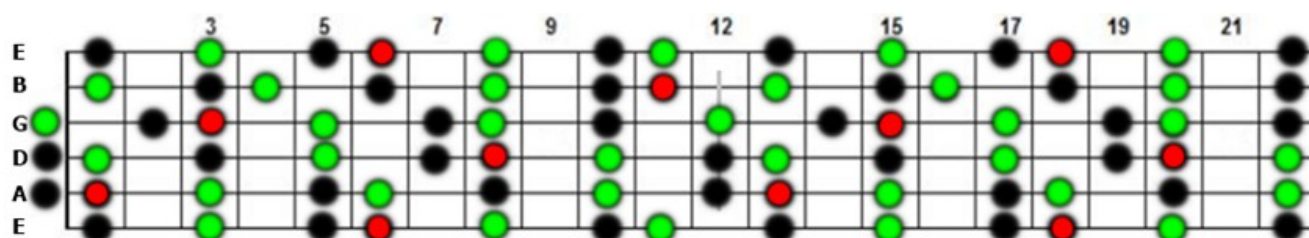
IV chord in Bb major



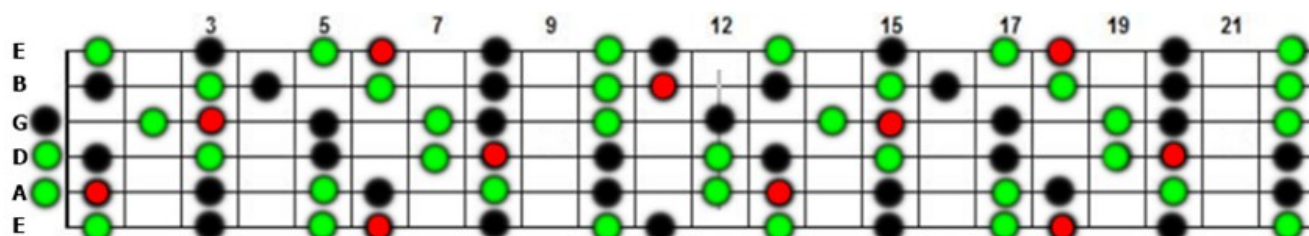
V chord in Bb major



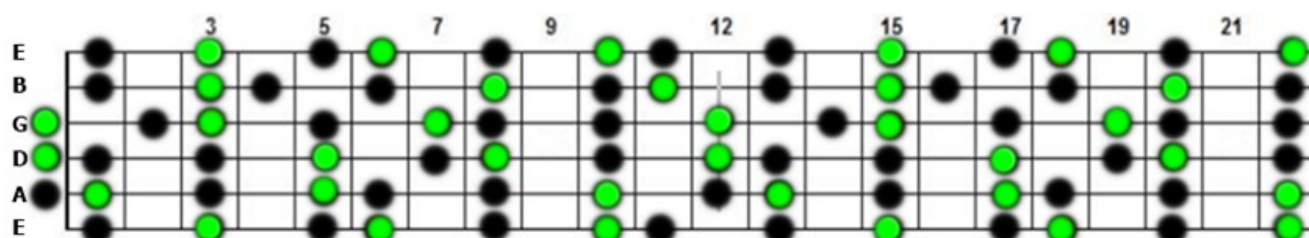
ii chord in Bb major



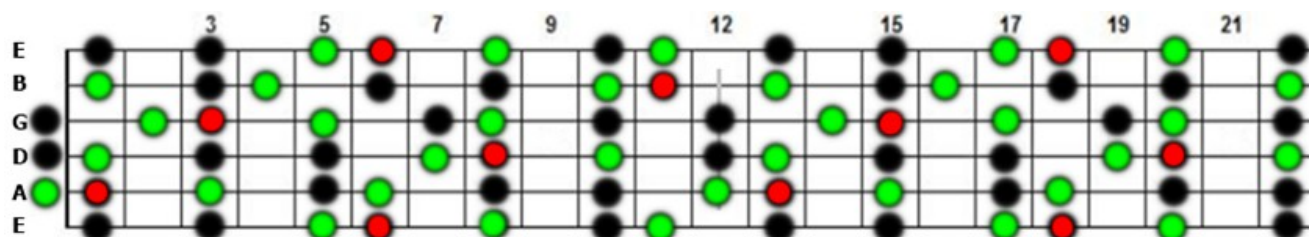
iii chord in Bb major



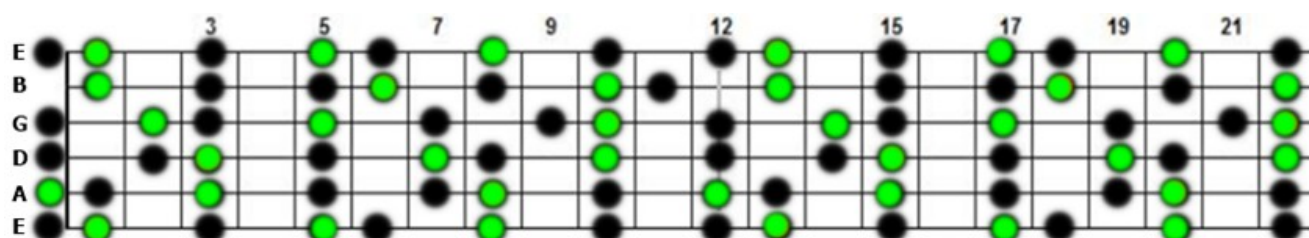
vi chord in Bb major



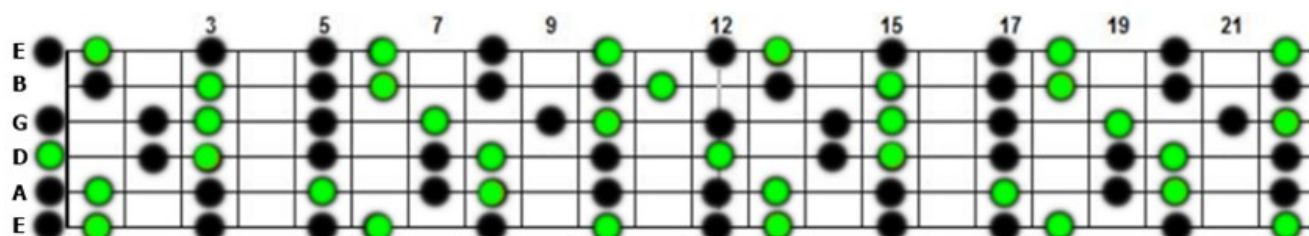
vii° chord in Bb major



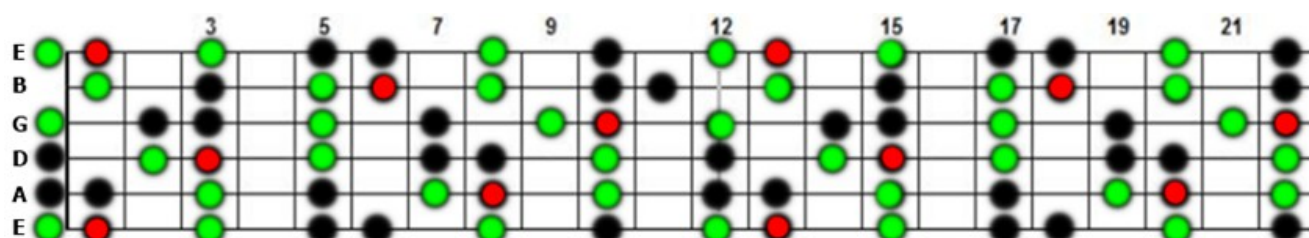
I chord in F major



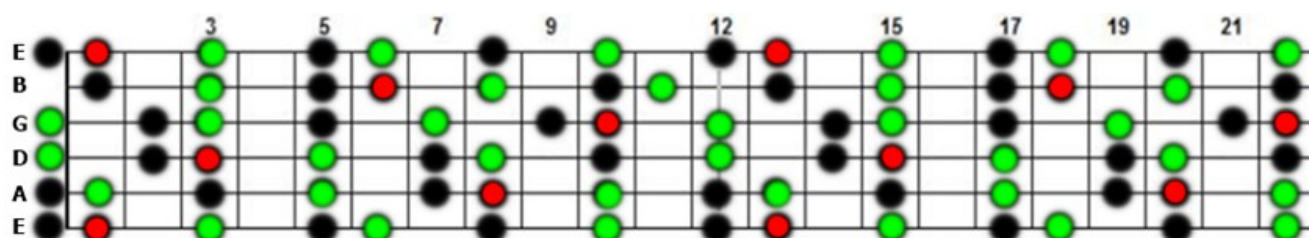
IV chord in F major



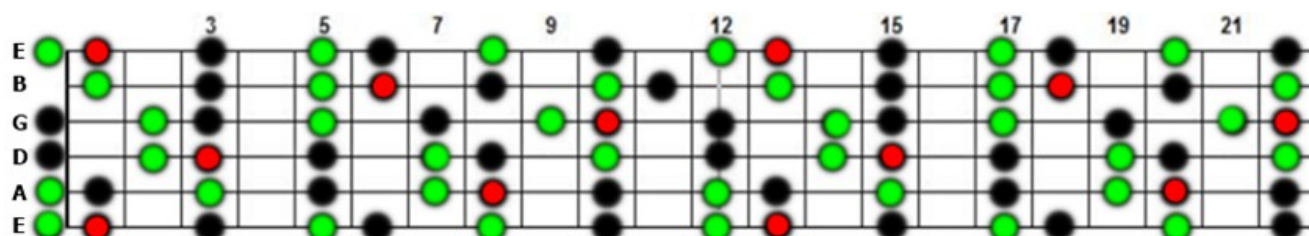
V chord in F major



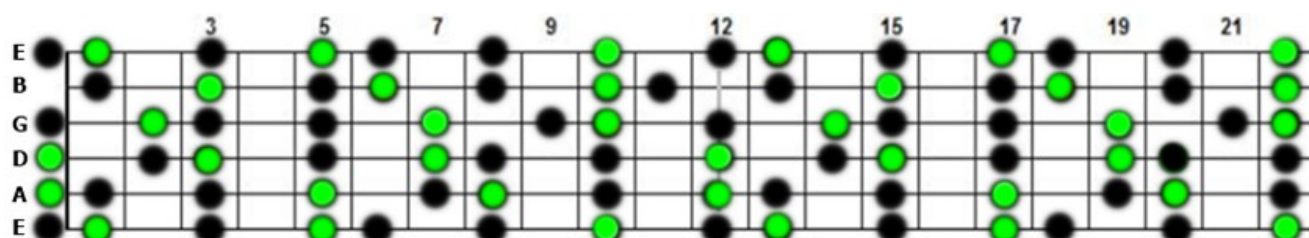
ii chord in F major



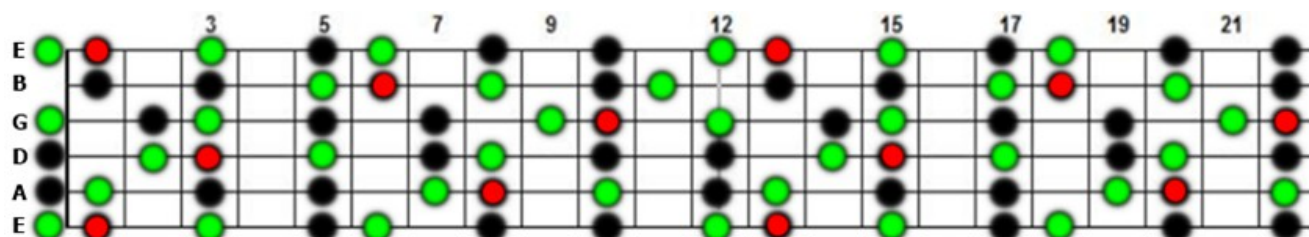
iii chord in F major



vi chord in F major



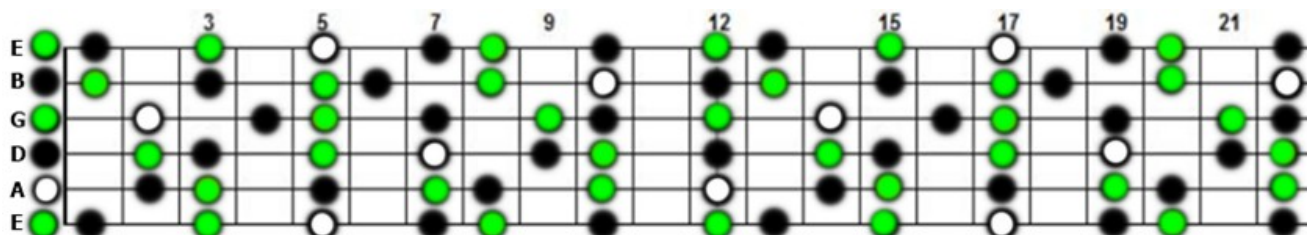
vii° chord in F major



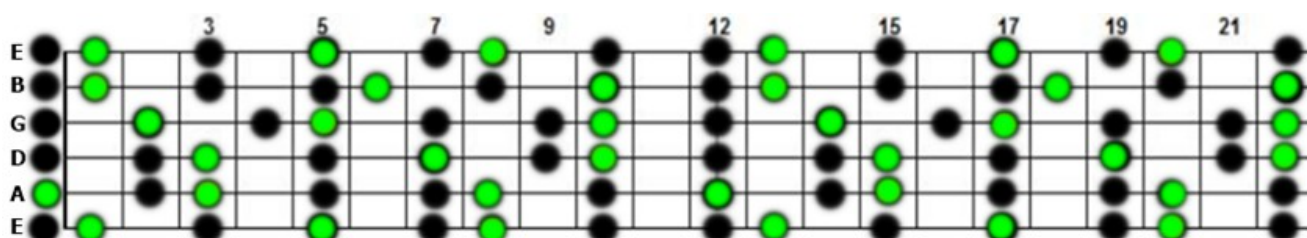
The 7 Diatonic Arpeggios in Each Minor Key

Green Dots = Chord Tones/Arpeggios Within Scalar Framework
White Dot = Tonic Note of Key/Scale

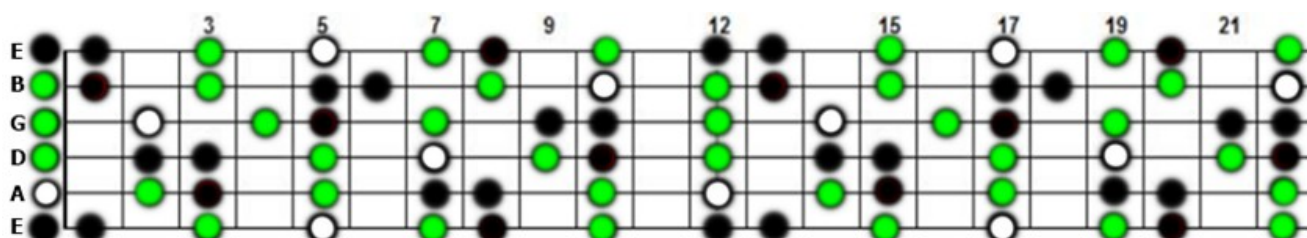
I chord (or bIII chord) in A minor



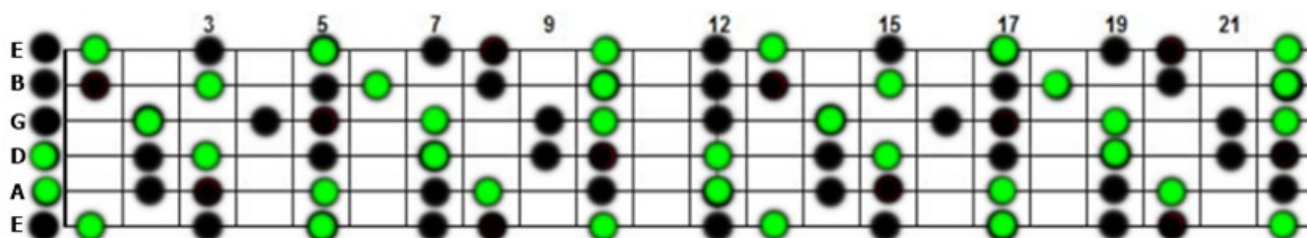
IV chord (or bVI chord) in A minor



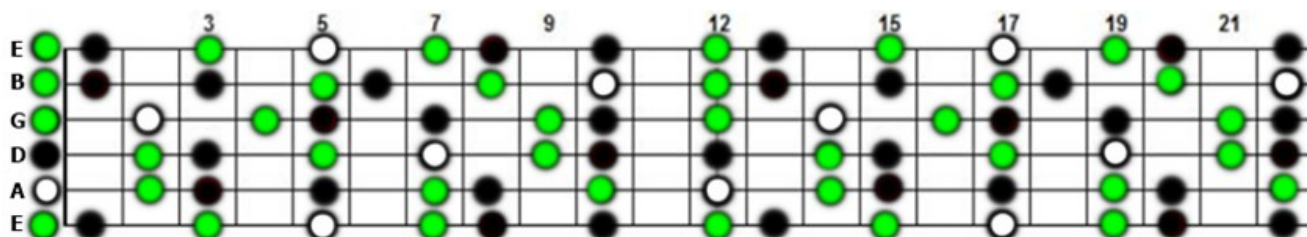
V chord (or bVII chord) in A minor



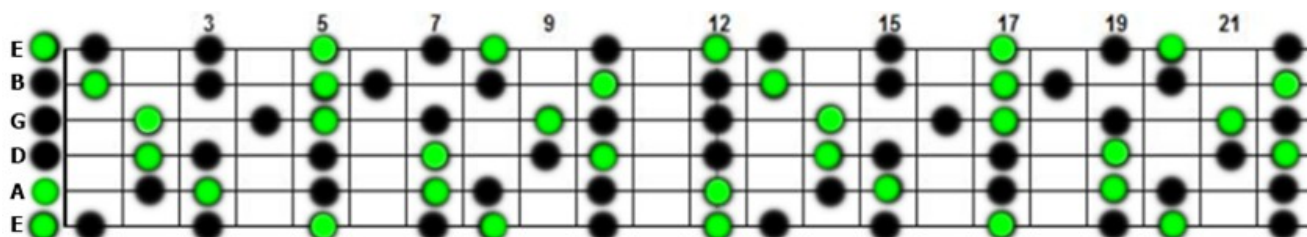
ii chord (or iv chord) in A minor



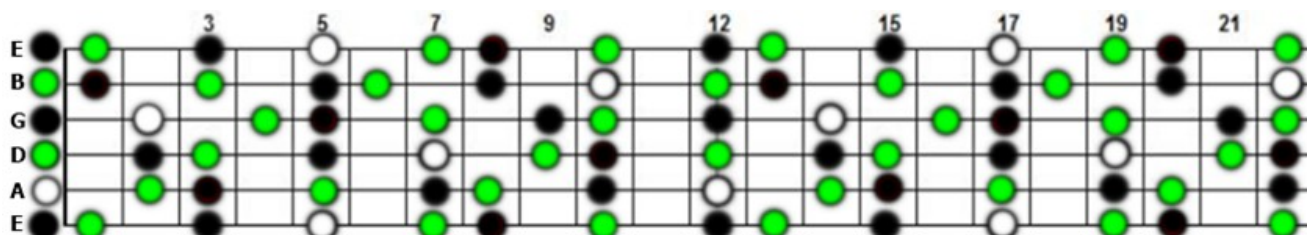
iii chord (or v chord) in A minor



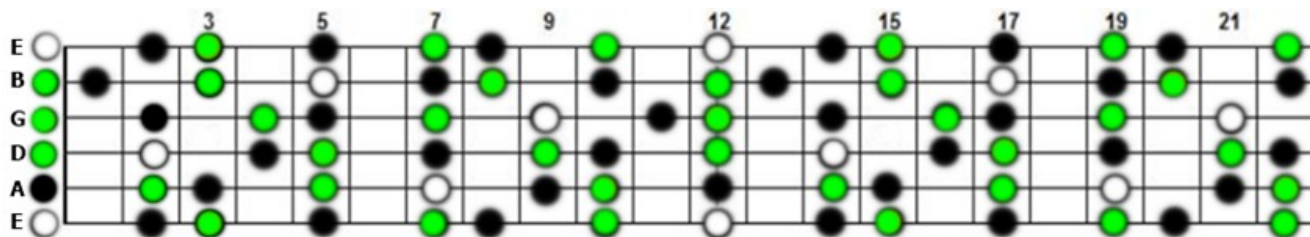
vi chord (or i chord) in A minor



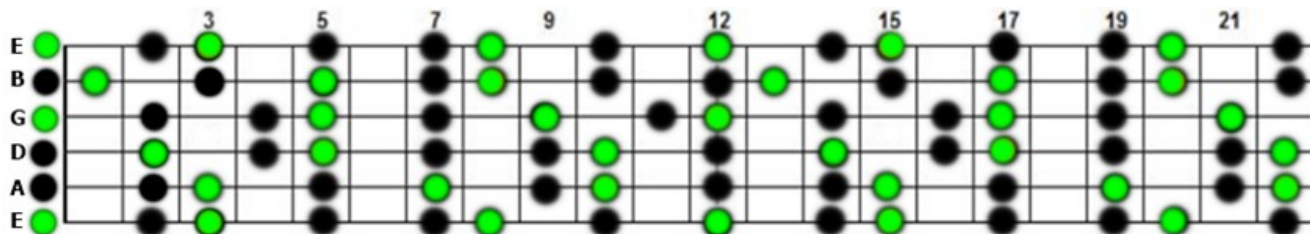
vii° chord (or ii° chord) in A minor



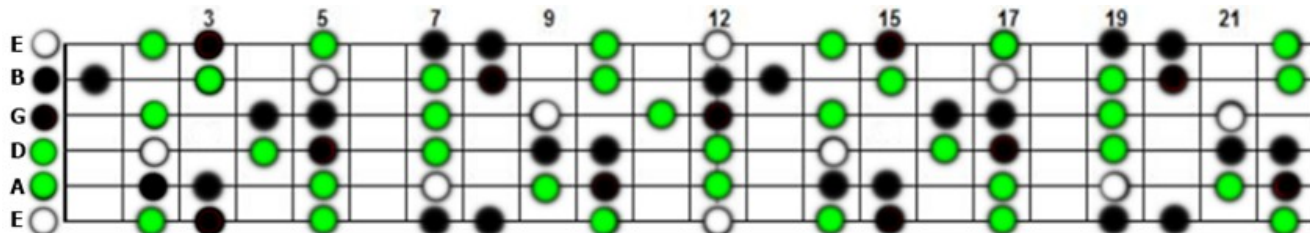
I chord (or bIII chord) in E minor



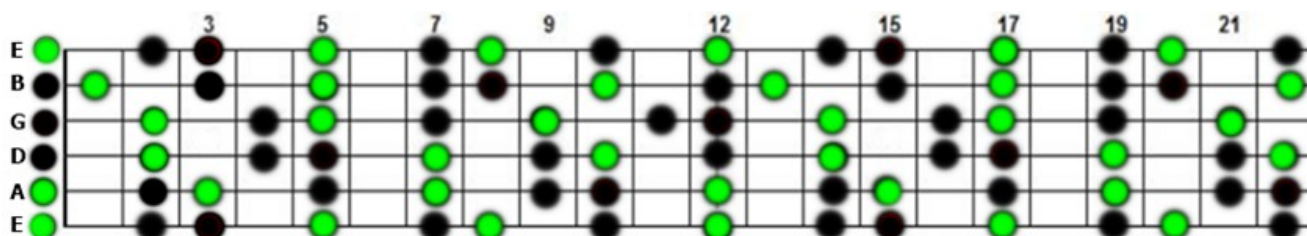
IV chord (or bVI chord) in E minor



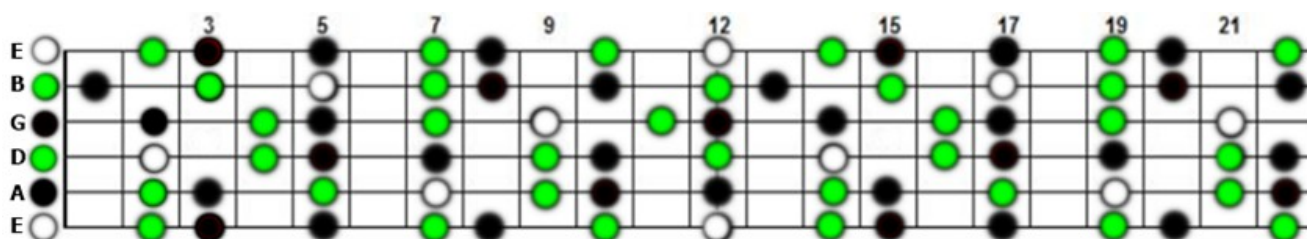
V chord (or bVII chord) in E minor



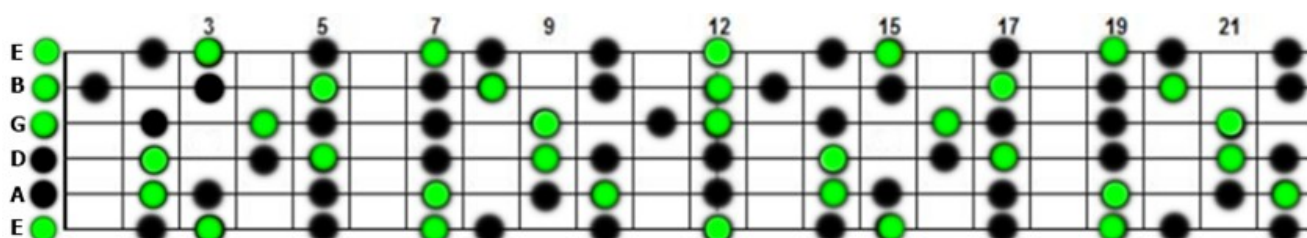
ii chord (or iv chord) in E minor



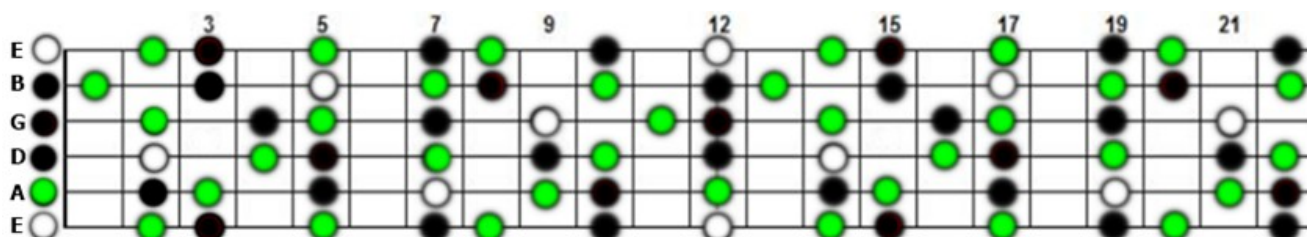
iii chord (or v chord) in E minor



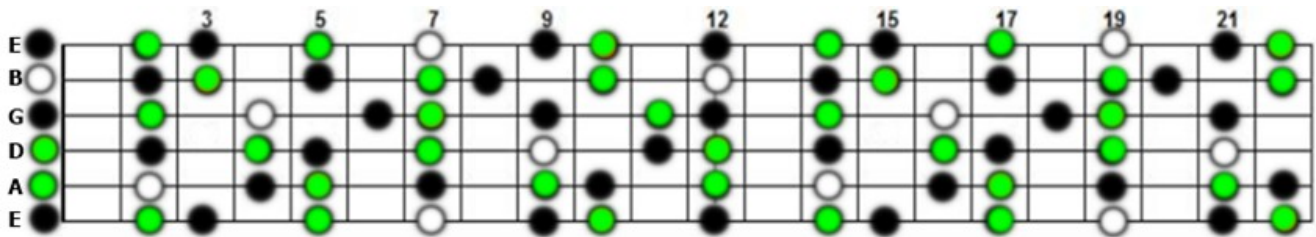
vi chord (or i chord) in E minor



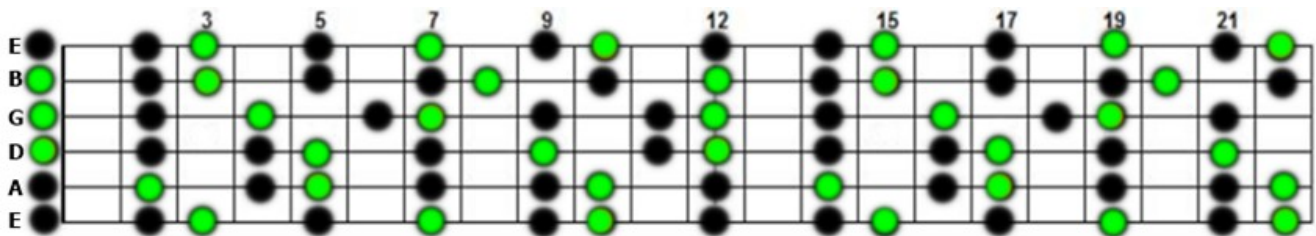
vii° chord (or ii° chord) in E minor



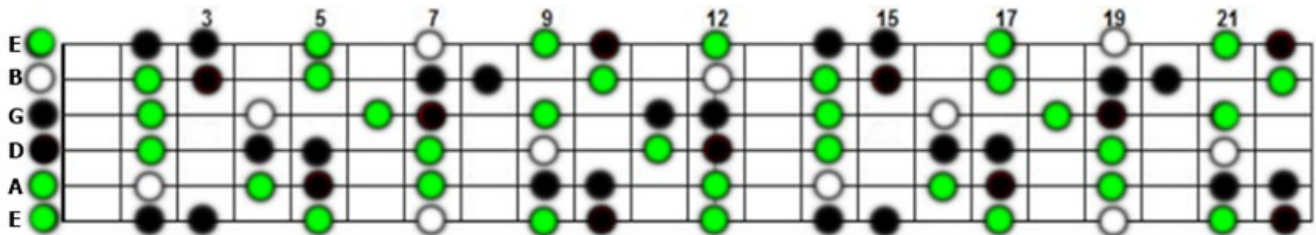
I chord (or bIII chord) in B minor



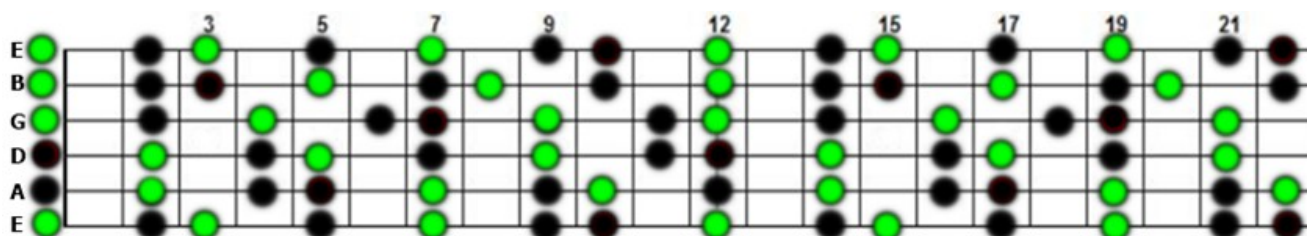
IV chord (or bVI chord) in B minor



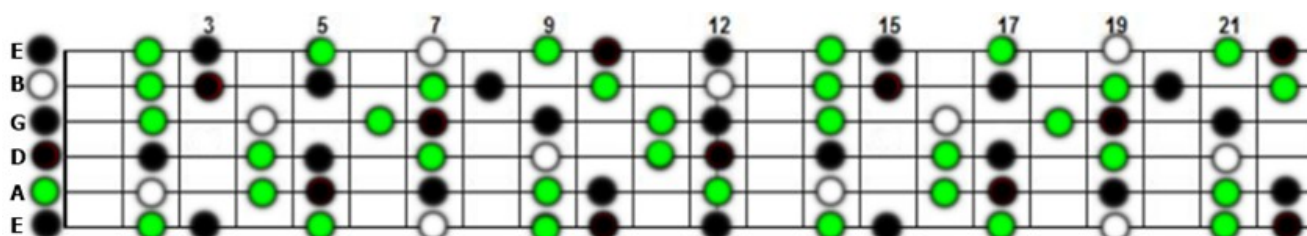
V chord (or bVII chord) in B minor



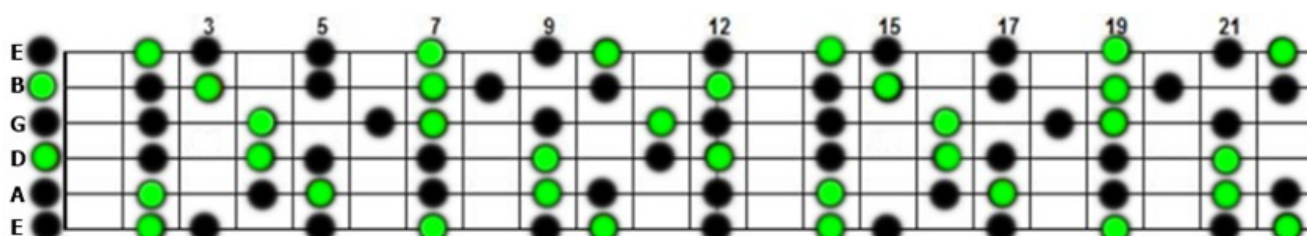
ii chord (or iv chord) in B minor



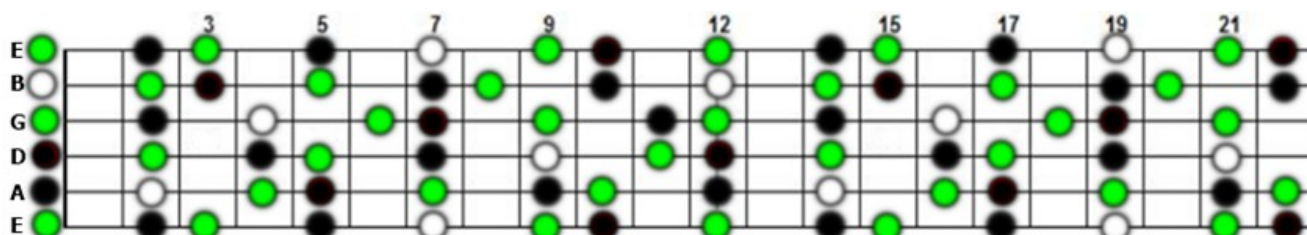
iii chord (or v chord) in B minor



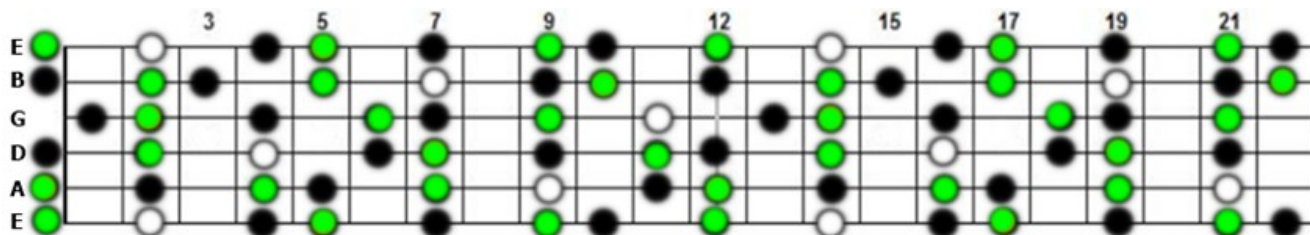
vi chord (or i chord) in B minor



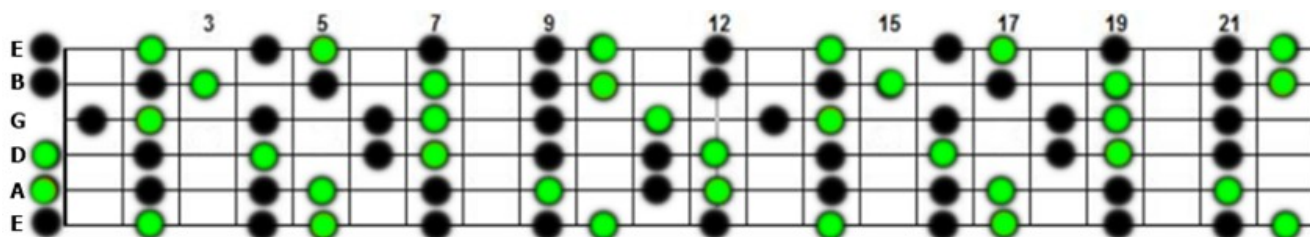
vii° chord (or ii° chord) in B minor



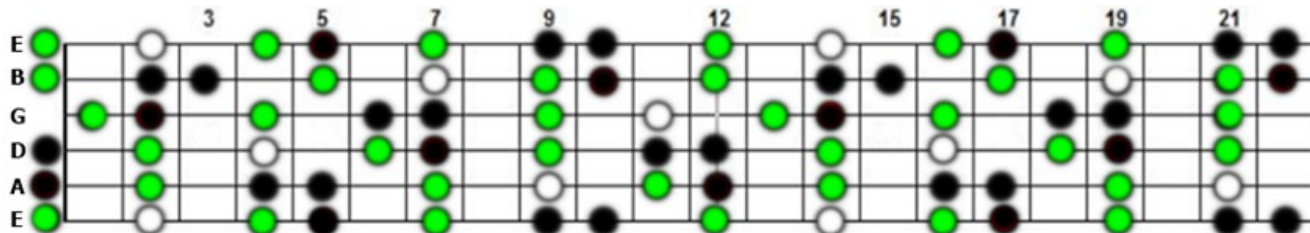
I chord (or bIII chord) in F# minor



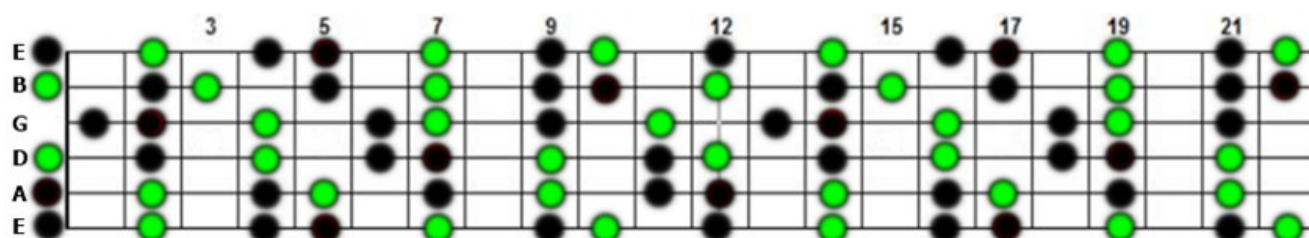
IV chord (or bVI chord) in F# minor



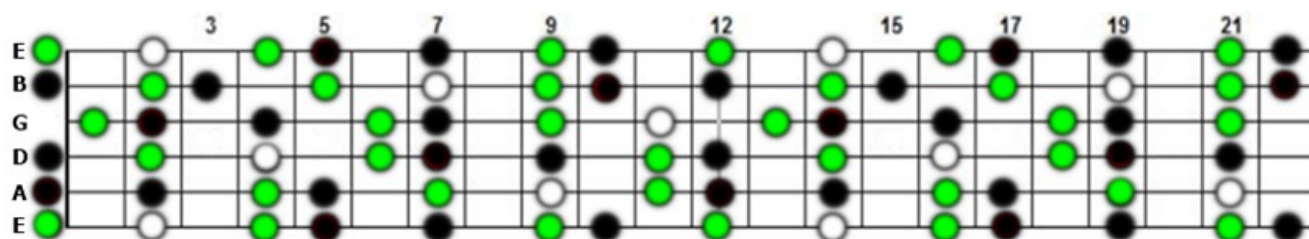
V chord (or bVII chord) in F# minor



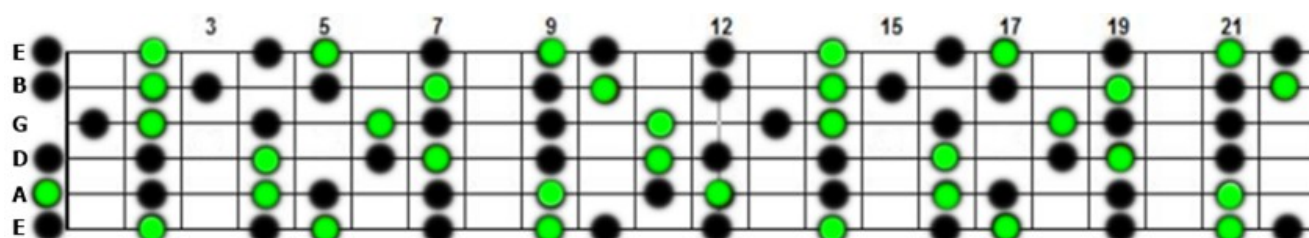
ii chord (or iv chord) in F# minor



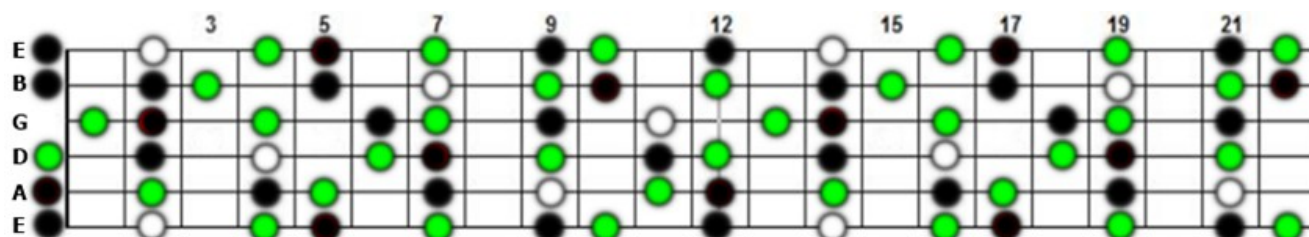
iii chord (or v chord) in F# minor



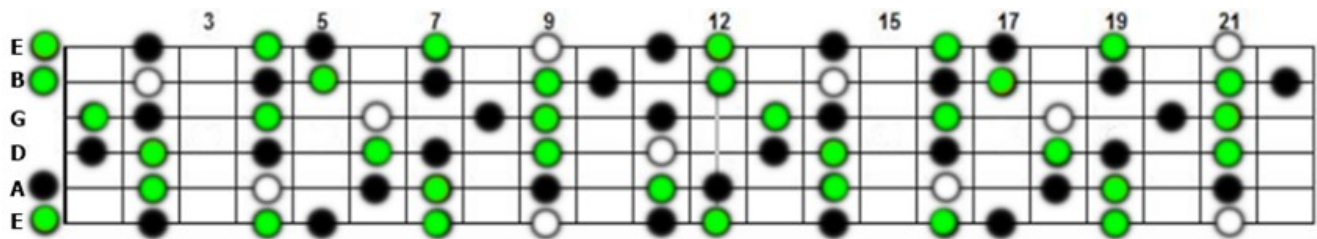
vi chord (or i chord) in F# minor



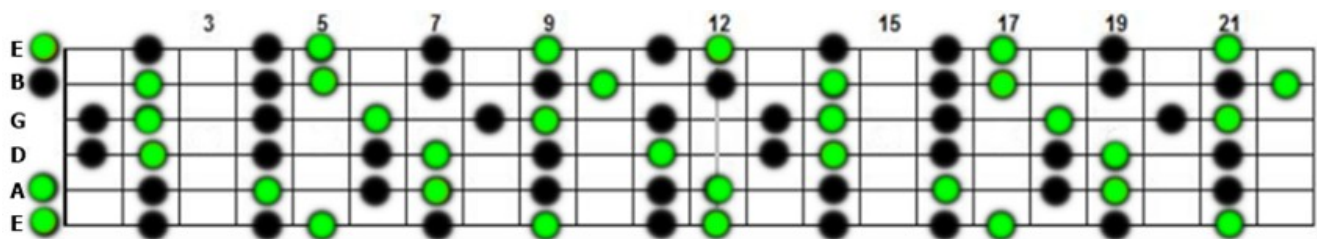
vii° chord (or ii° chord) in F# minor



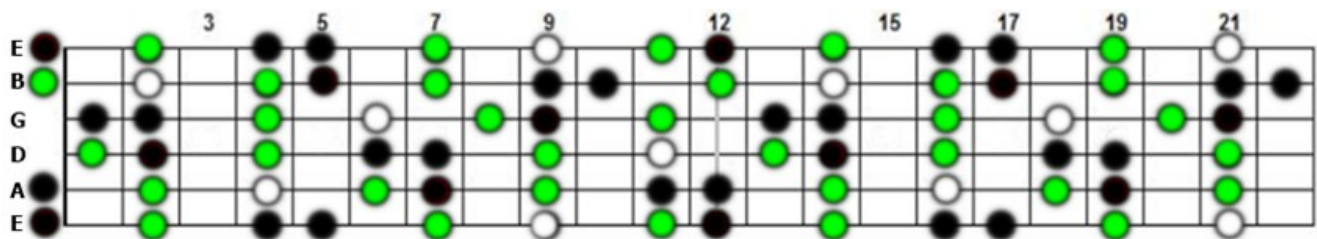
I chord (or bIII chord) in C# minor



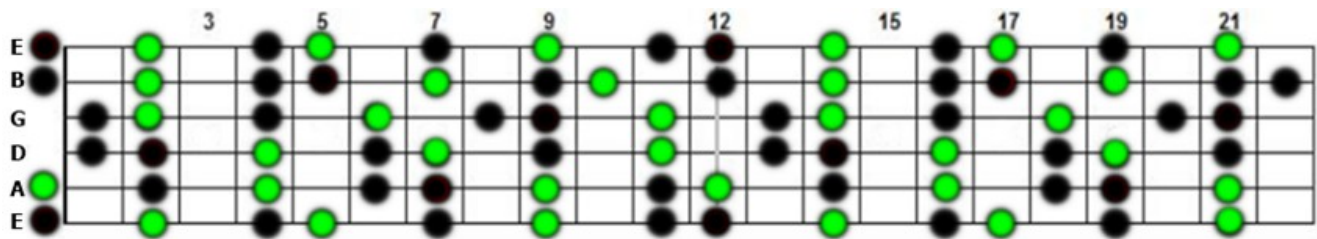
IV chord (or bVI chord) in C# minor



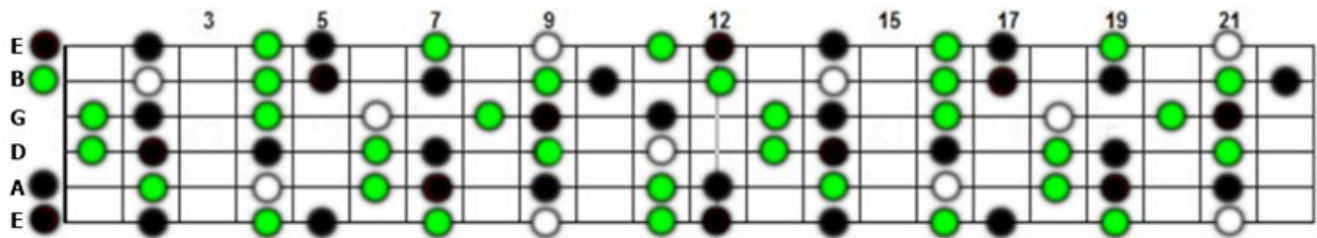
V chord (or bVII chord) in C# minor



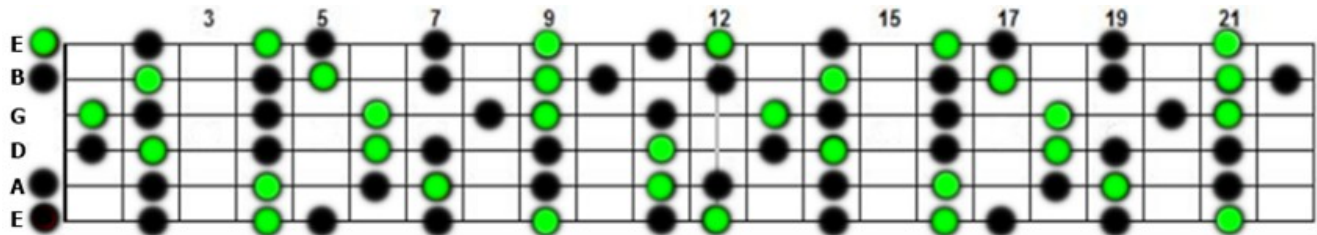
ii chord (or iv chord) in C# minor



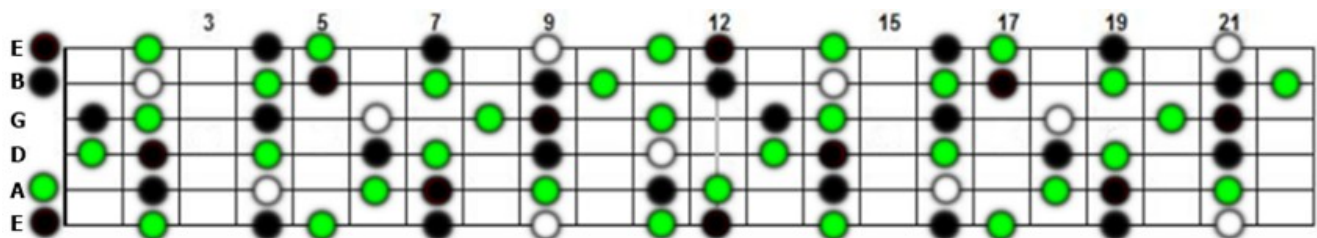
iii chord (or v chord) in C# minor



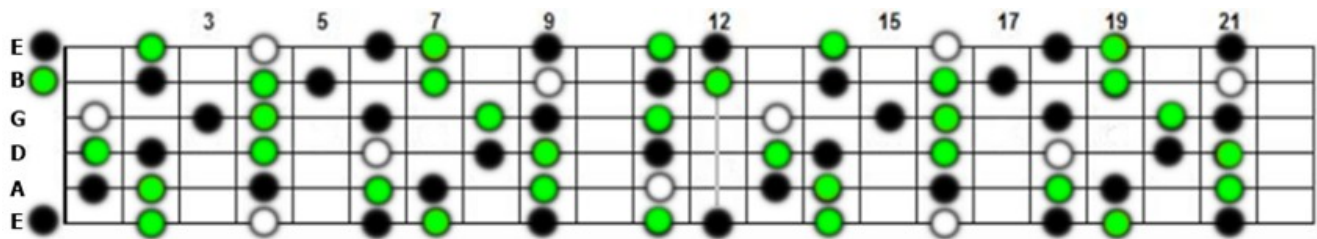
vi chord (or i chord) in C# minor



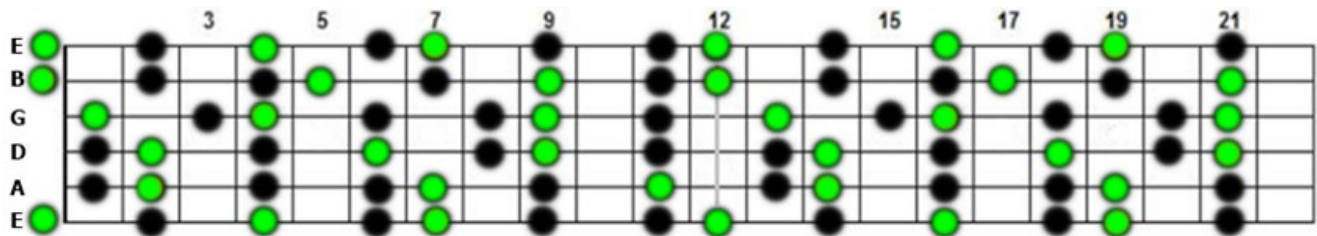
vii° chord (or ii° chord) in C# minor



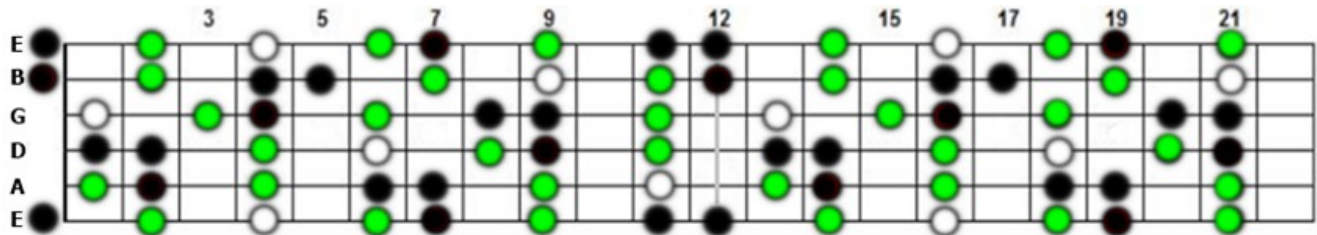
I chord (or bIII chord) in G# minor



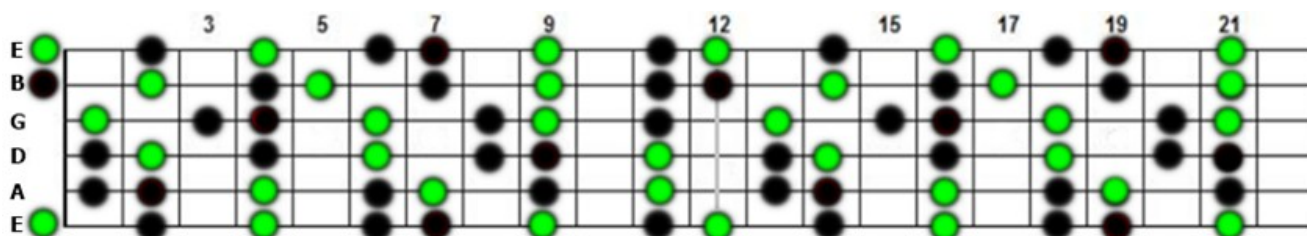
IV chord (or bVI chord) in G# minor



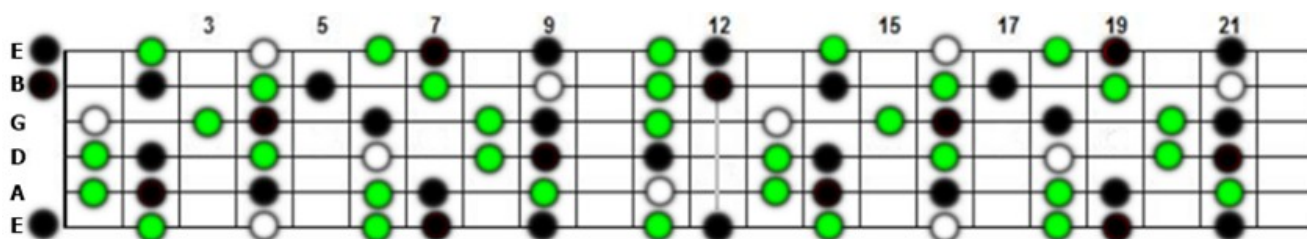
V chord (or bVII chord) in G# minor



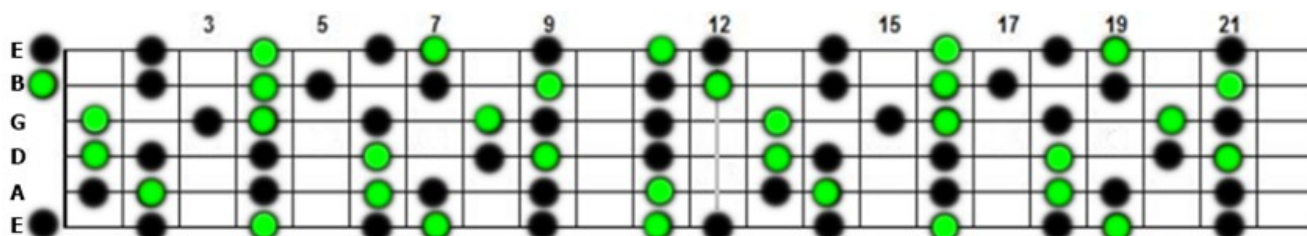
ii chord (or iv chord) in G# minor



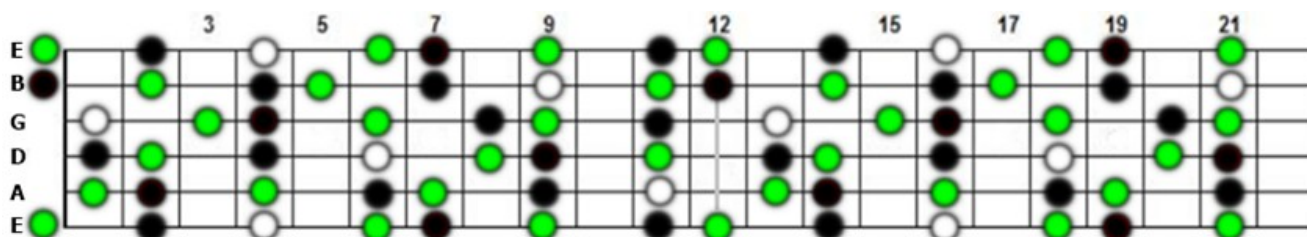
iii chord (or v chord) in G# minor



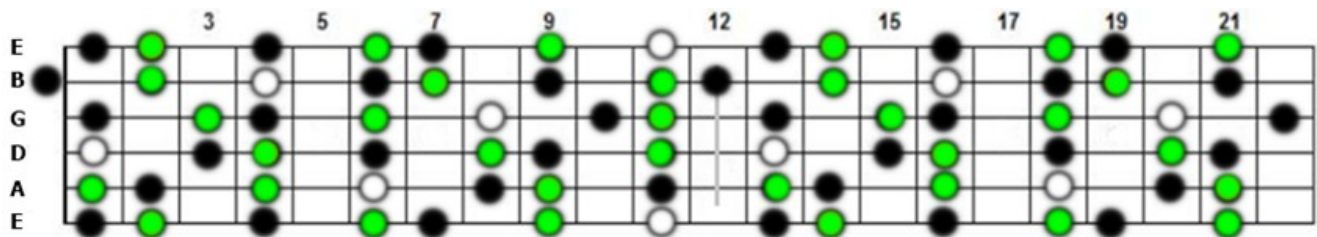
vi chord (or i chord) in G# minor



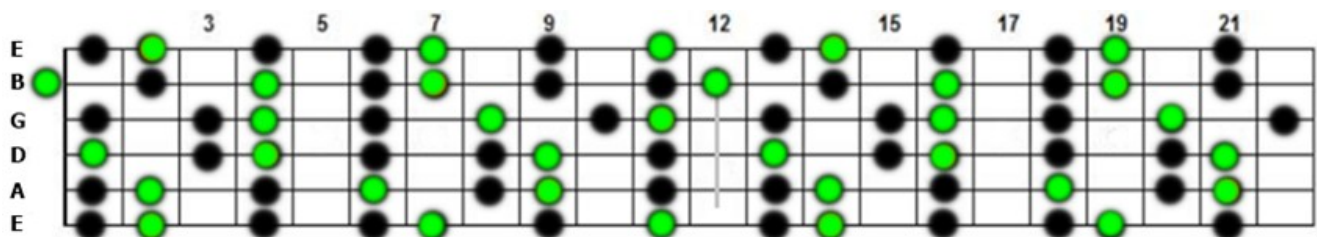
vii° chord (or ii° chord) in G# minor



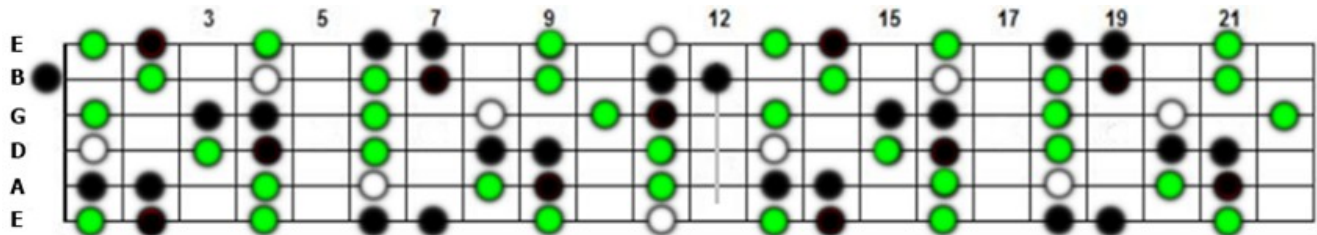
I chord (or bIII chord) in D# minor



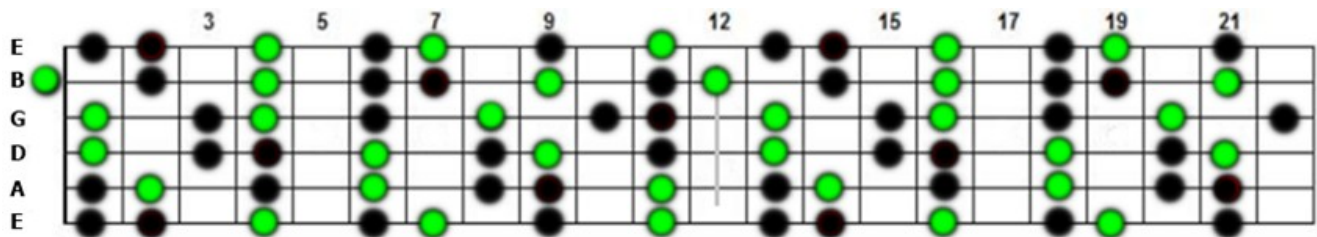
IV chord (or bVI chord) in D# minor



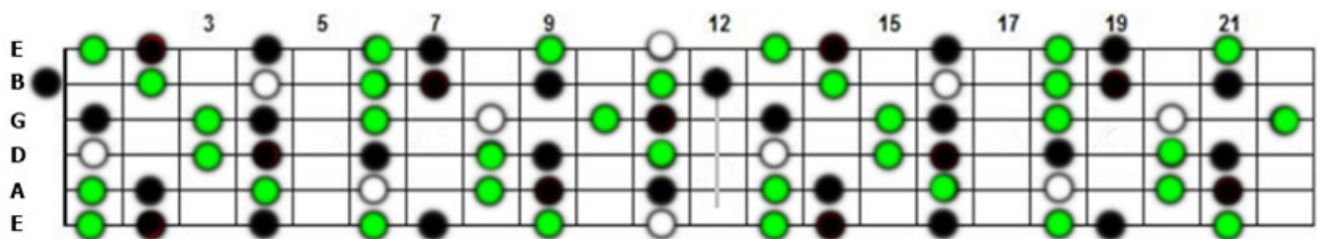
V chord (or bVII chord) in D# minor



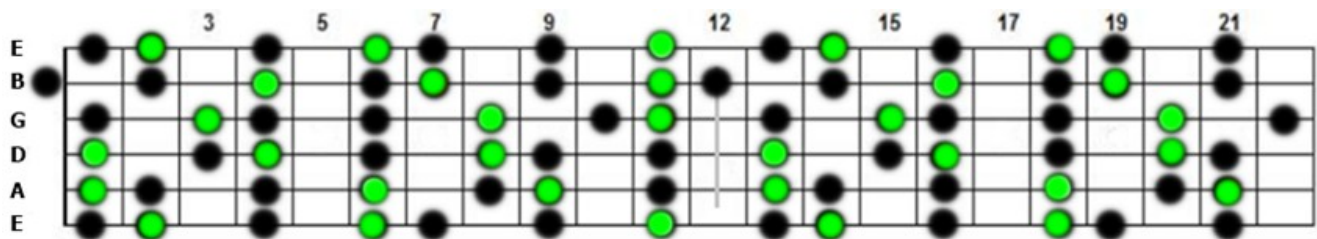
ii chord (or iv chord) in D# minor



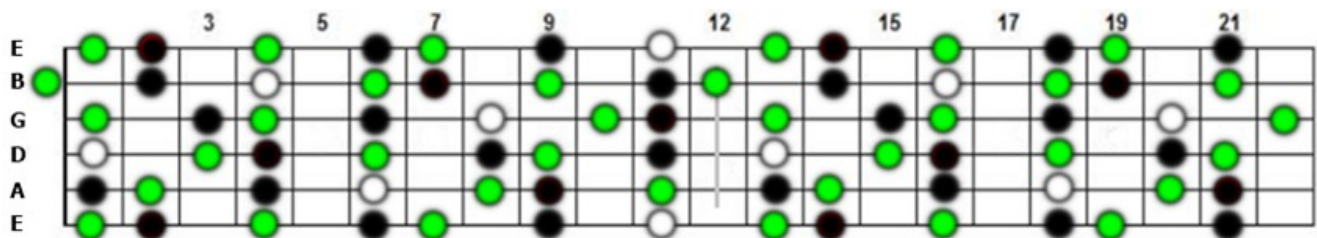
iii chord (or v chord) in D# minor



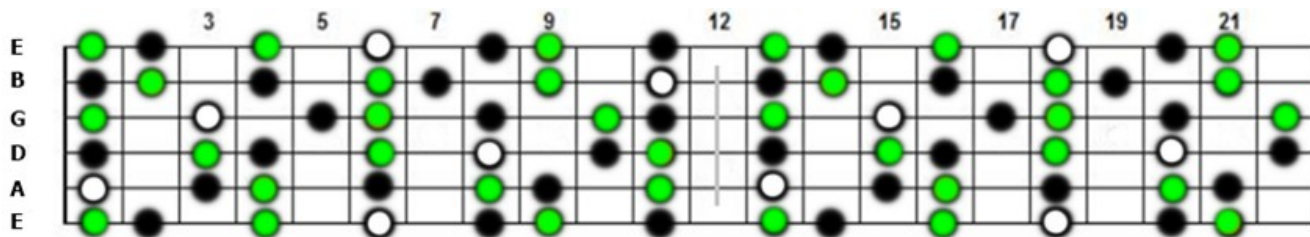
vi chord (or i chord) in D# minor



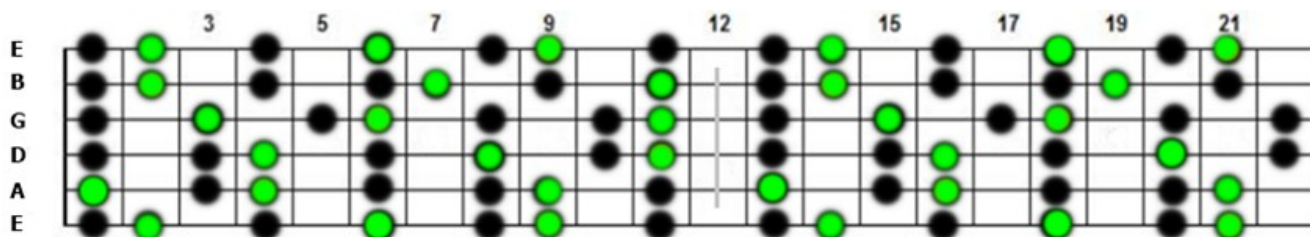
vii° chord (or ii° chord) in D# minor



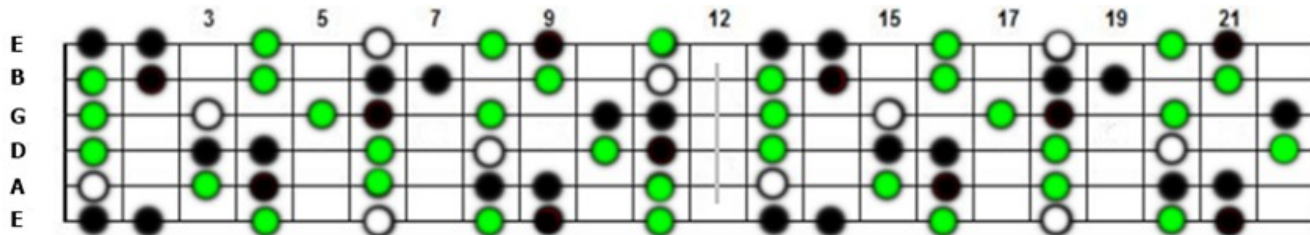
I chord (or bIII chord) in A#/Bb minor



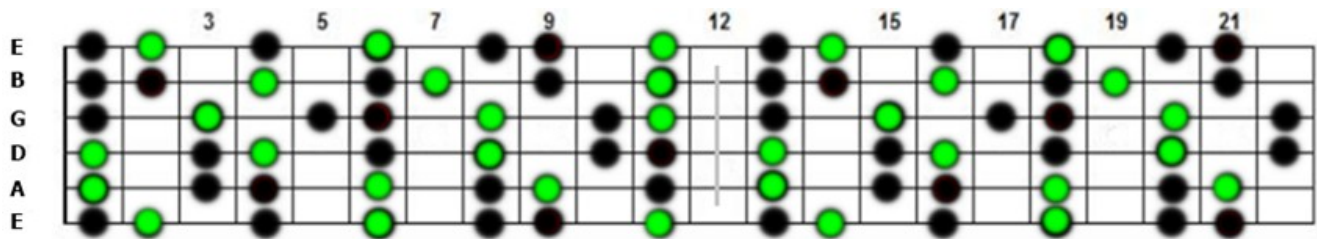
IV chord (or bVI chord) in A#/Bb minor



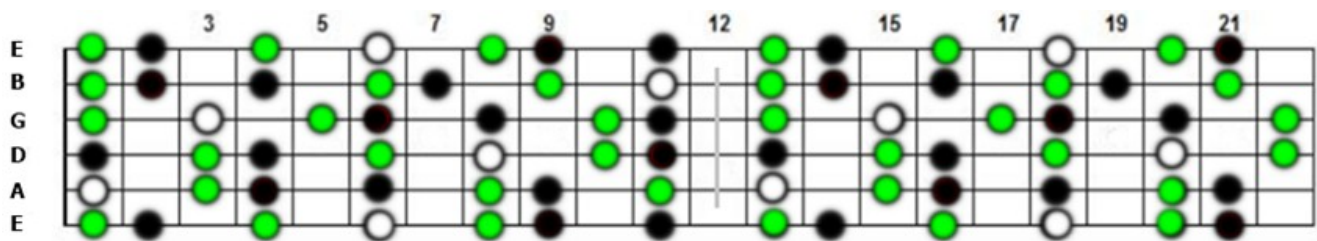
V chord (or bVII chord) in A#/Bb minor



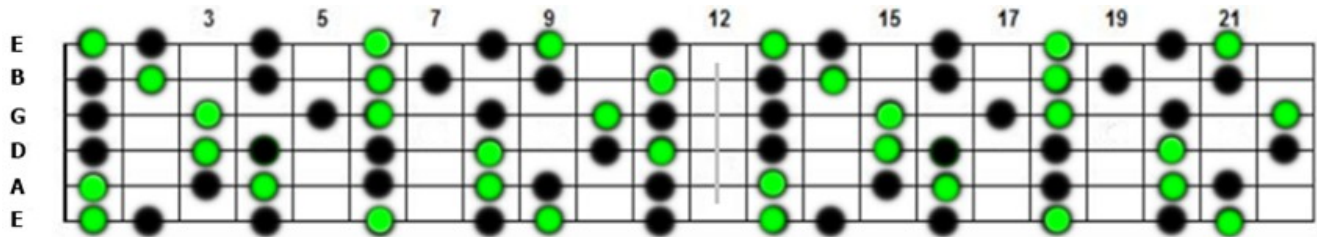
ii chord (or iv chord) in A#/Bb minor



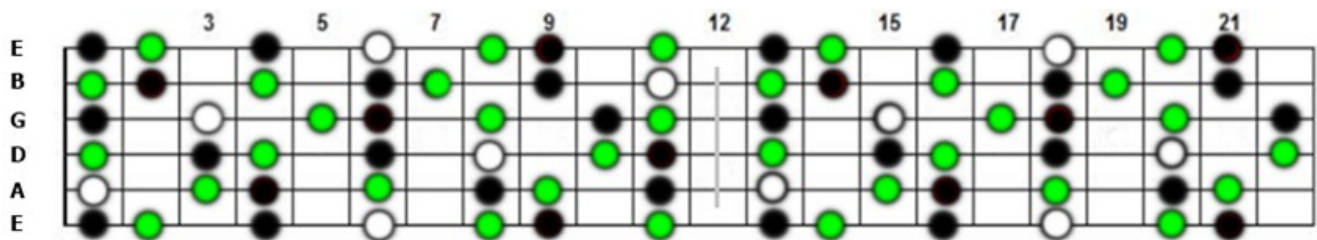
iii chord (or v chord) in A#/Bb minor



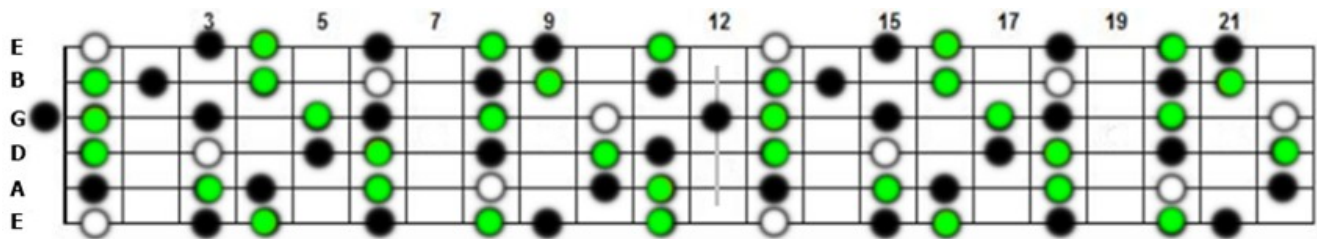
vi chord (or i chord) in A#/Bb minor



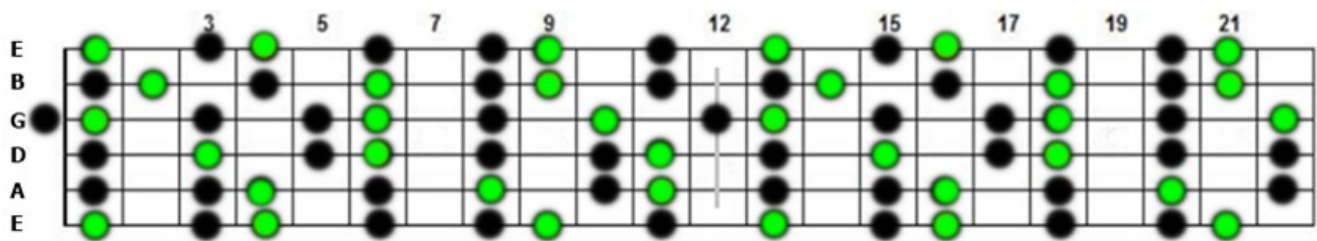
vii° chord (or ii° chord) in A#/Bb minor



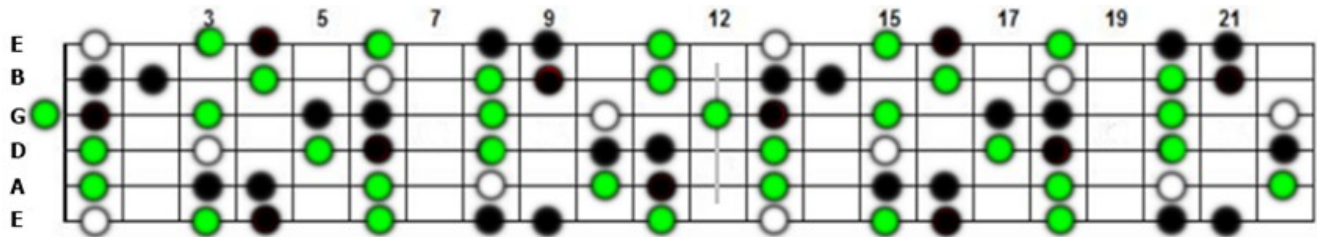
I chord (or bIII chord) in F minor



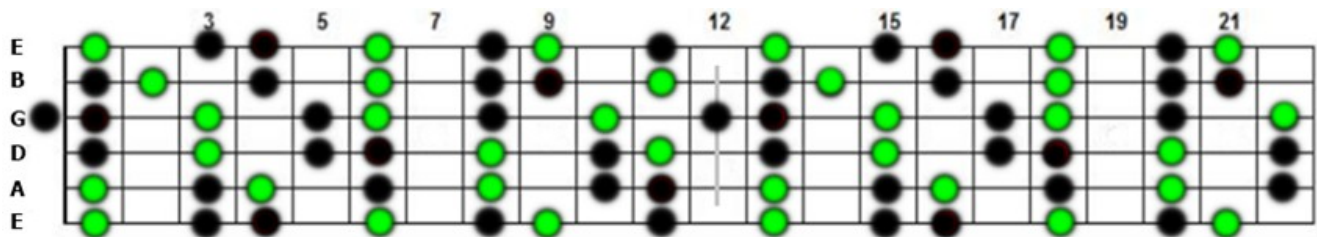
IV chord (or bVI chord) in F minor



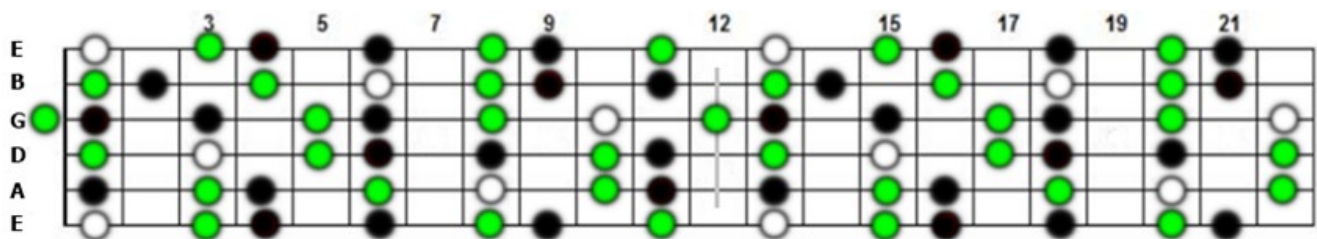
V chord (or bVII chord) in F minor



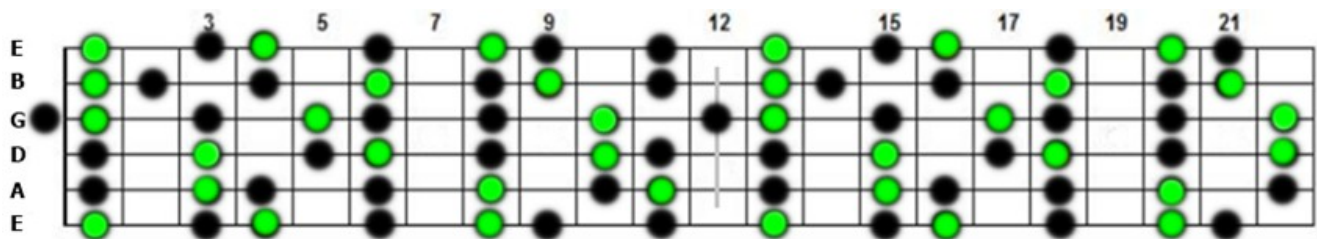
ii chord (or iv chord) in F minor



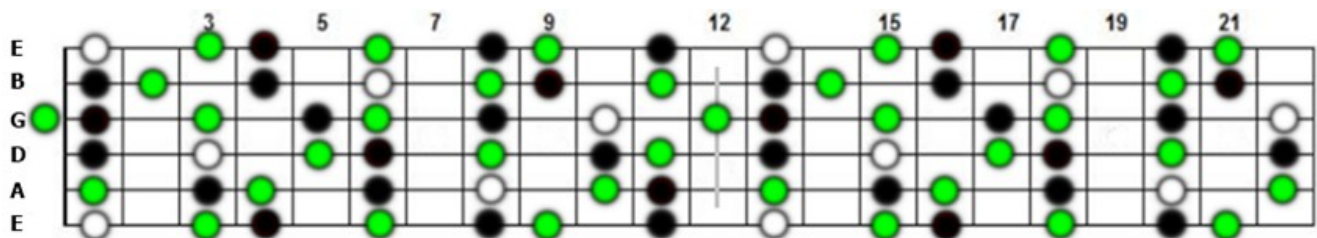
iii chord (or v chord) in F minor



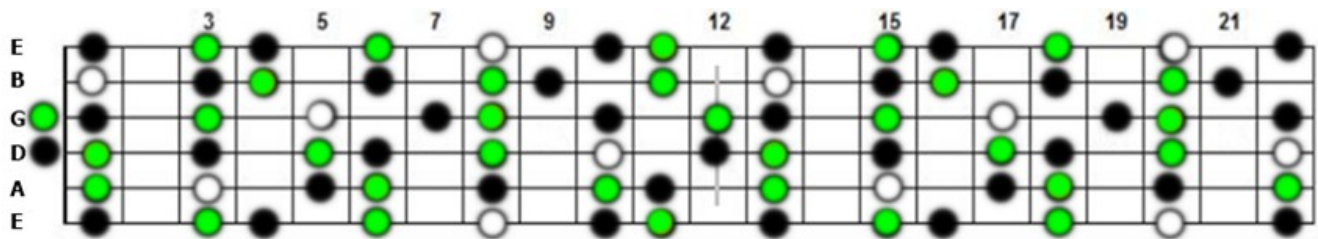
vi chord (or i chord) in F minor



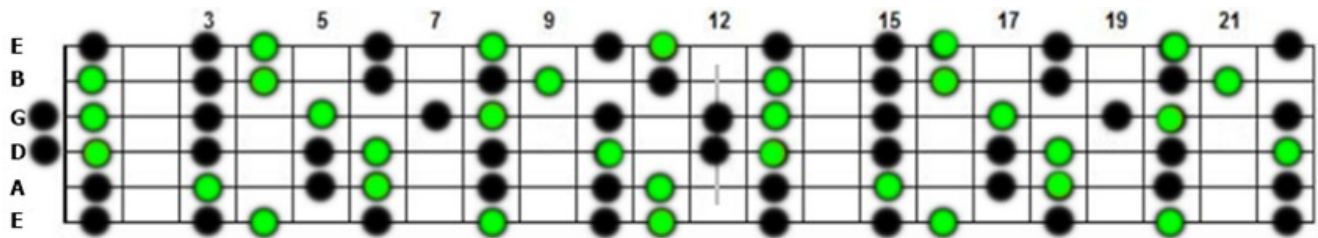
vii° chord (or ii° chord) in F minor



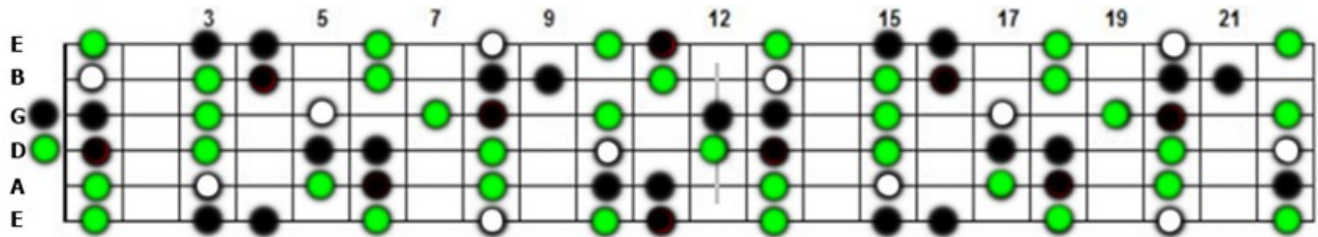
I chord (or bIII chord) in C minor



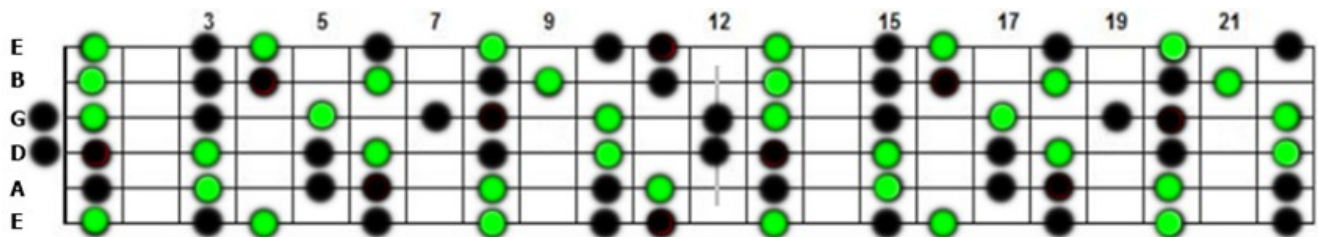
IV chord (or bVI chord) in C minor



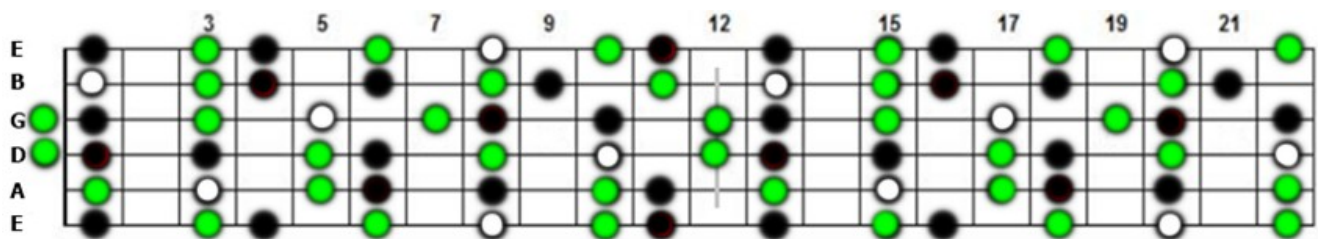
V chord (or bVII chord) in C minor



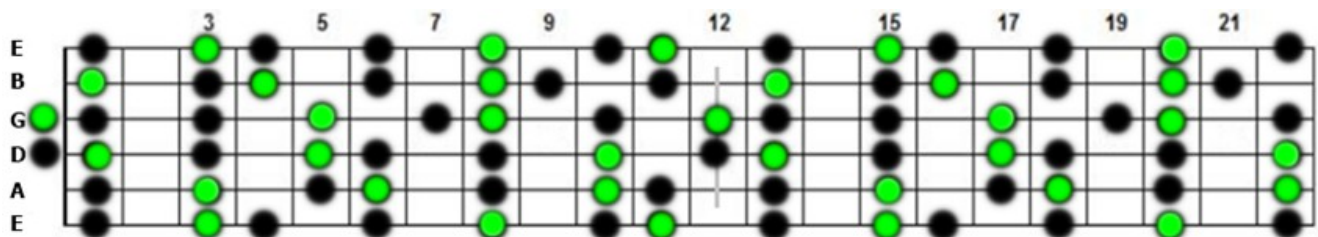
ii chord (or iv chord) in C minor



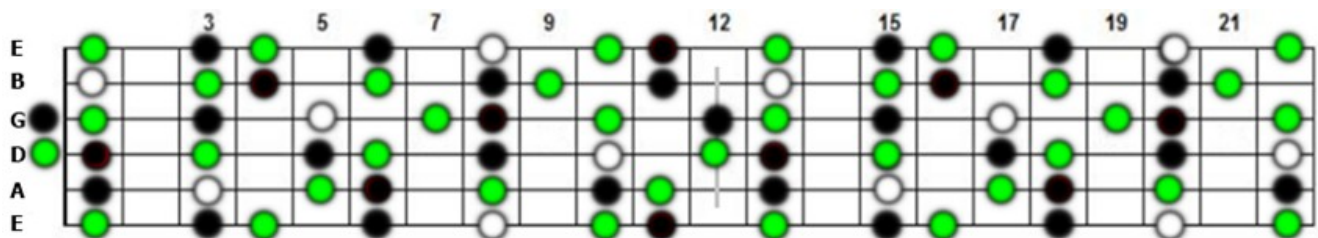
iii chord (or v chord) in C minor



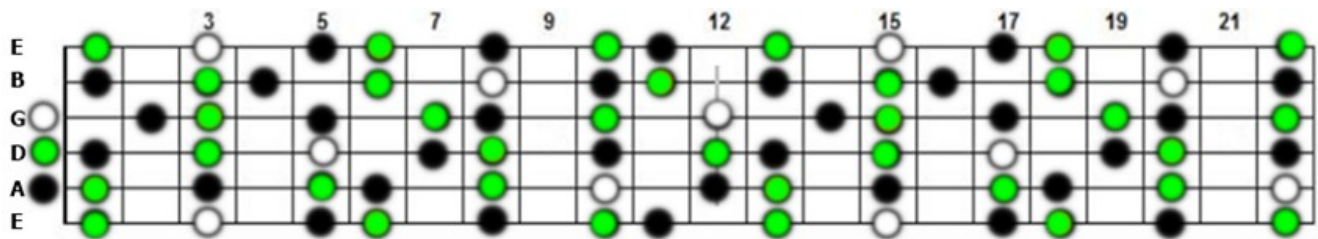
vi chord (or i chord) in C minor



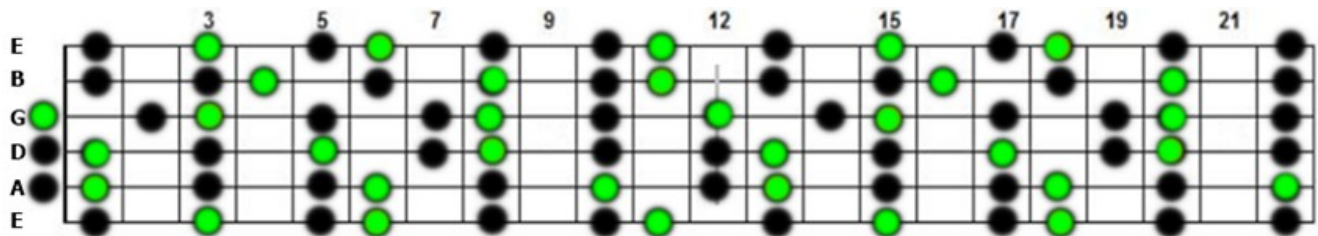
vii° chord (or ii° chord) in C minor



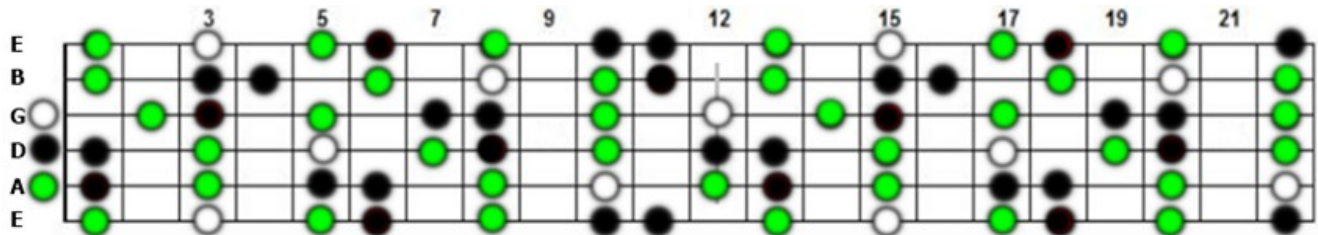
I chord (or bIII chord) in G minor



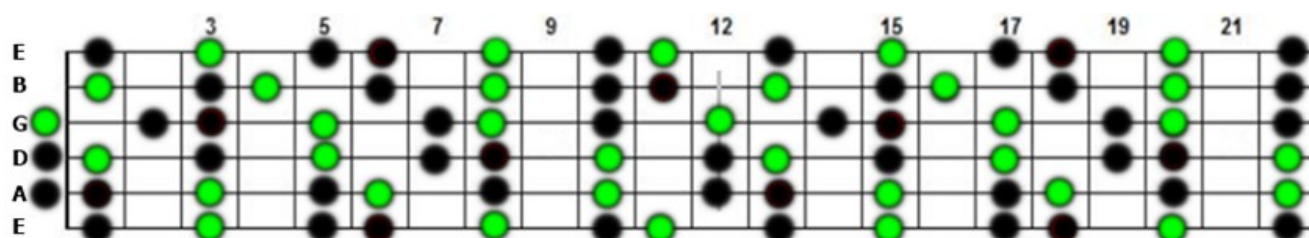
IV chord (or bVI chord) in G minor



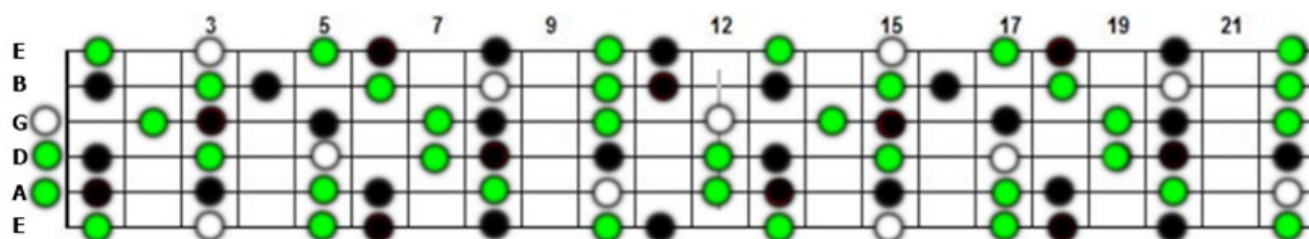
V chord (or bVII chord) in G minor



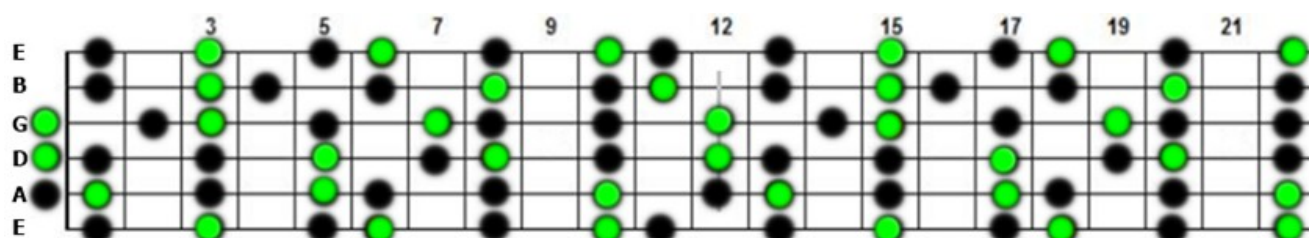
ii chord (or iv chord) in G minor



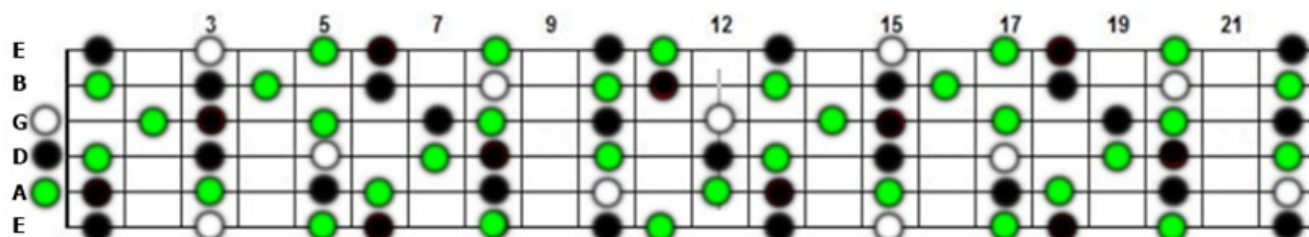
iii chord (or v chord) in G minor



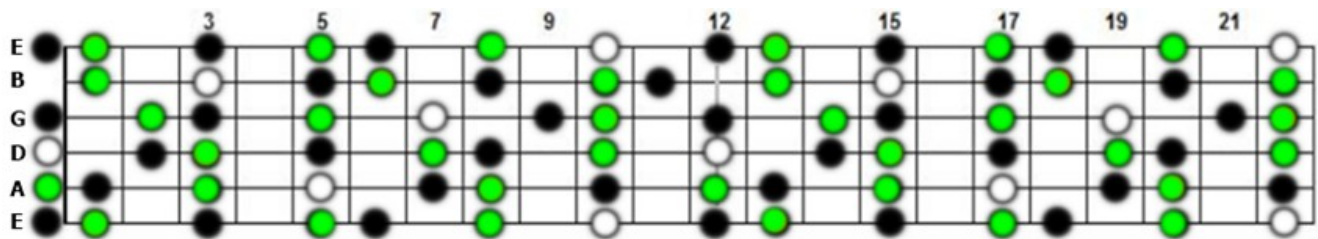
vi chord (or i chord) in G minor



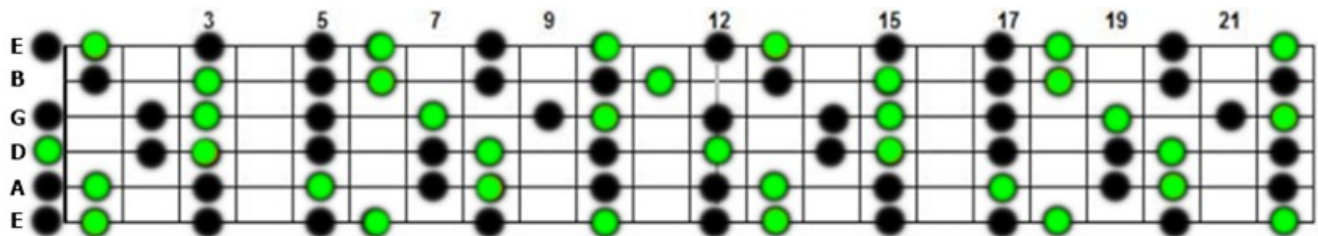
vii° chord (or ii° chord) in G minor



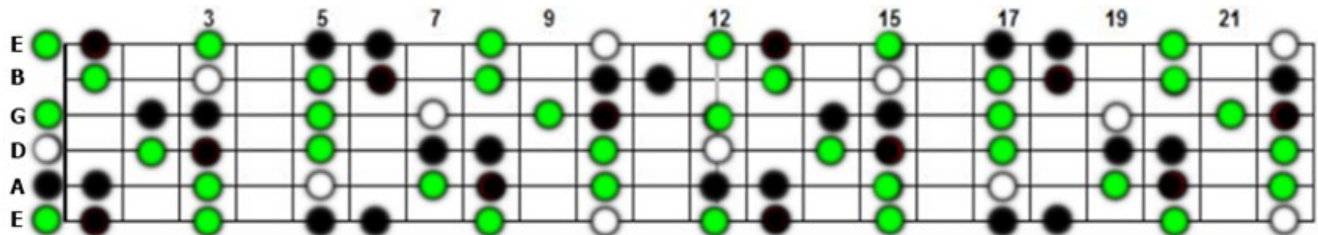
I chord (or bIII chord) in D minor



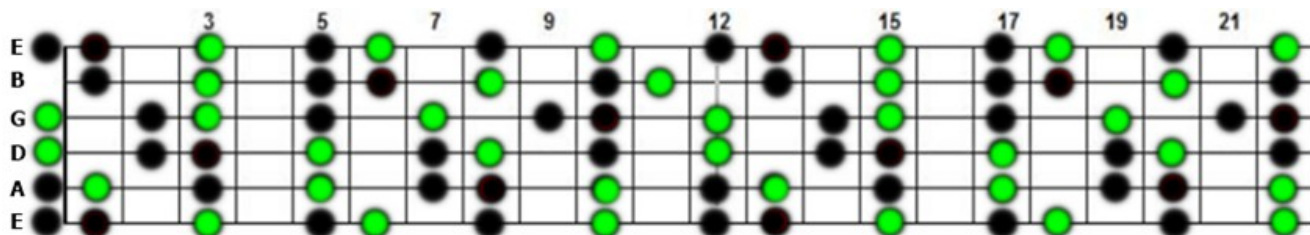
IV chord (or bVI chord) in D minor



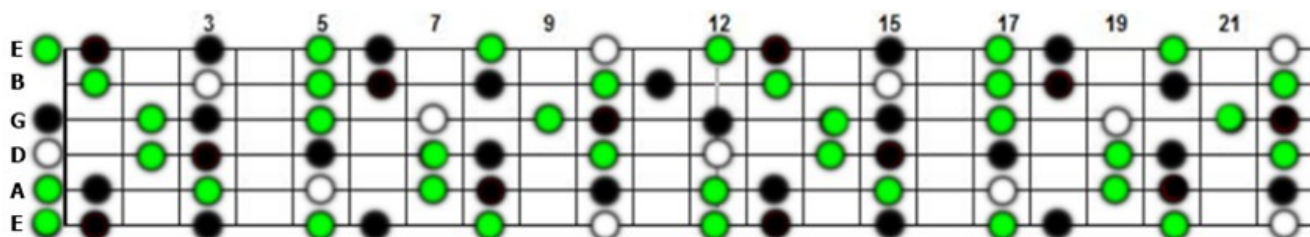
V chord (or bVII chord) in D minor



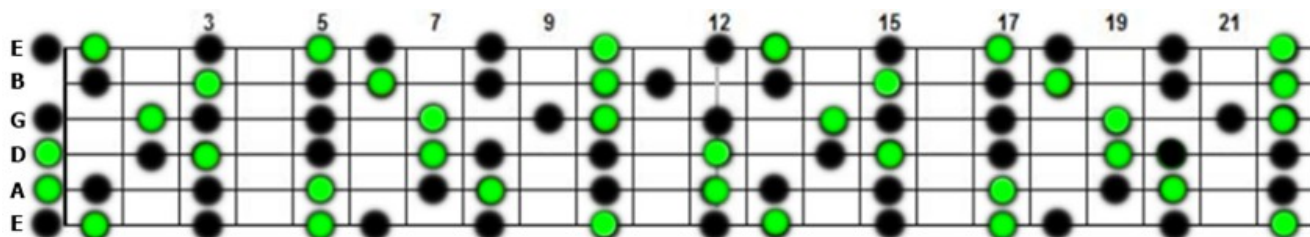
ii chord (or iv chord) in D minor



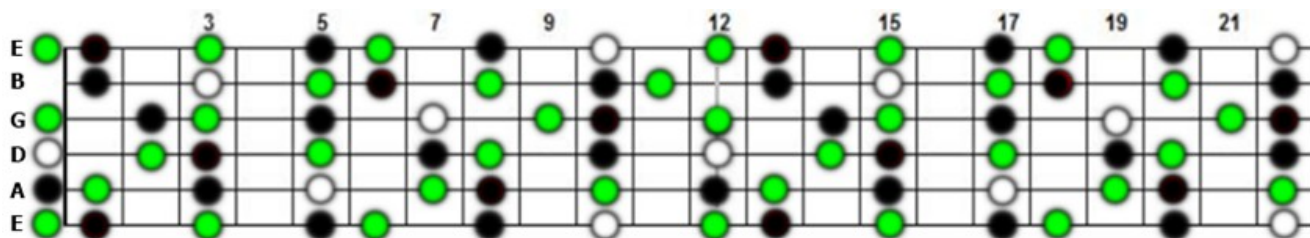
iii chord (or v chord) in D minor



vi chord (or i chord) in D minor



vii° chord (or ii° chord) in D minor

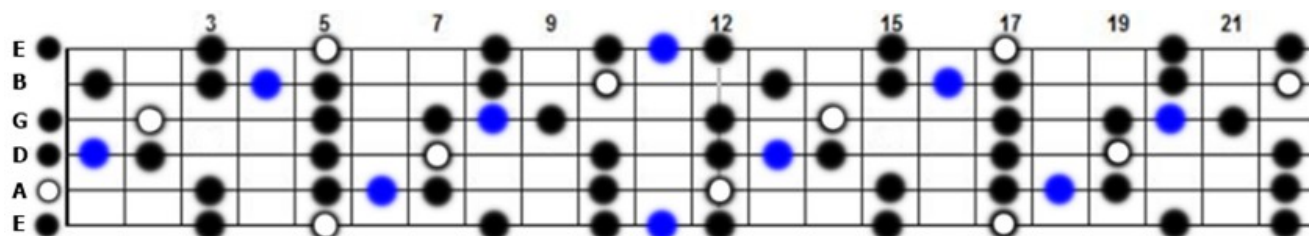


Minor Blues Scales

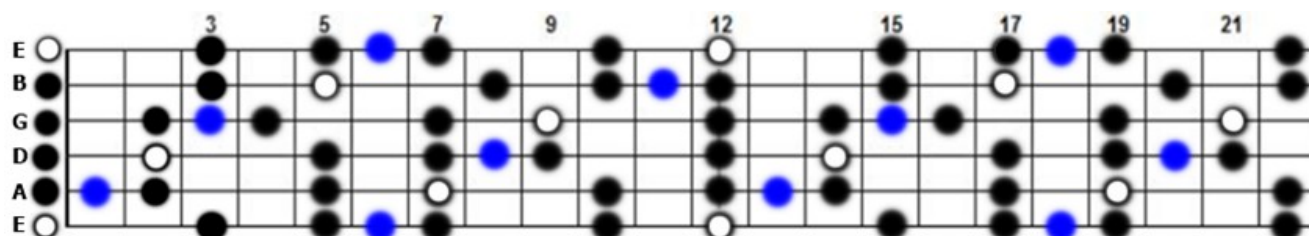
Blue Dot = The “Blue Note”

White Dot = Tonic Note of Key/Scale

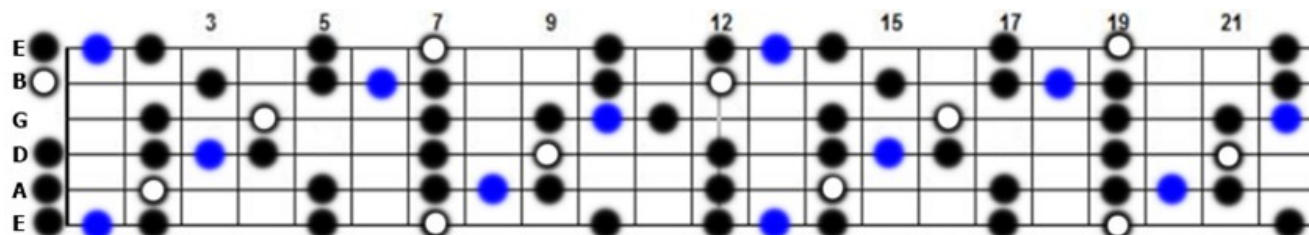
A minor blues



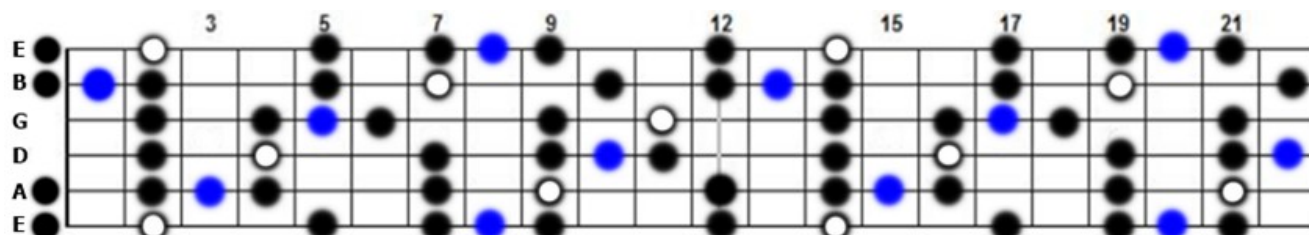
E minor blues



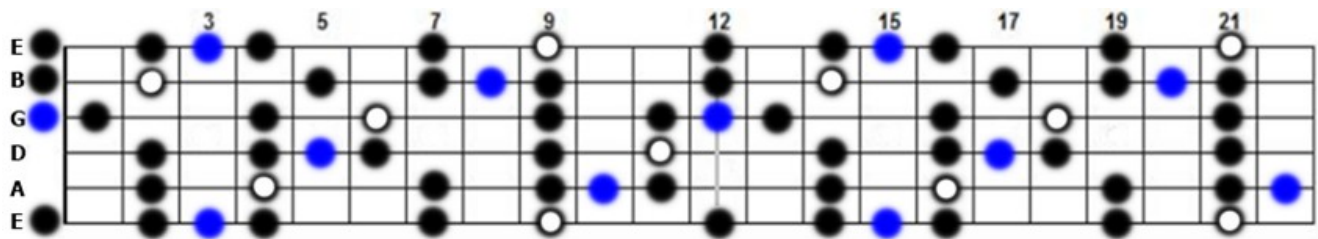
B minor blues



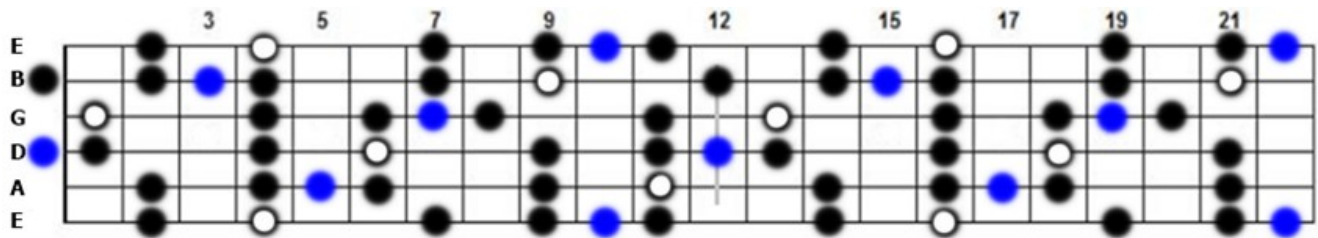
F# minor blues



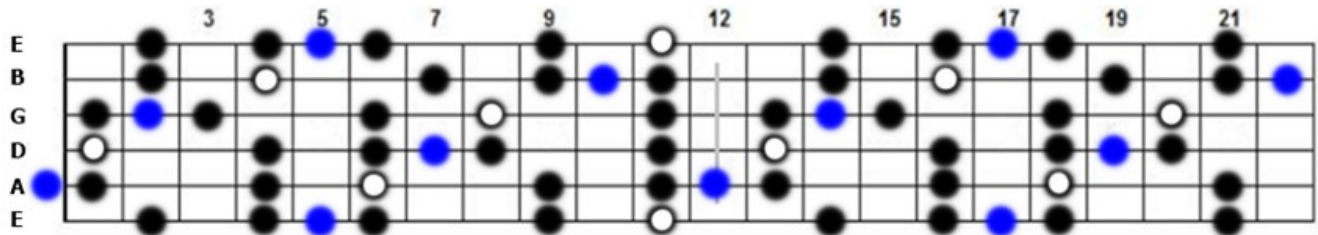
C# minor blues



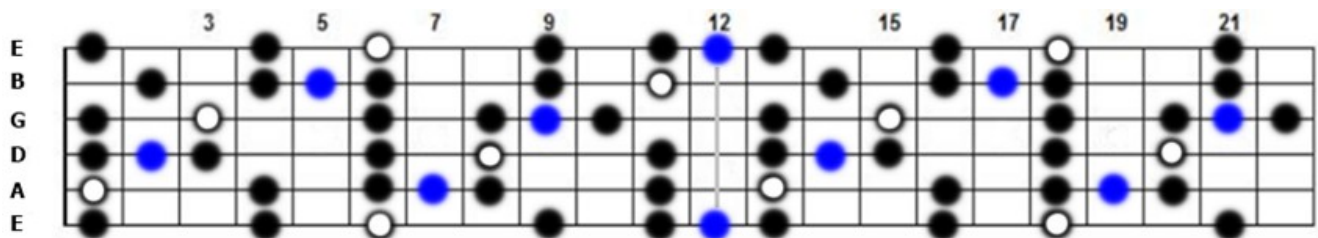
G# minor blues



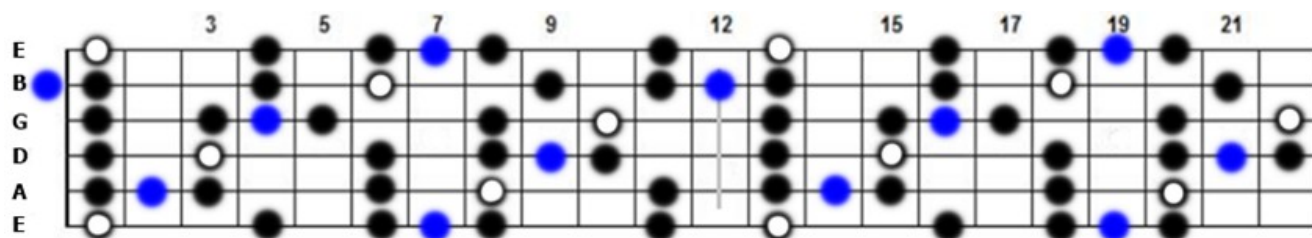
D# minor blues



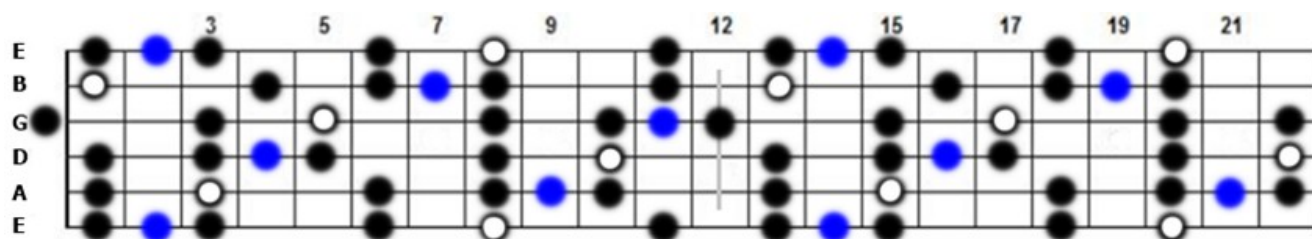
A#/Bb minor blues



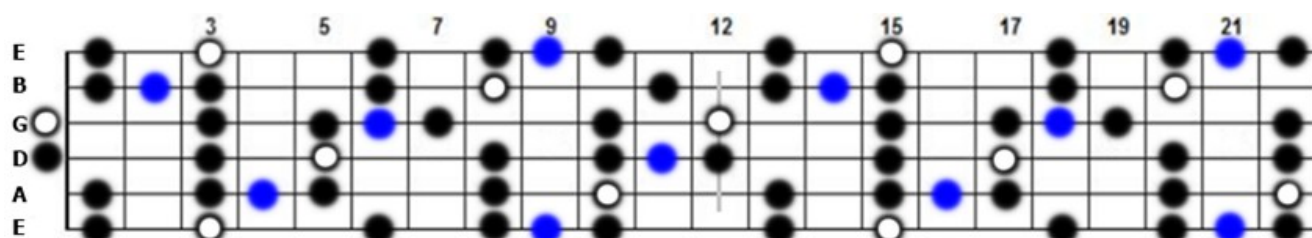
F minor blues



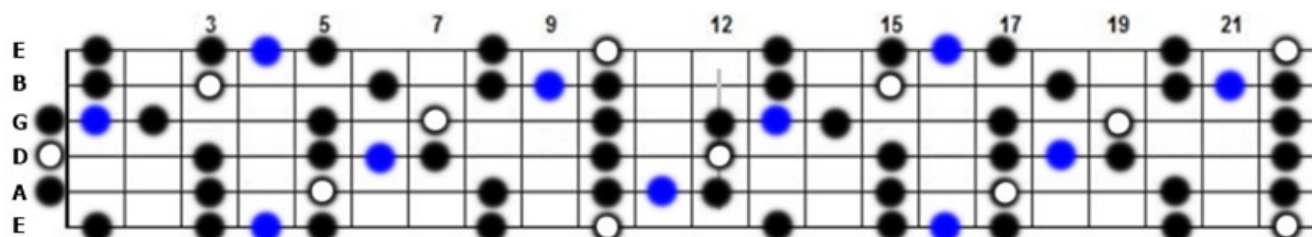
C minor blues



G minor blues



D minor blues

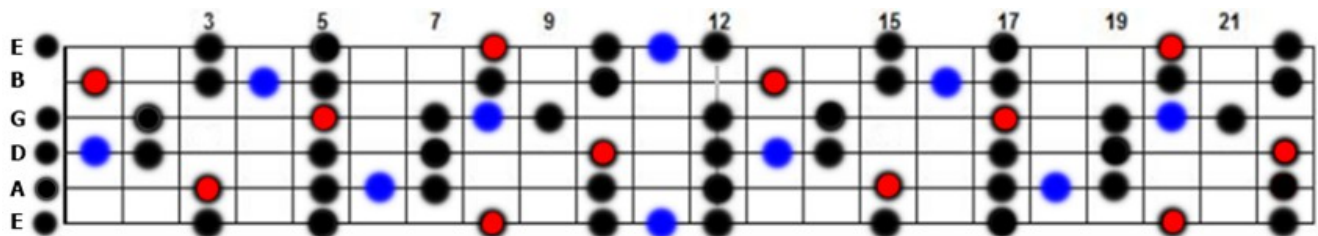


Major Blues Scales

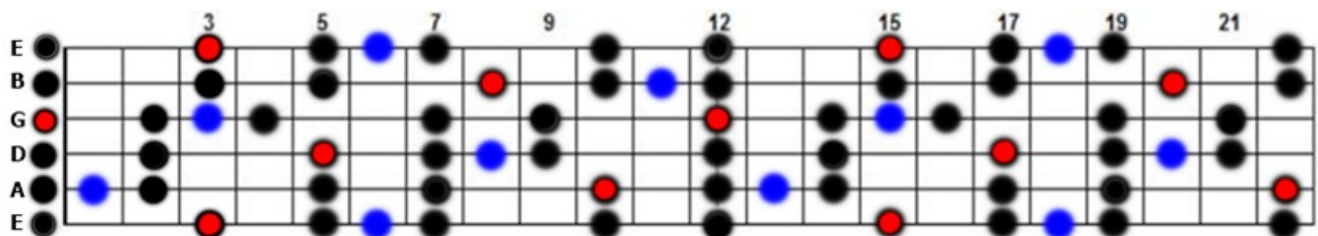
Blue Dot = The “Blue Note”

Red Dot = Tonic Note of Key/Scale

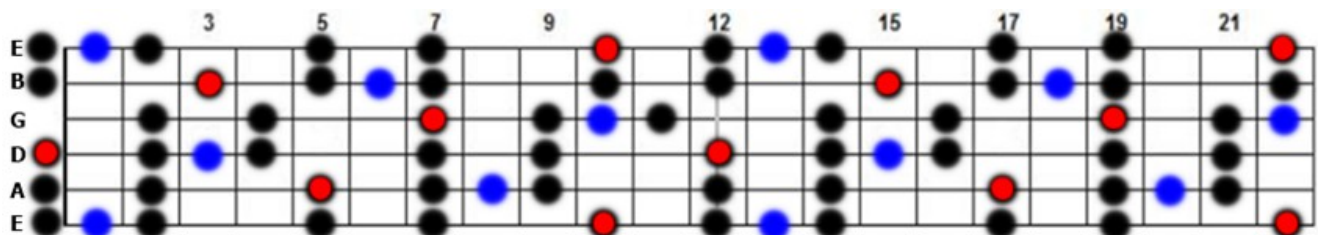
C major blues



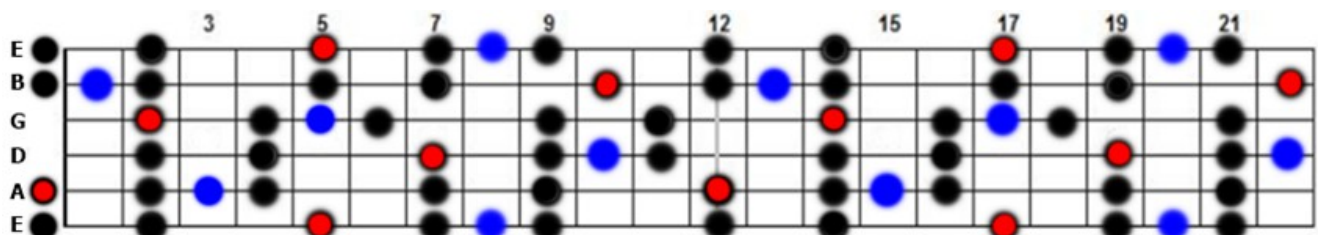
G major blues



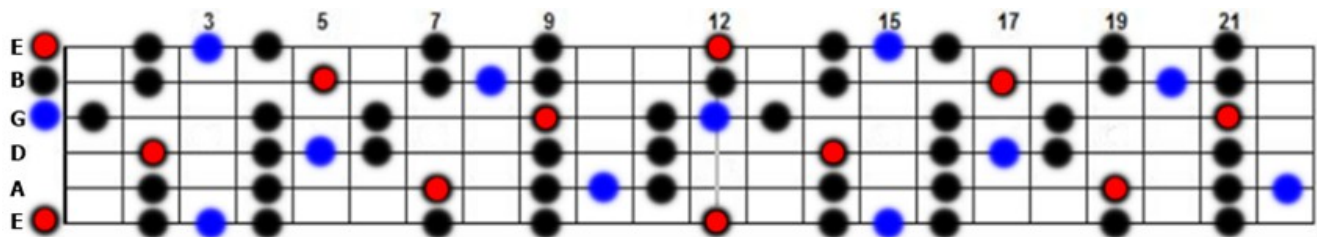
D major blues



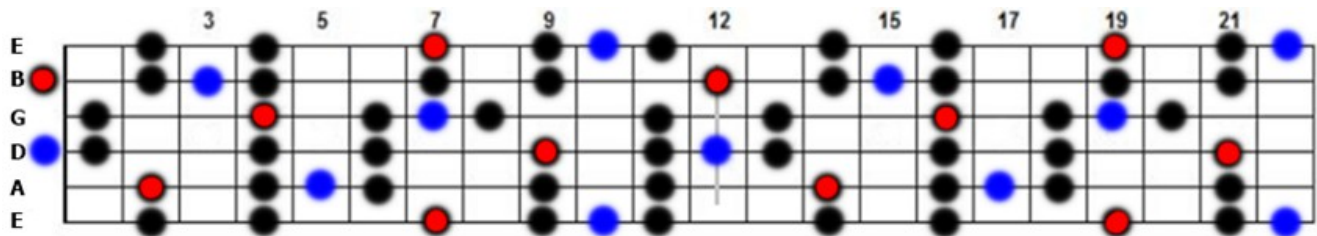
A major blues



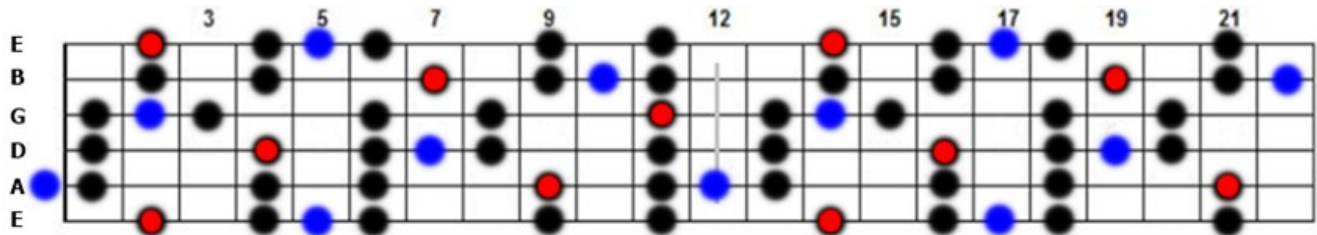
E major blues



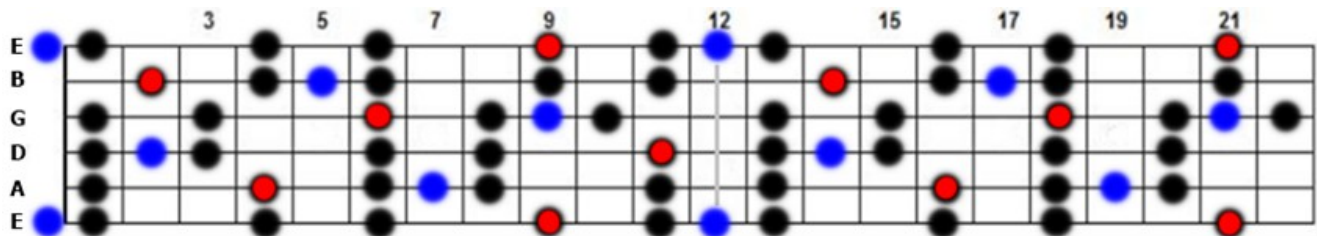
B major blues



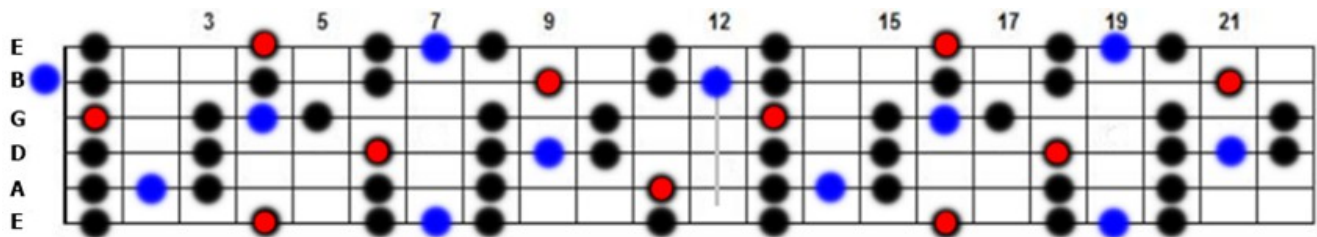
F#/Gb major blues



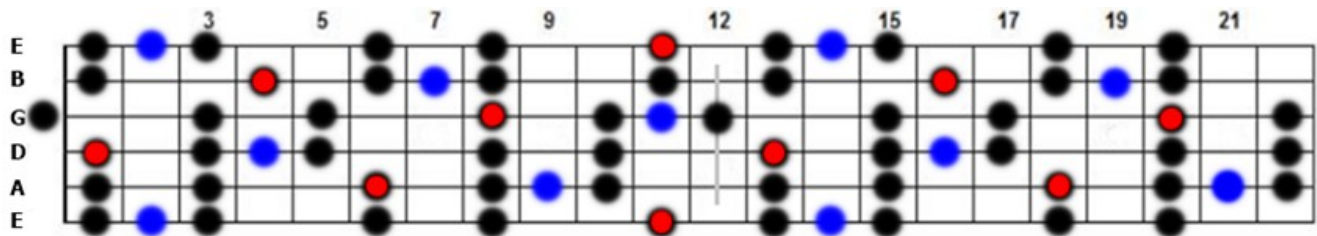
Db major blues



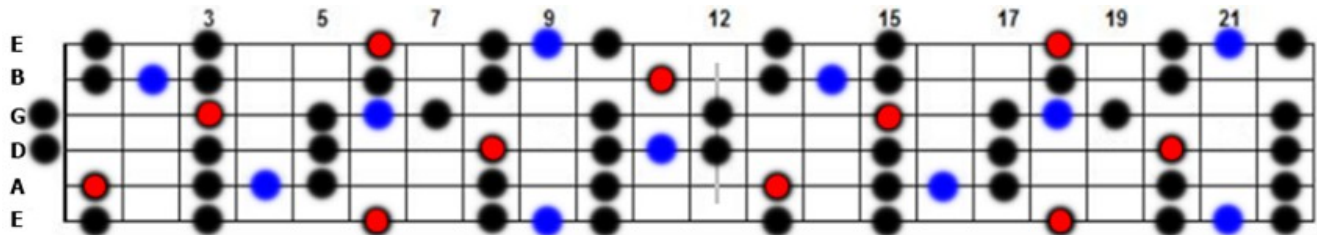
Ab major blues



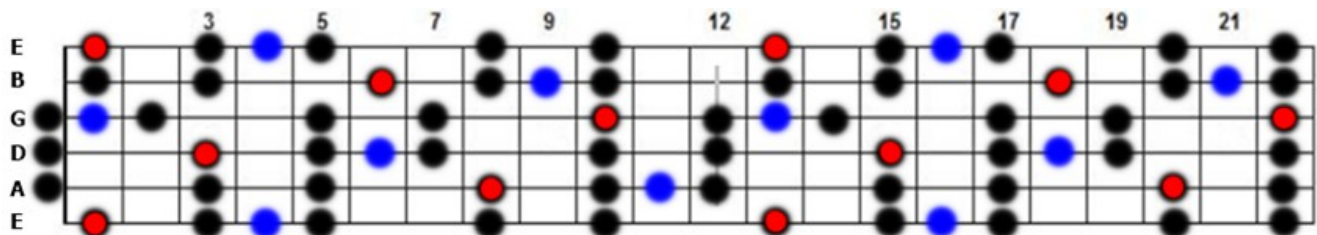
Eb major blues



Bb major blues



F major blues



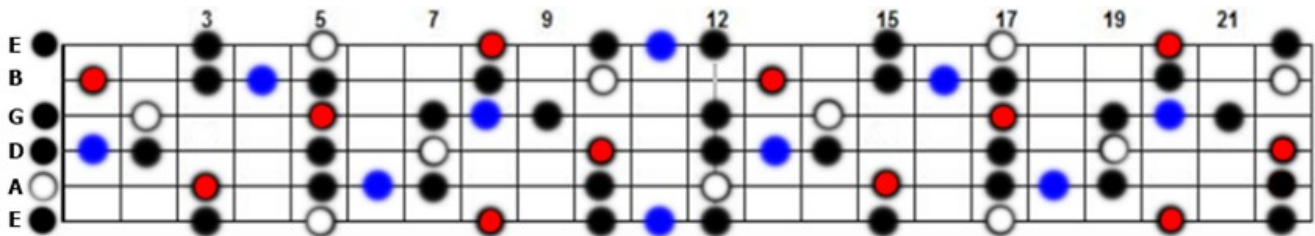
Relative Major-Minor Blues Scales

Red Dot = Major Scale Root

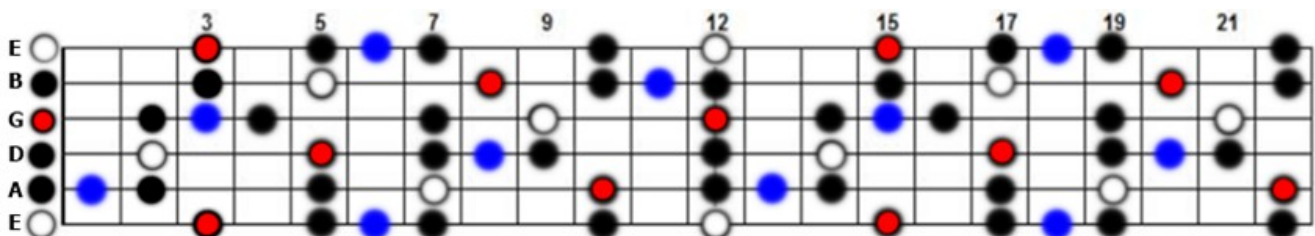
White Dot = Minor Scale Root

Blue Dot = The “Blue Note”

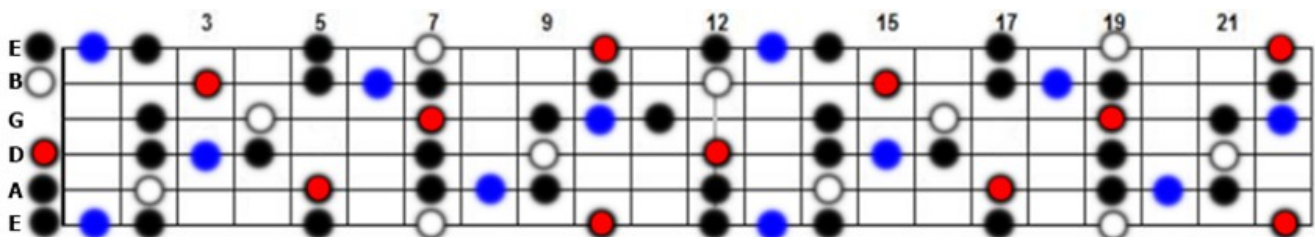
C major-A minor blues



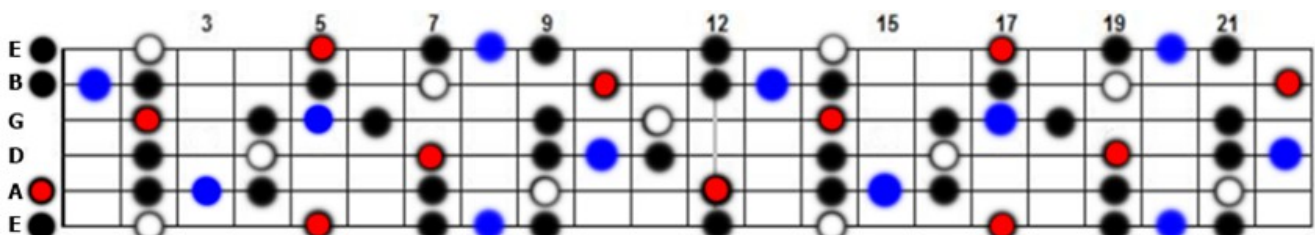
G major-E minor blues



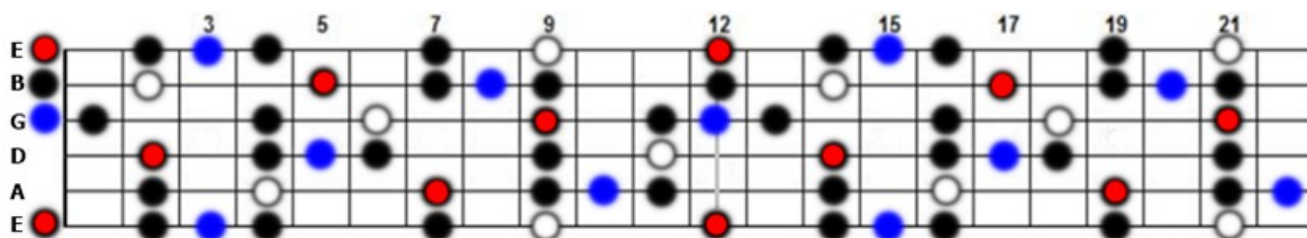
D major-B minor blues



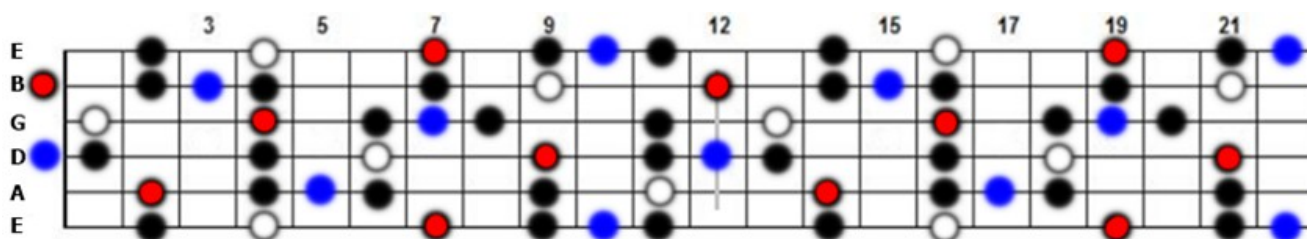
A major-F# minor blues



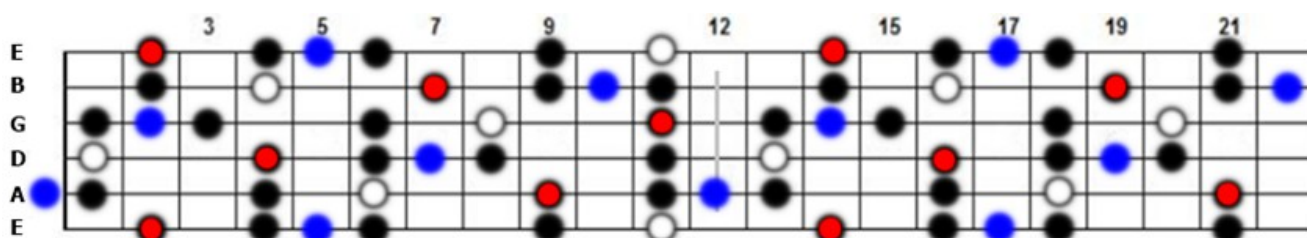
E major-C# minor blues



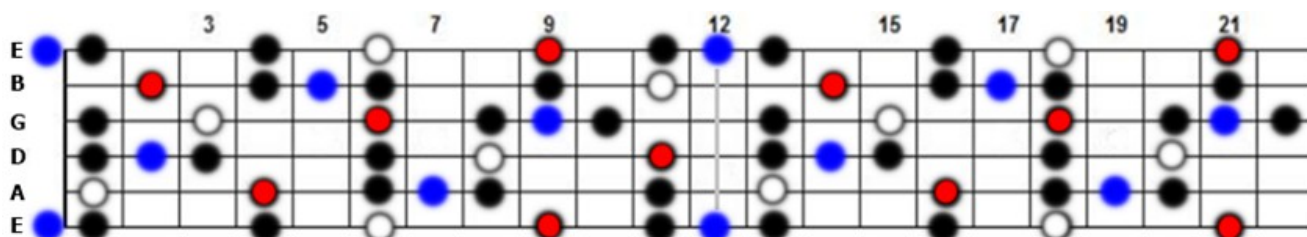
B major-G# minor blues



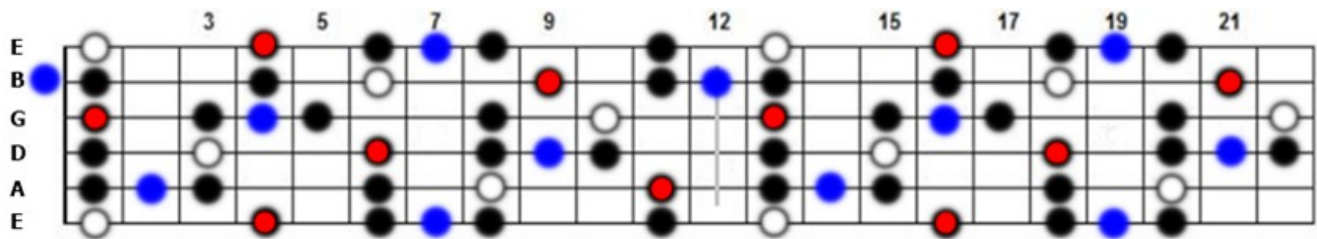
Gb major-D# minor blues



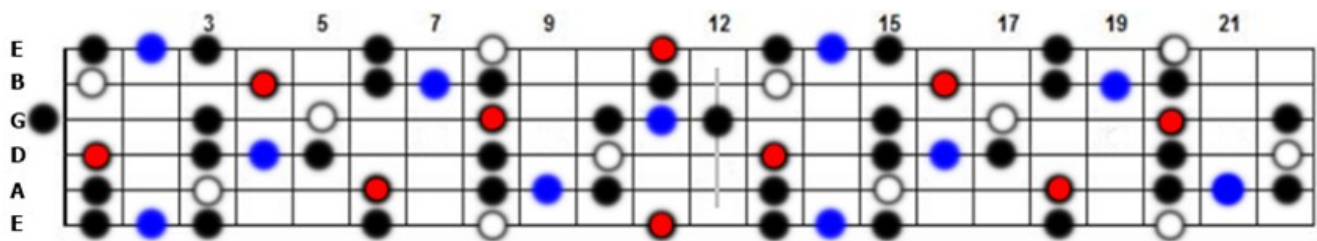
Db major-A# minor blues



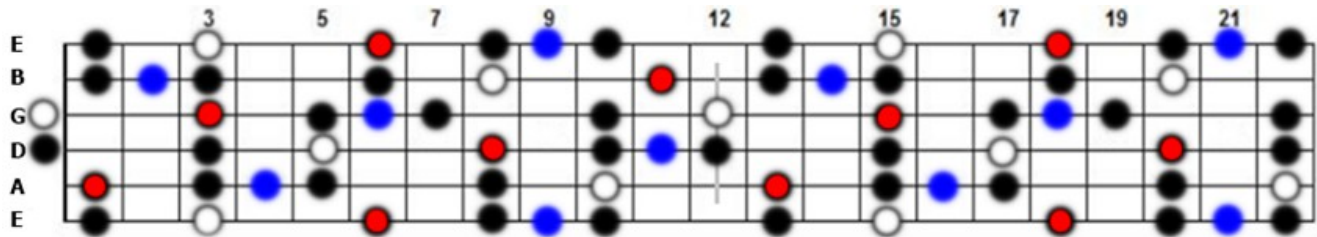
Ab major-F minor blues



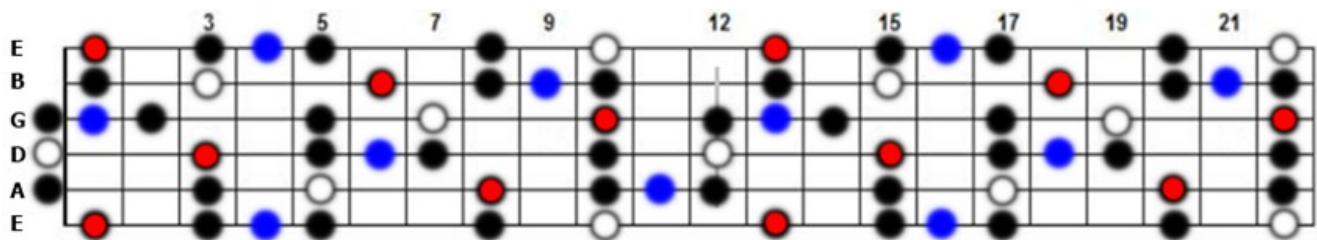
Eb major-C minor blues



Bb major-G minor blues

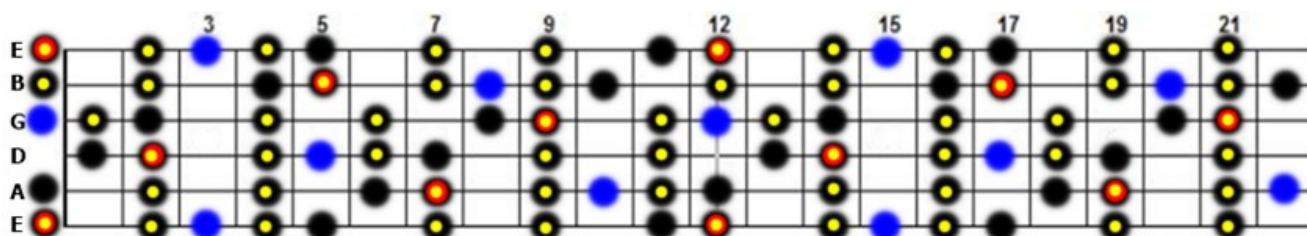


F major-D minor blues

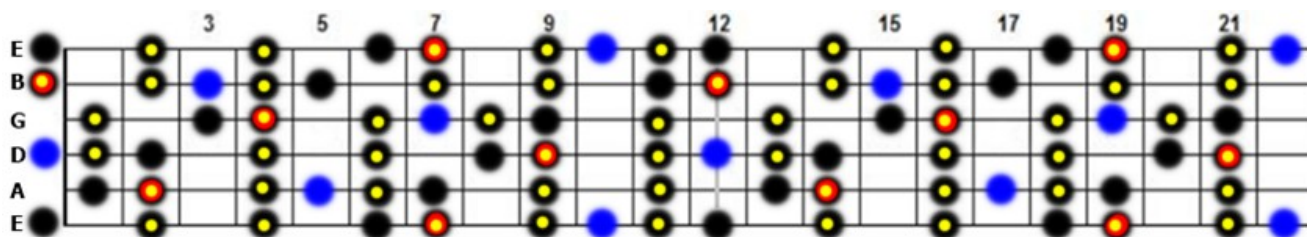


Blue Dot = The “Blue Note”

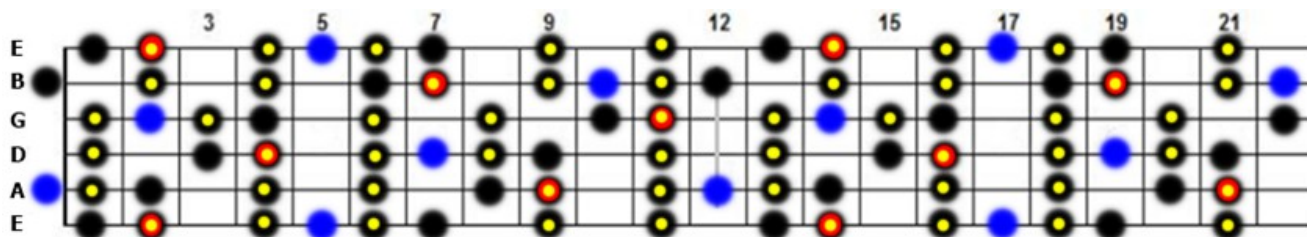
E major scale combination



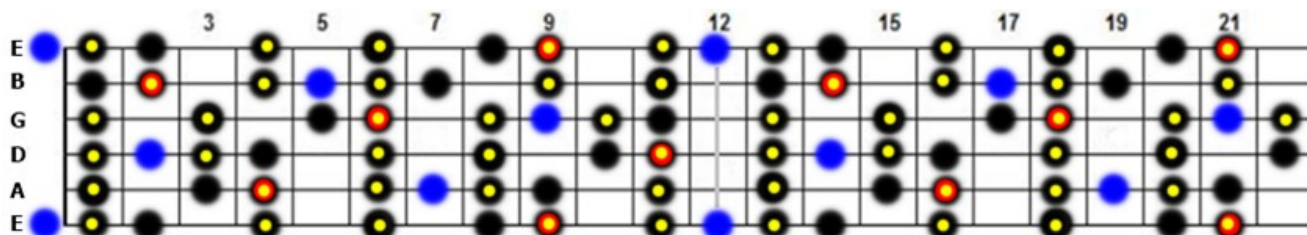
B major scale combination



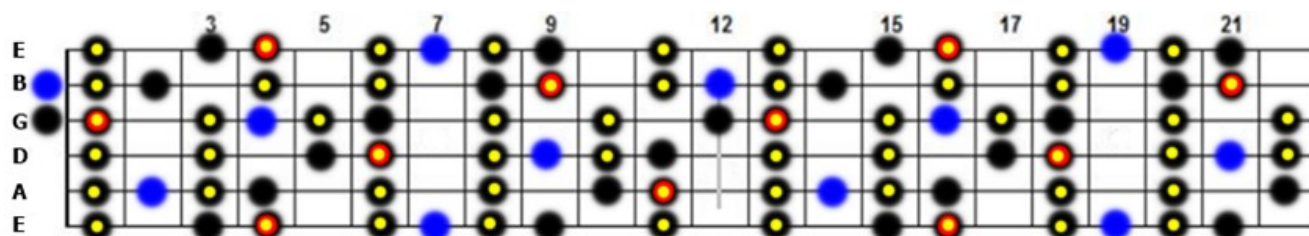
F#/Gb major scale combination



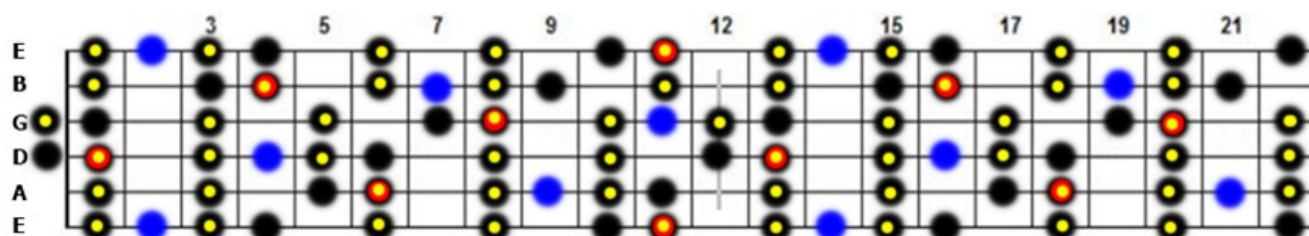
Db major scale combination



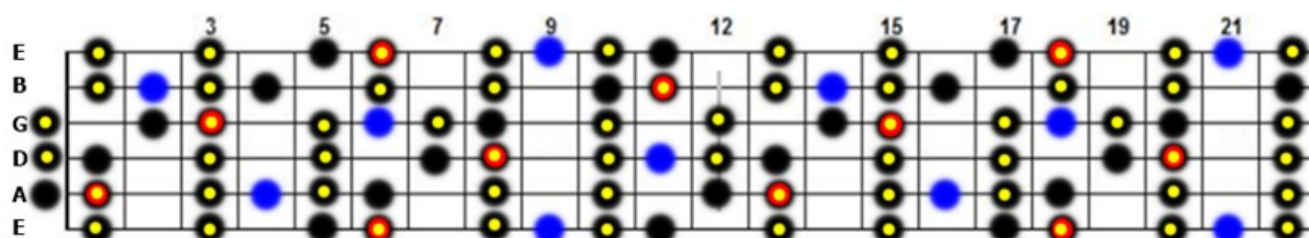
Ab major scale combination



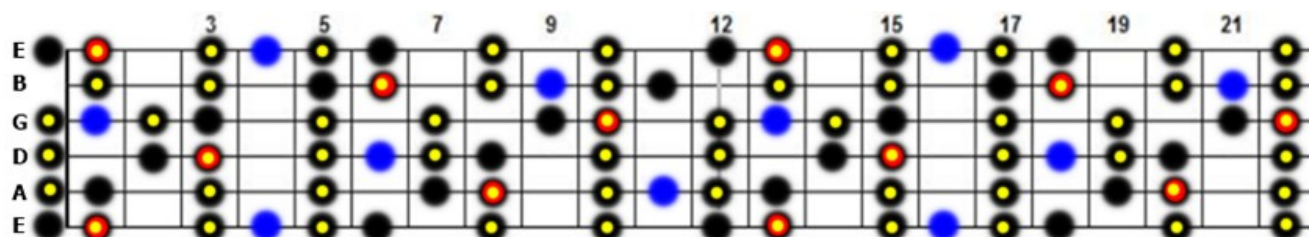
Eb major scale combination



Bb major scale combination



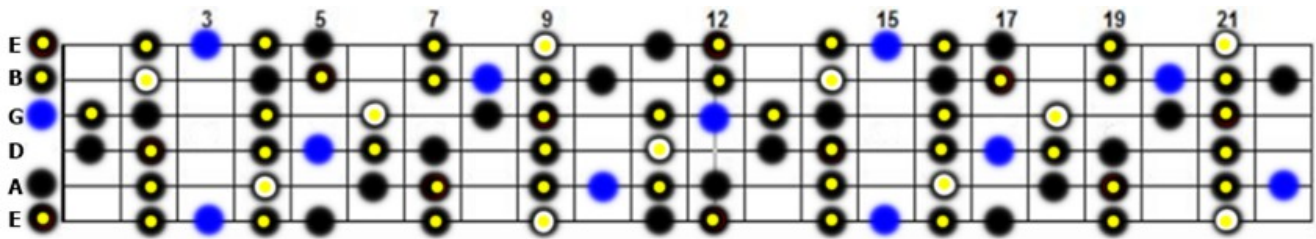
F major scale combination



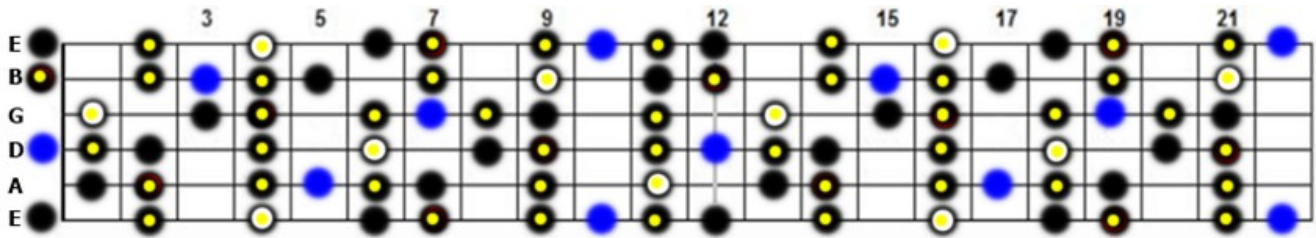
White Dot = Tonic Note of Key/Scale

Blue Dot = The “Blue Note”

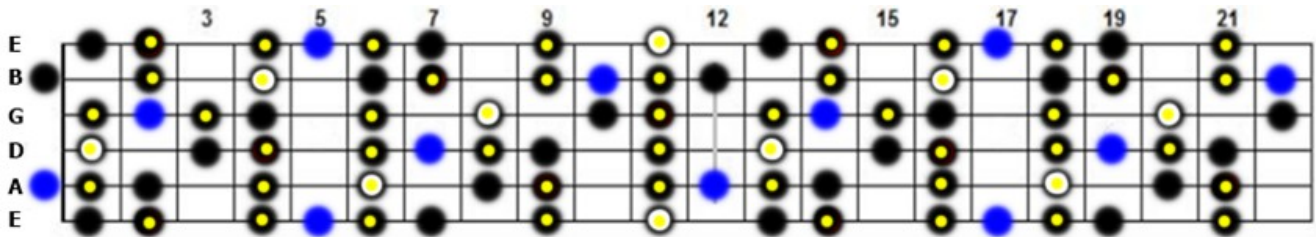
C# minor scale combination



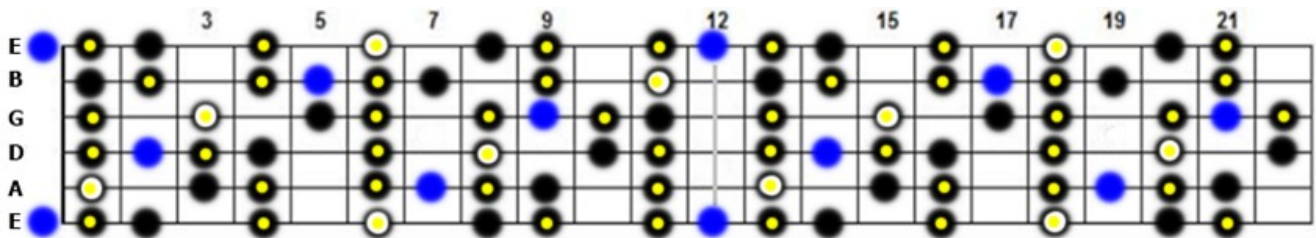
G# minor scale combination



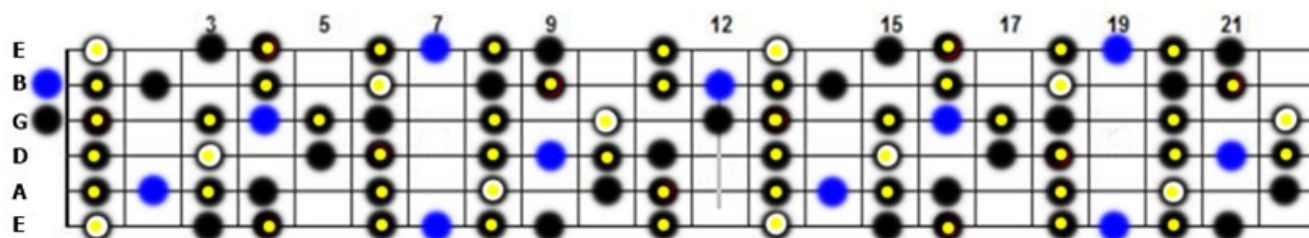
D# minor scale combination



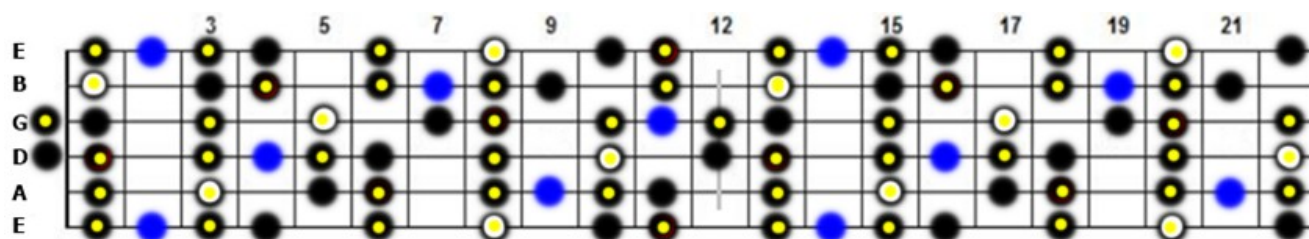
A#/Bb minor scale combination



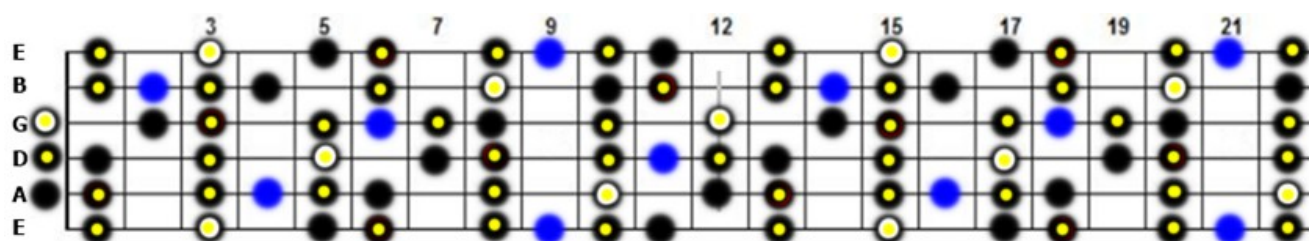
F minor scale combination



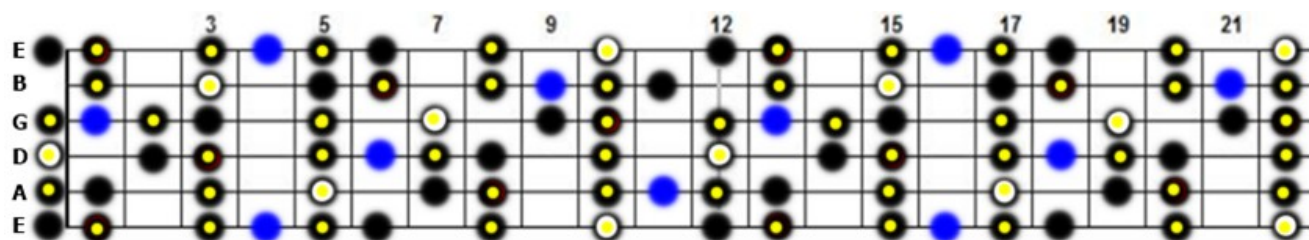
C minor scale combination



G minor scale combination



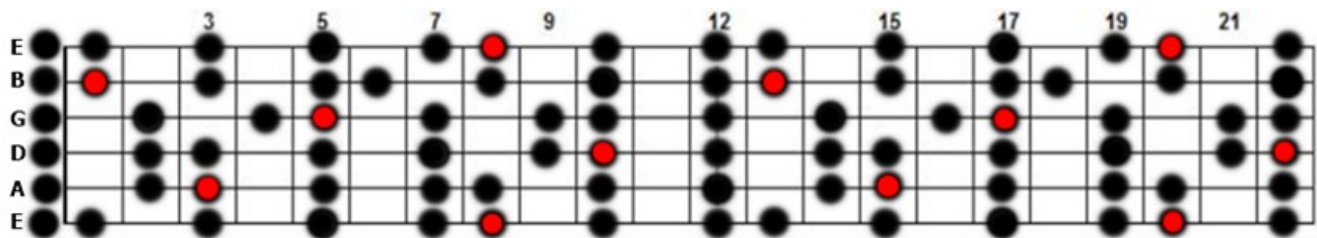
D minor scale combination



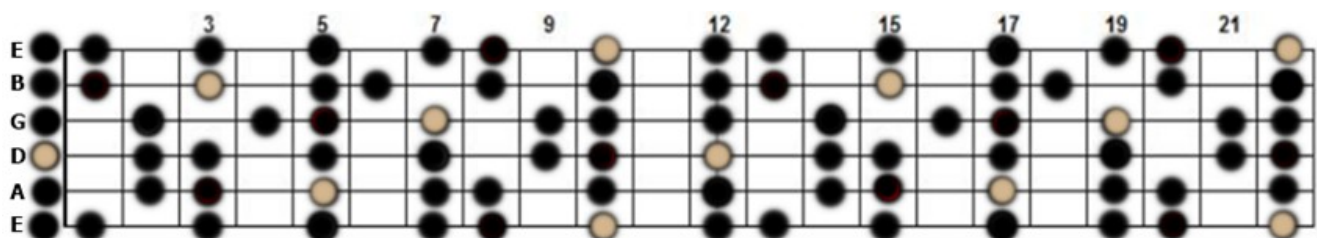
Modes of C major

Any Colored Note other than Black = Tonal Center

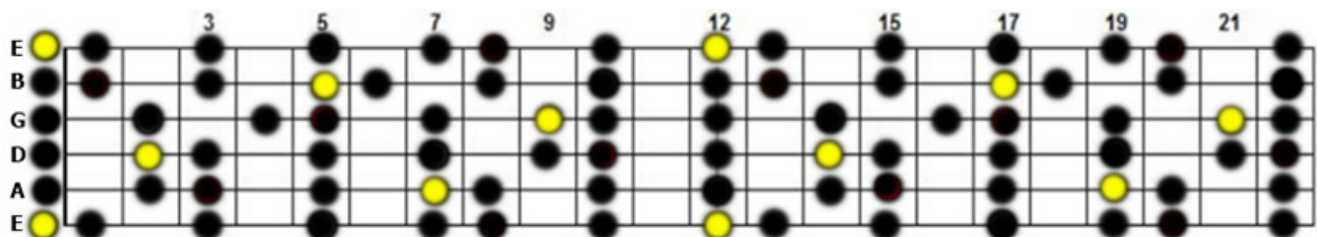
C Ionian



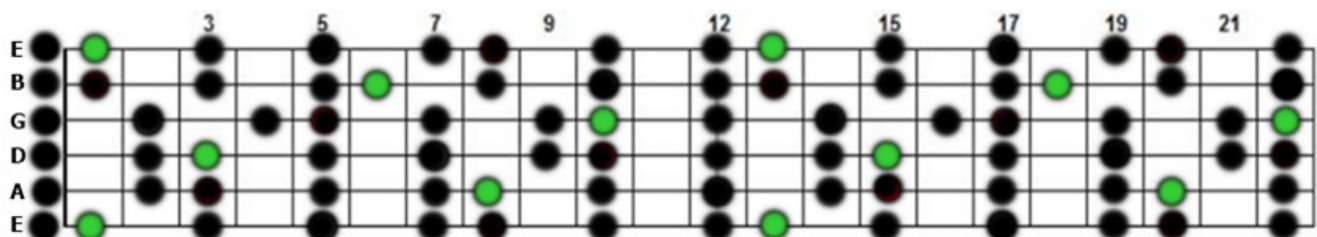
D Dorian



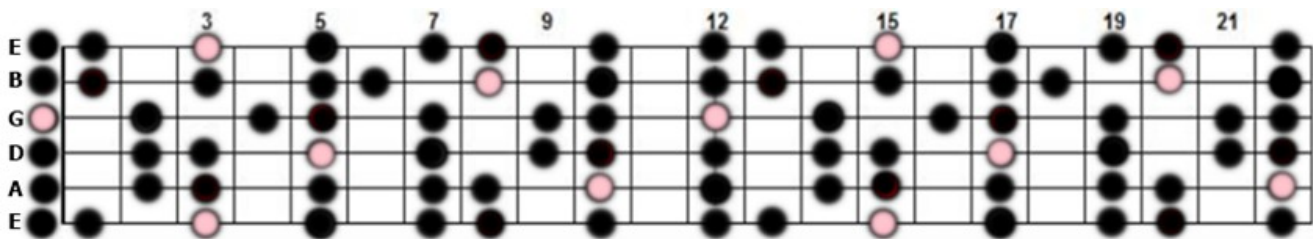
E Phrygian



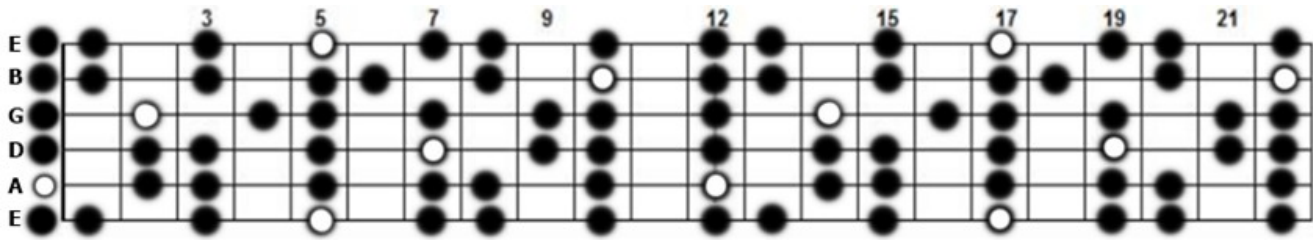
F Lydian



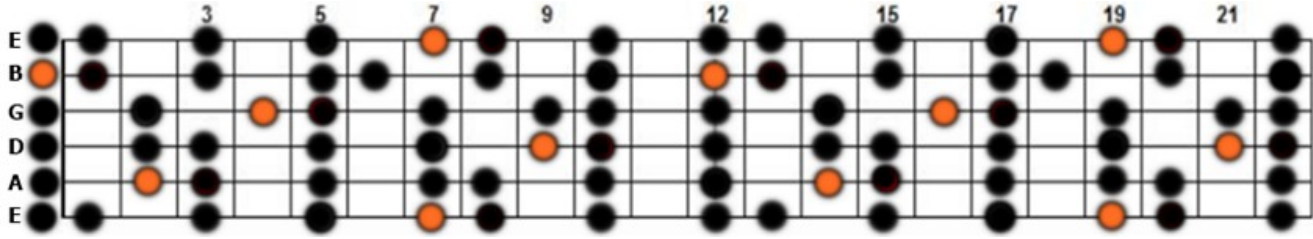
G Mixolydian



A Aeolian



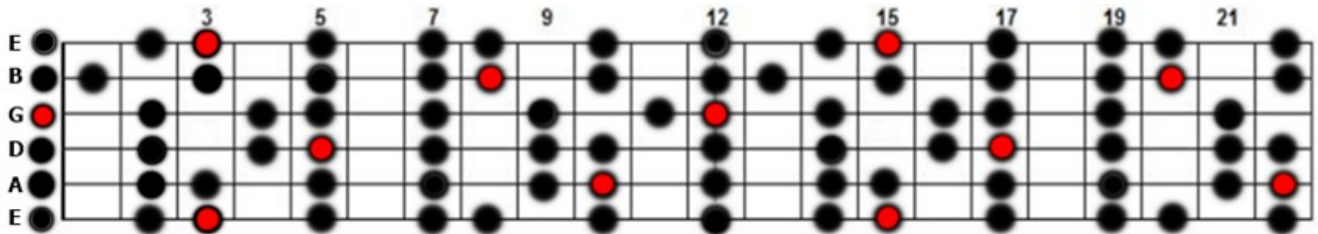
B Locrian



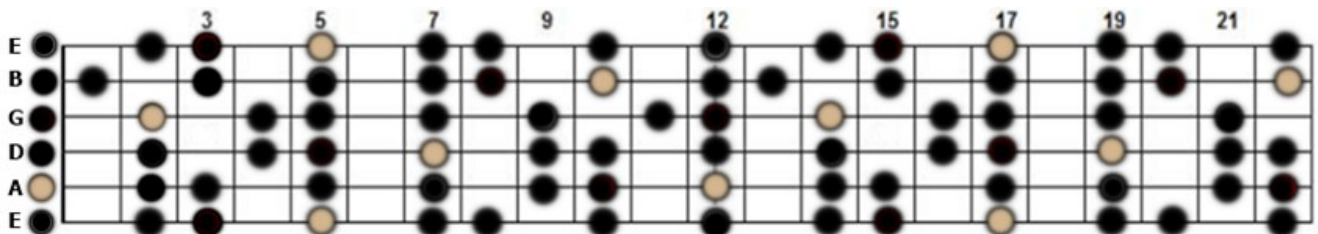
Modes of G major

Any Colored Note other than Black = Tonal Center

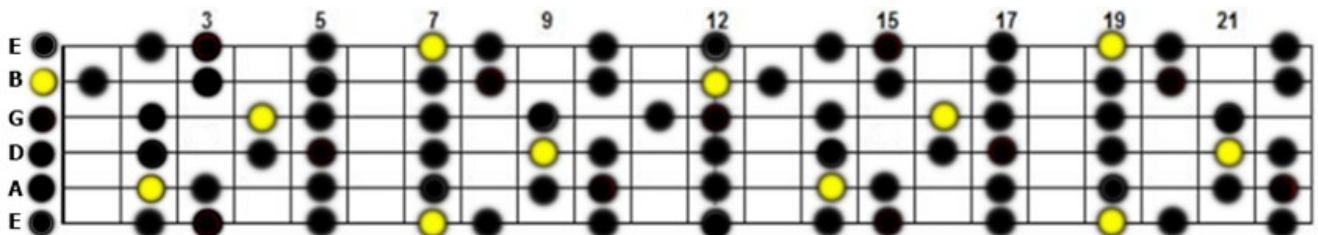
G Ionian



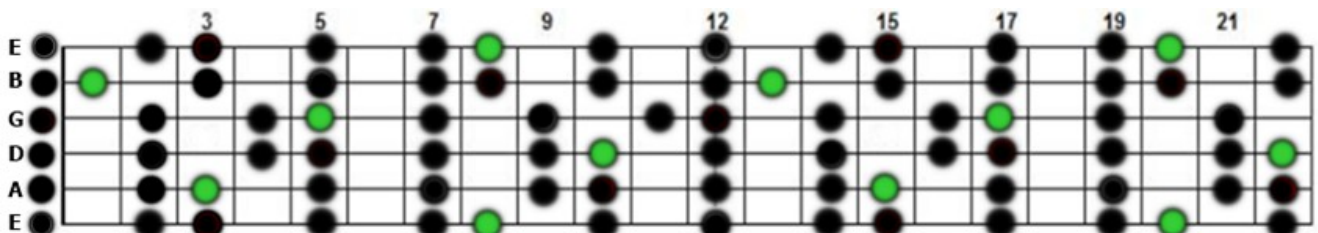
A Dorian



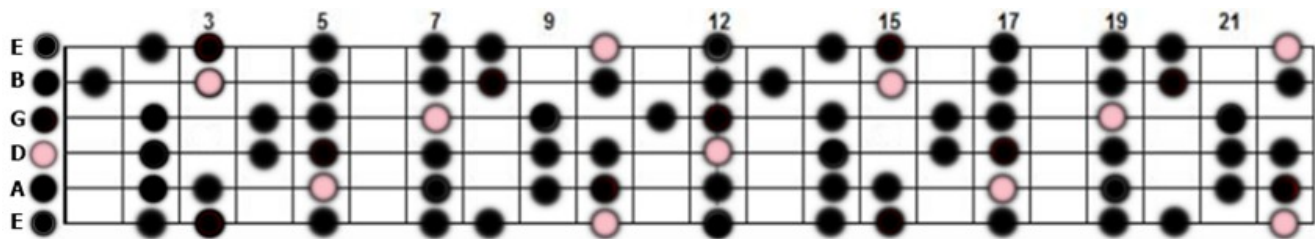
B Phrygian



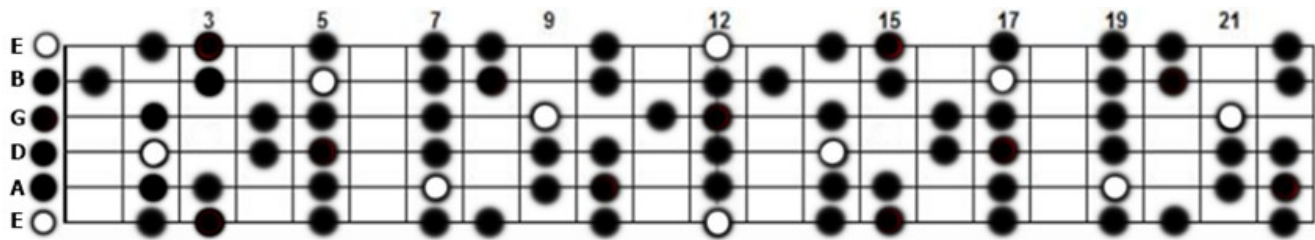
C Lydian



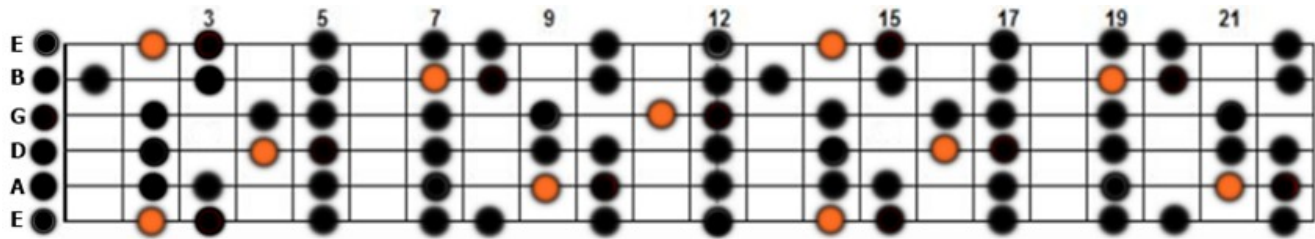
D Mixolydian



E Aeolian



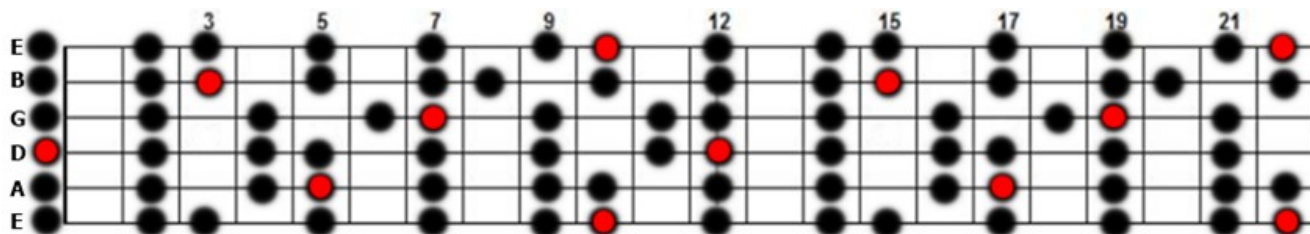
F# Locrian



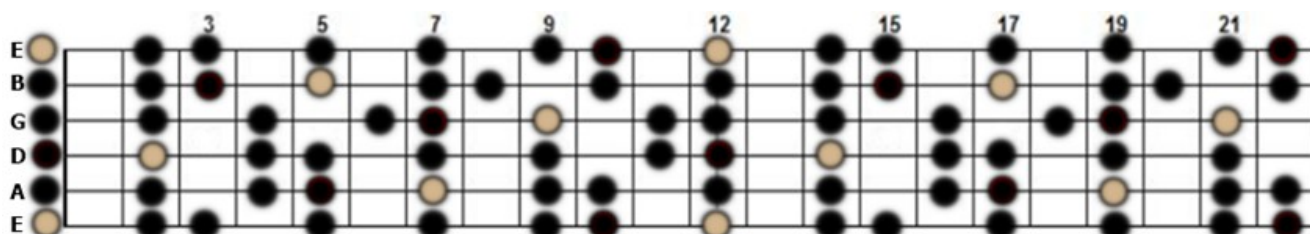
Modes of D major

Any Colored Note other than Black = Tonal Center

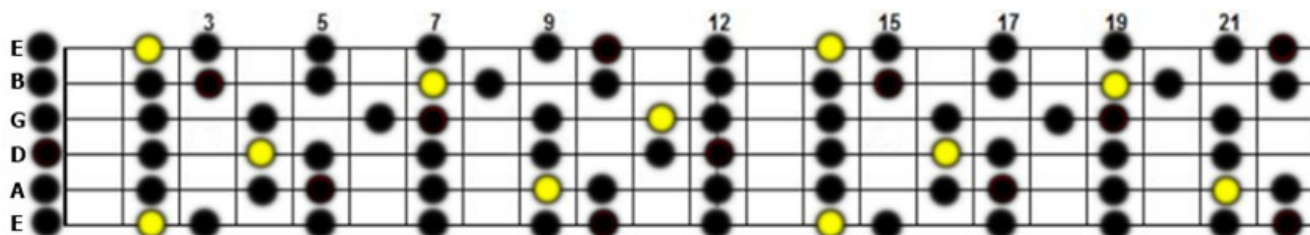
D Ionian



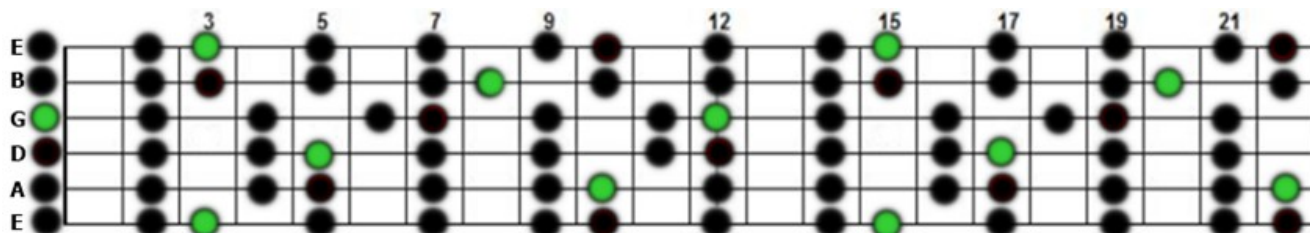
E Dorian



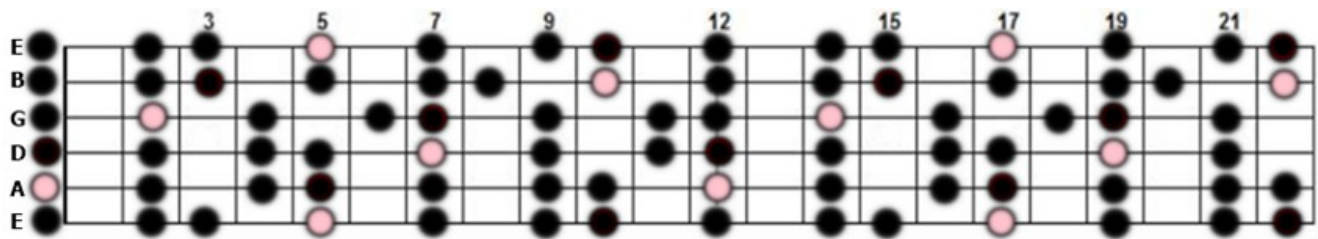
F# Phrygian



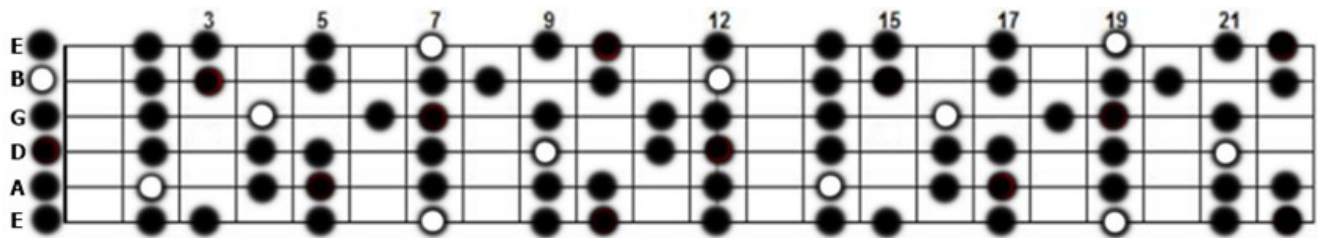
G Lydian



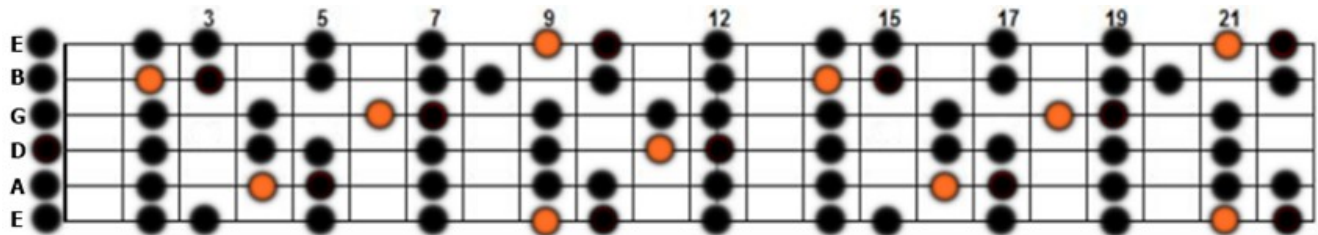
A Mixolydian



B Aeolian



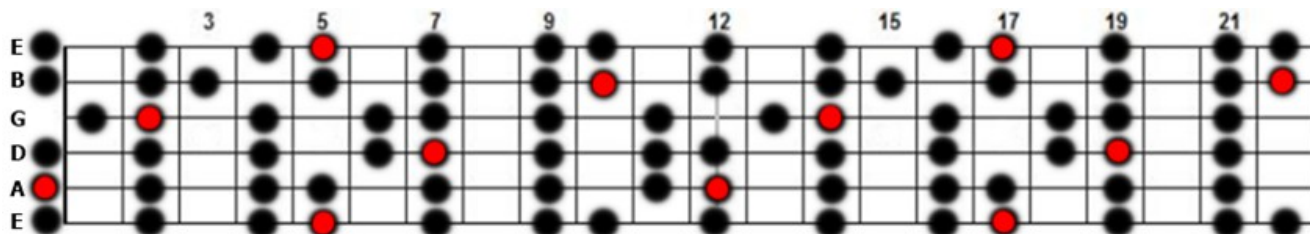
C# Locrian



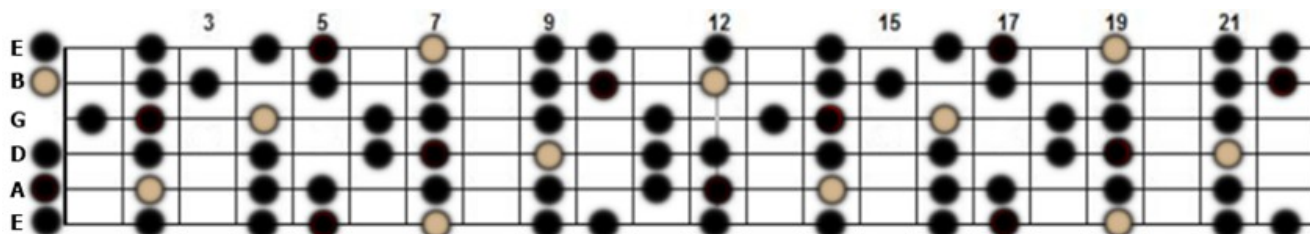
Modes of A major

Any Colored Note other than Black = Tonal Center

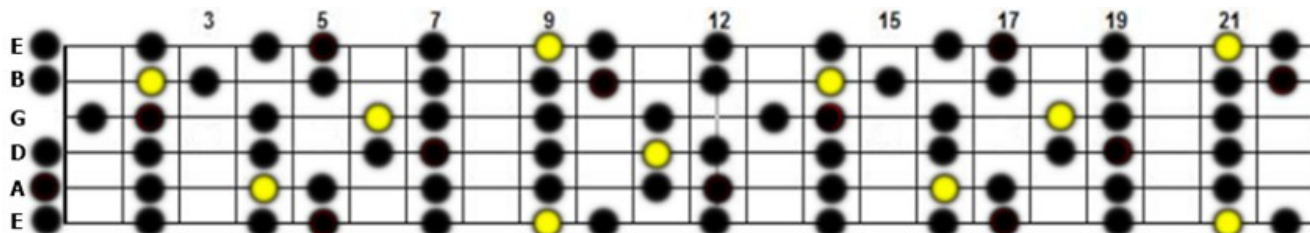
A Ionian



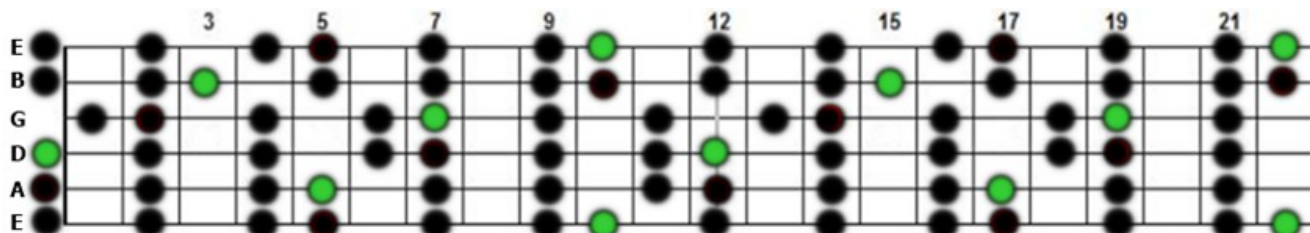
B Dorian



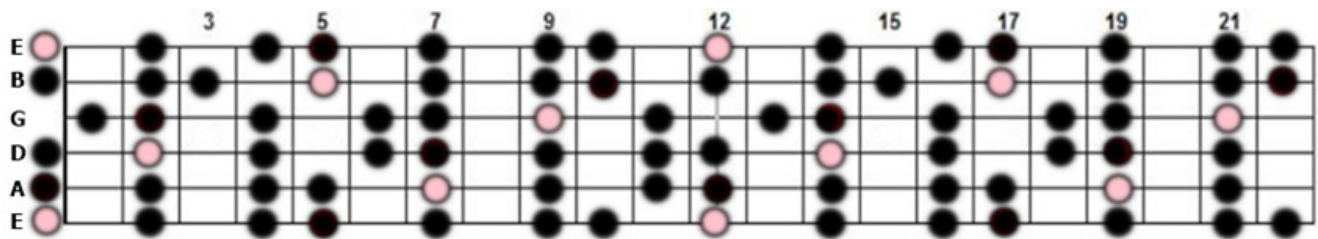
C# Phrygian



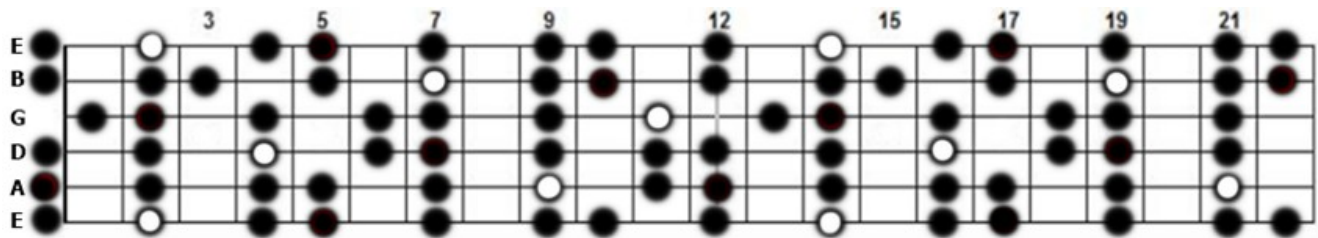
D Lydian



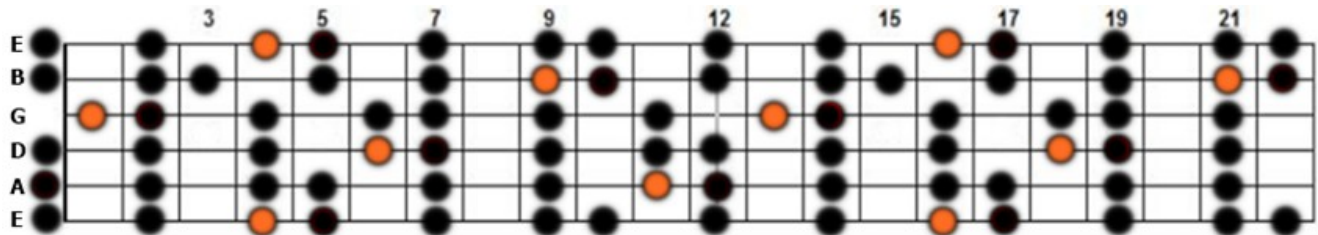
E Mixolydian



F# Aeolian



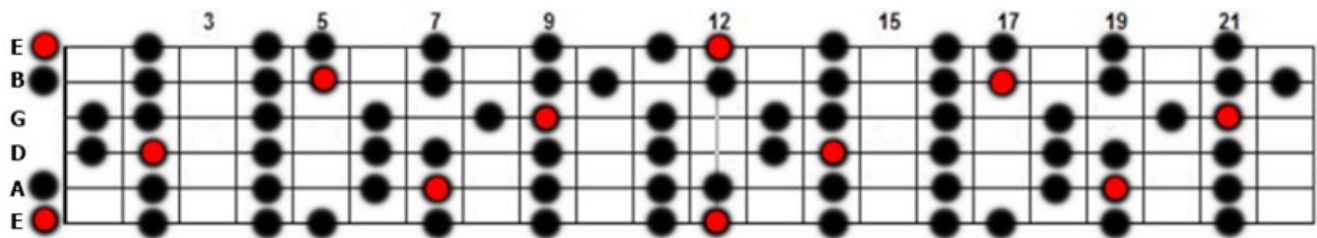
G# Locrian



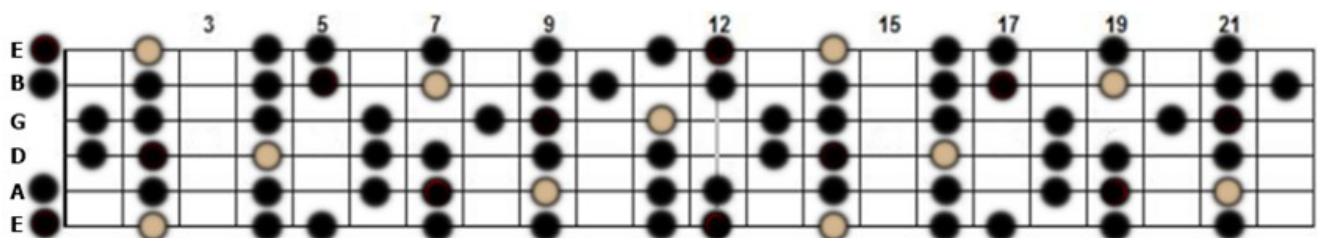
Modes of E major

Any Colored Note other than Black = Tonal Center

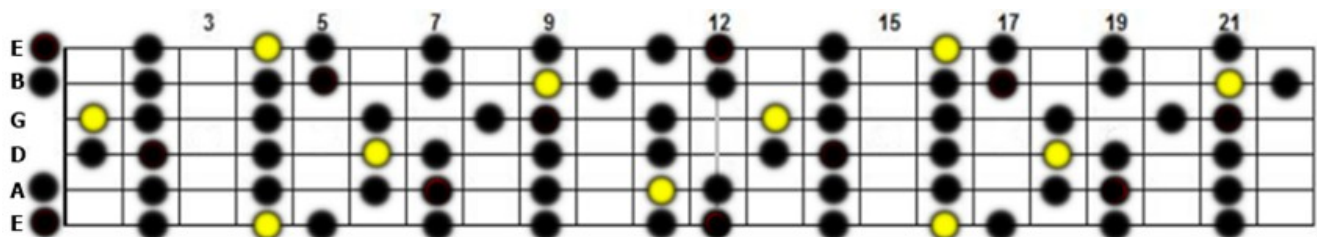
E Ionian



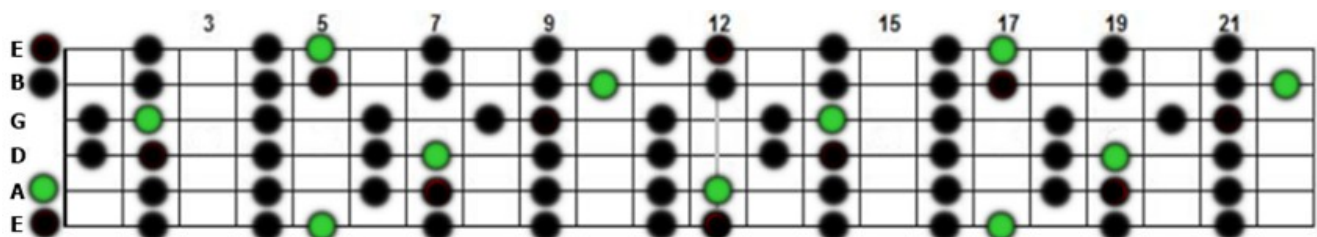
F# Dorian



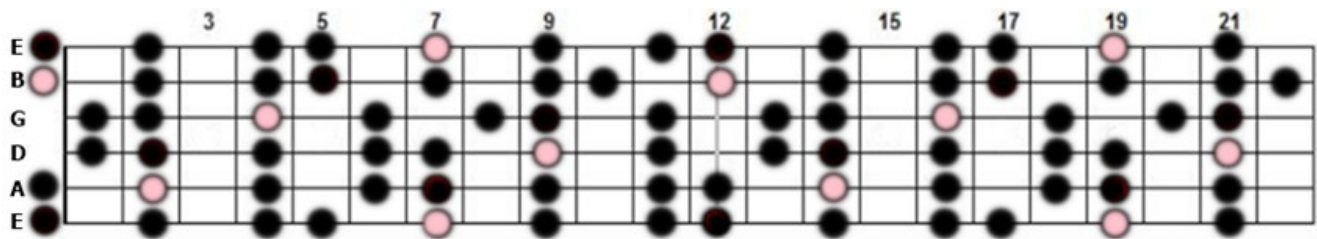
G# Phrygian



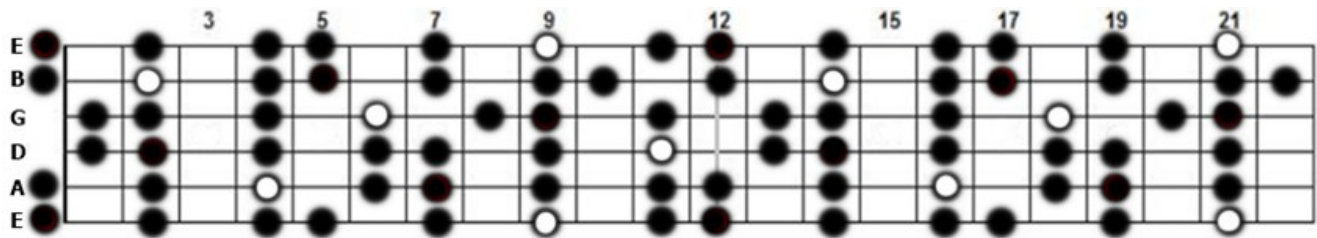
A Lydian



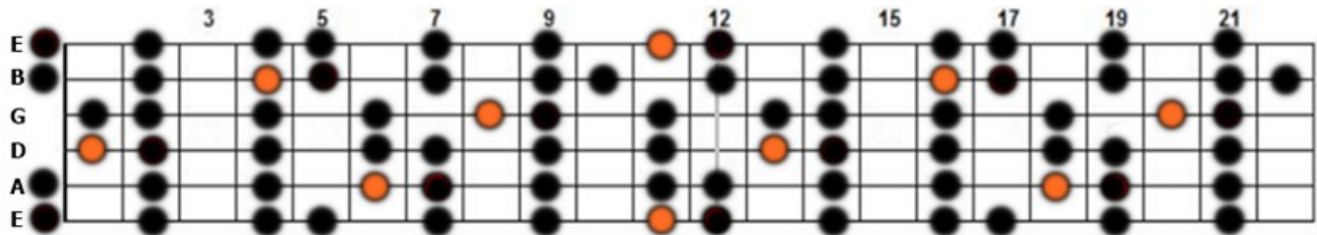
B Mixolydian



C# Aeolian



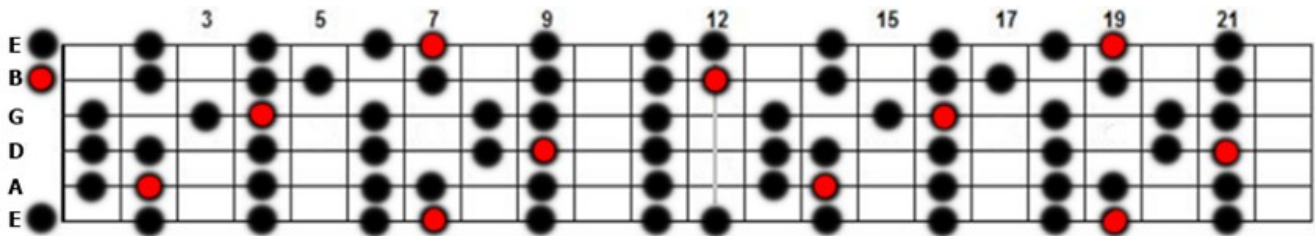
D# Locrian



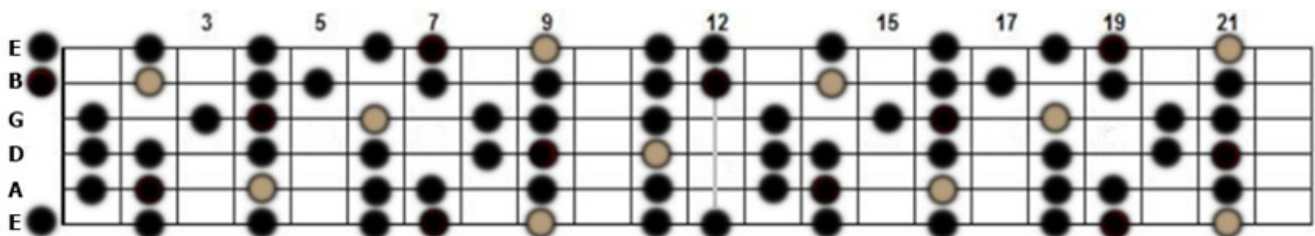
Modes of B major

Any Colored Note other than Black = Tonal Center

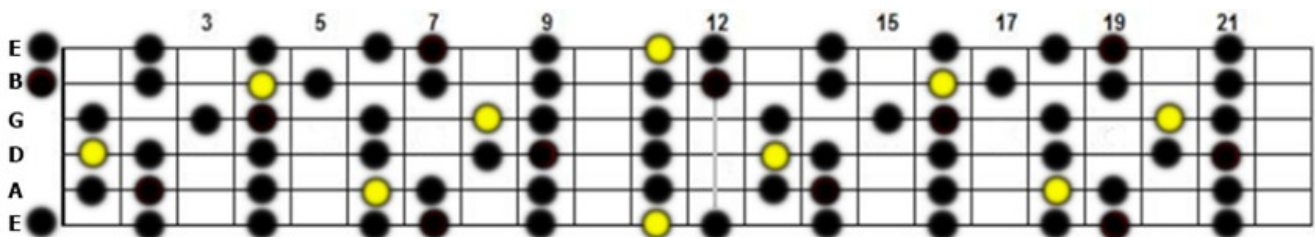
B Ionian



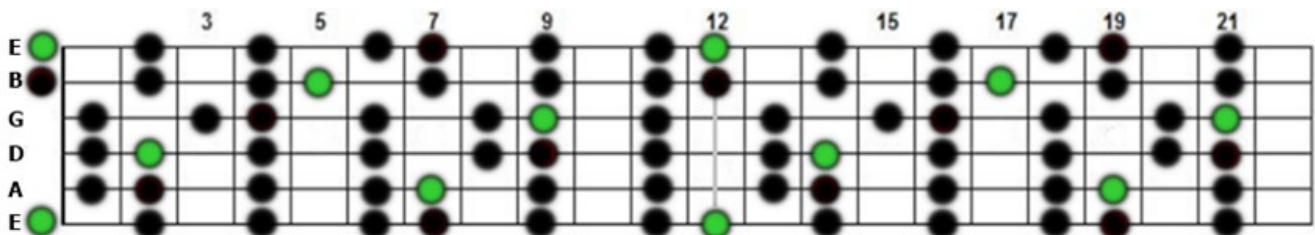
C# Dorian



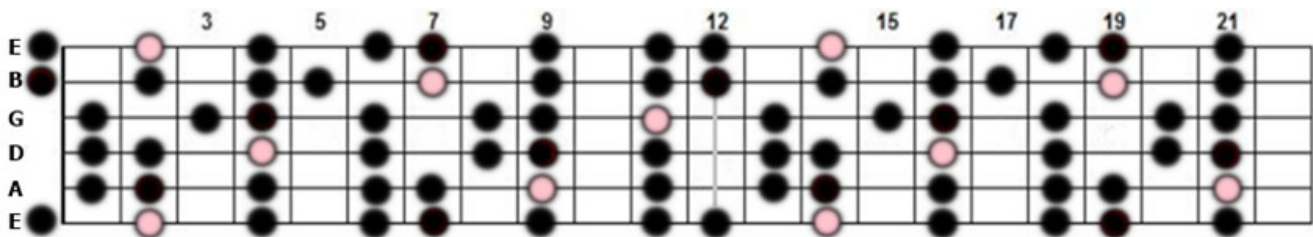
D# Phrygian



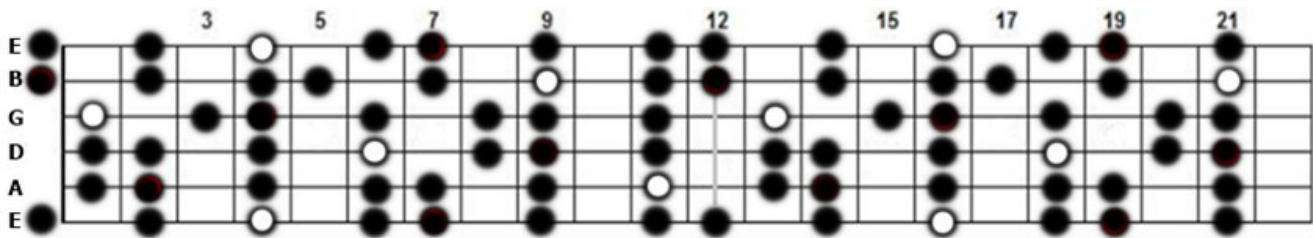
E Lydian



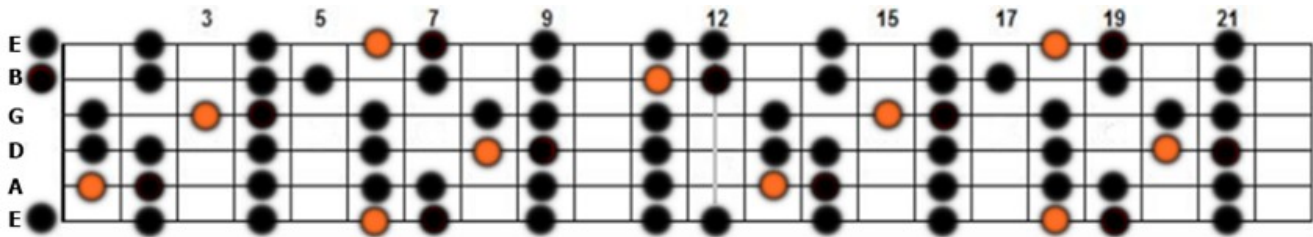
F# Mixolydian



G# Aeolian



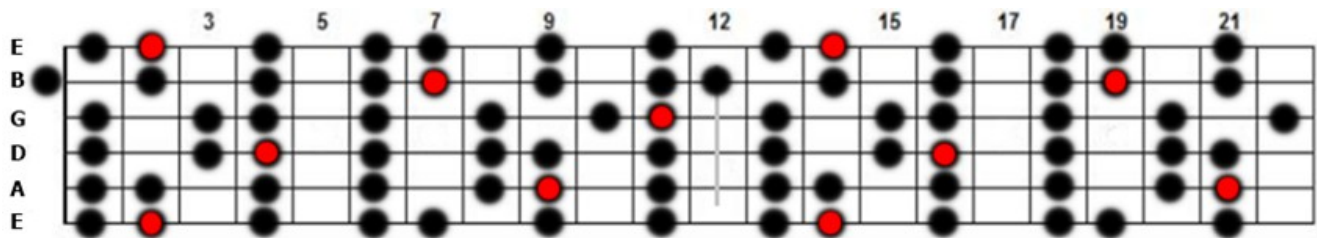
A# Locrian



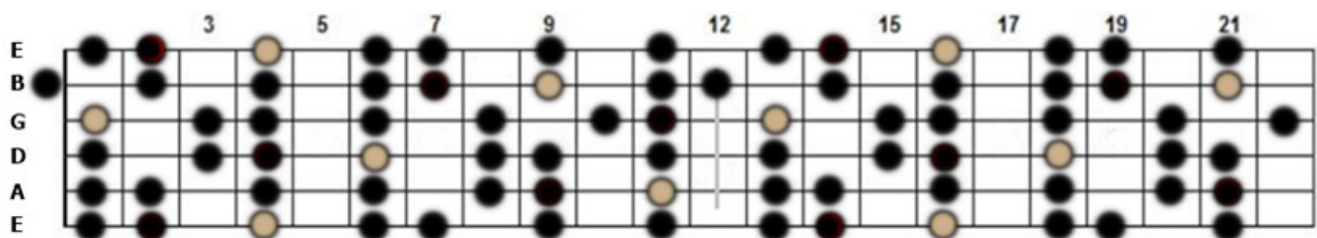
Modes of F#/Gb major

Any Colored Note other than Black = Tonal Center

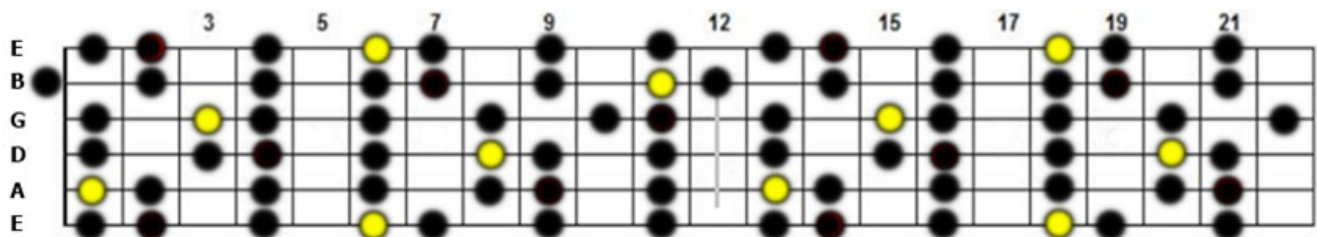
F#/Gb Ionian



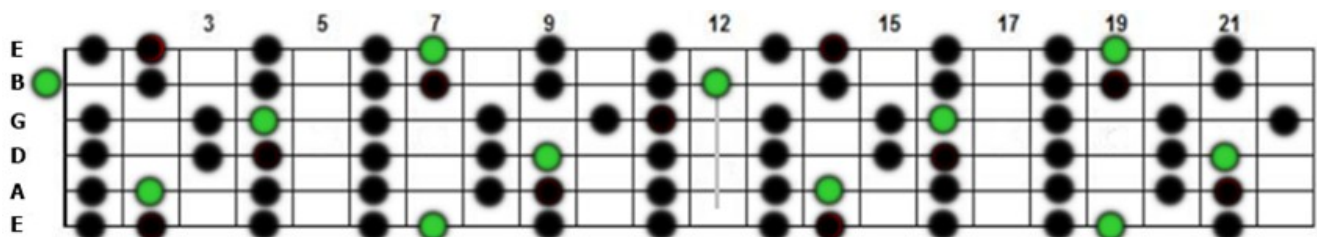
Ab Dorian



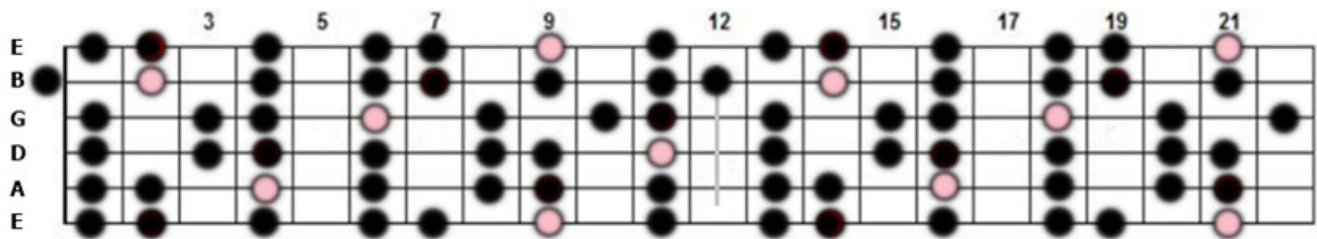
Bb Phrygian



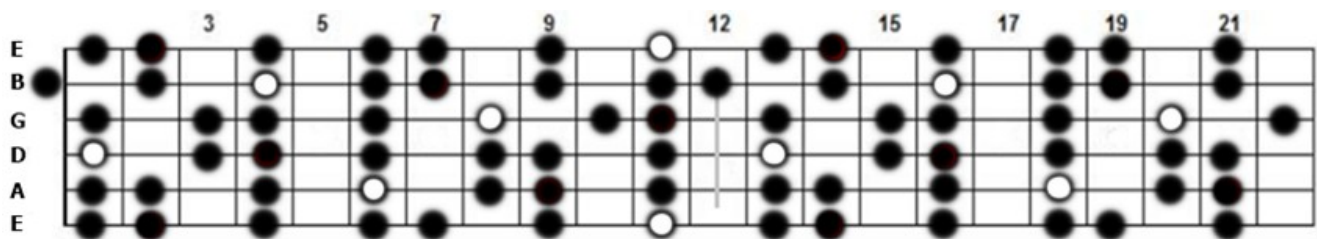
B Lydian



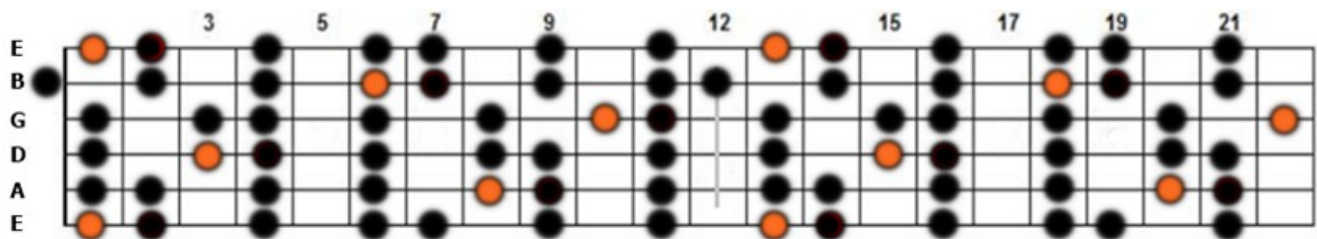
Db Mixolydian



Eb Aeolian



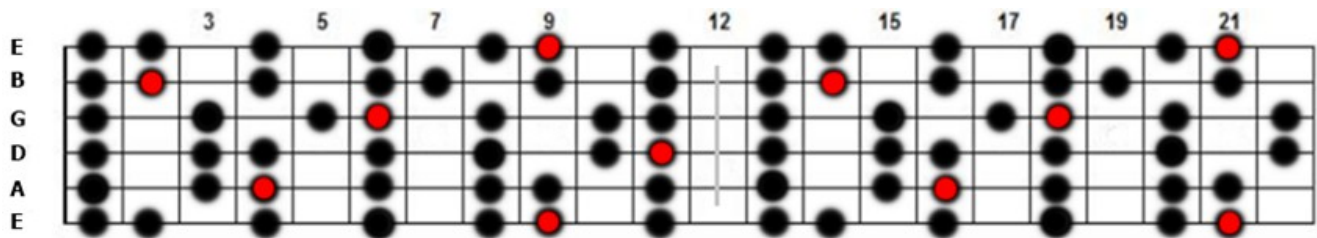
F Locrian



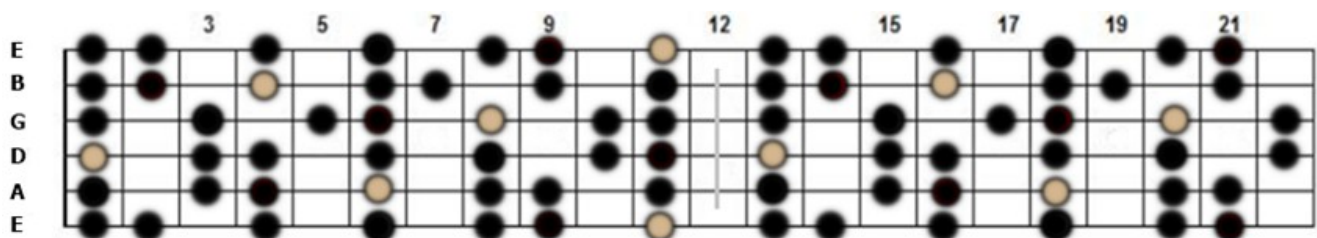
Modes of Db major

Any Colored Note other than Black = Tonal Center

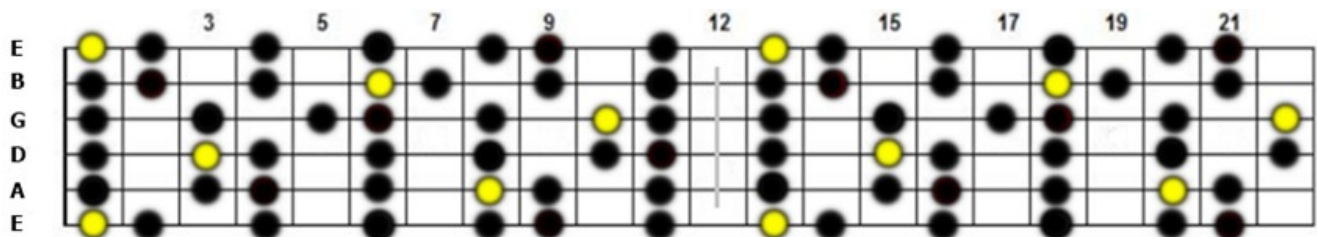
Db Ionian



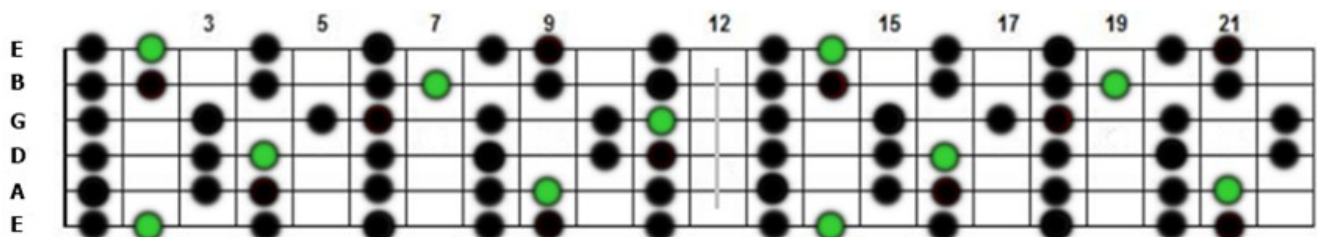
Eb Dorian



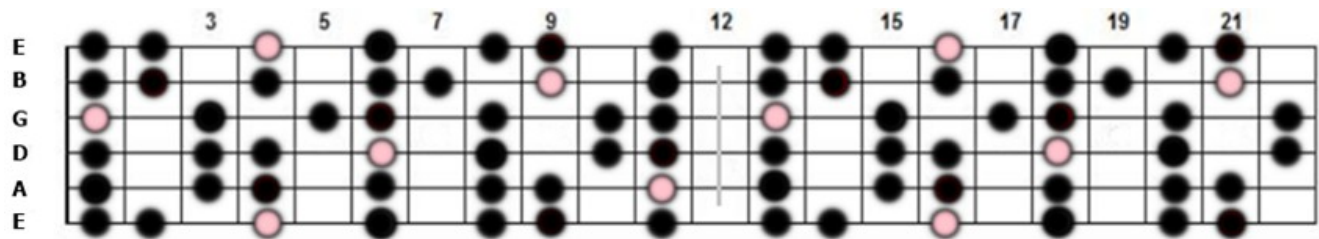
F Phrygian



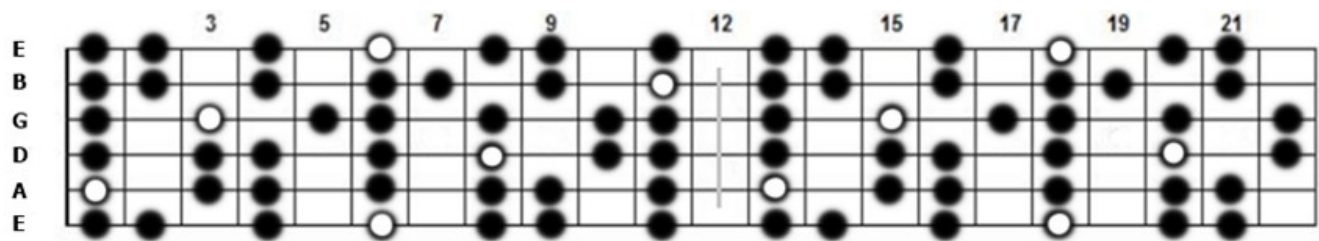
Gb Lydian



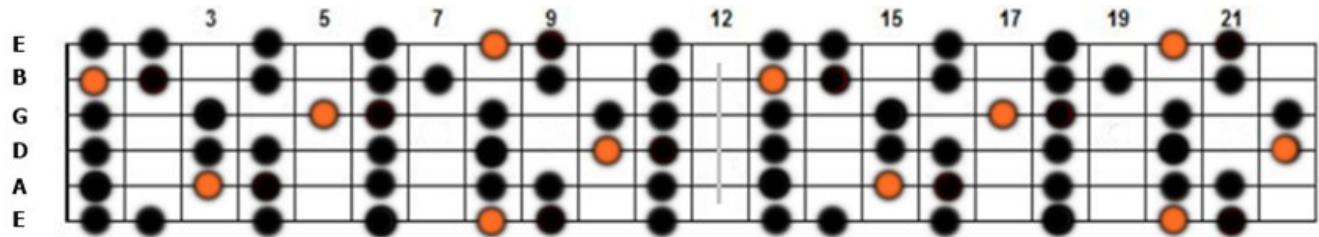
Ab Mixolydian



A#/Bb Aeolian



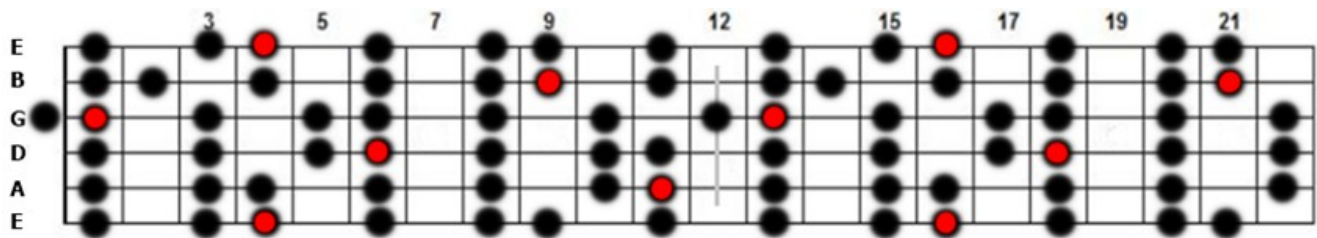
C Locrian



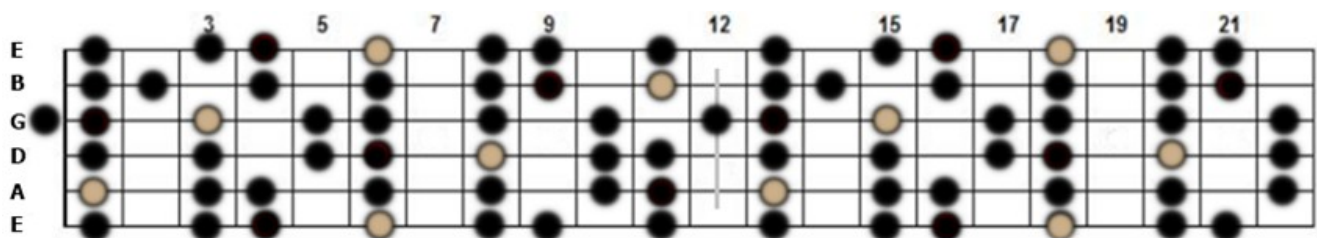
Modes of Ab major

Any Colored Note other than Black = Tonal Center

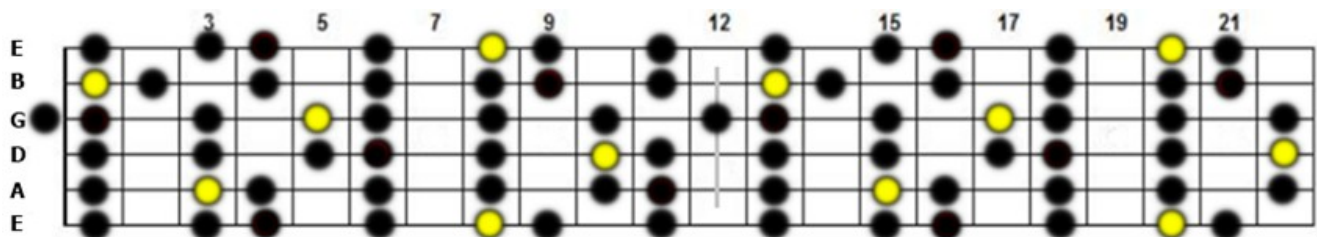
Ab Ionian



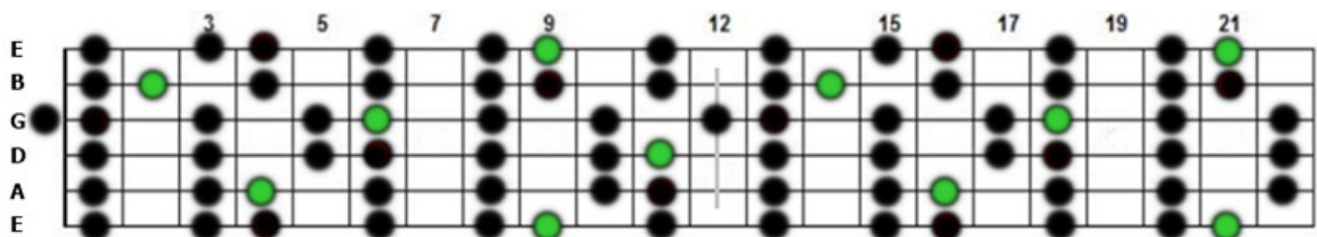
Bb Dorian



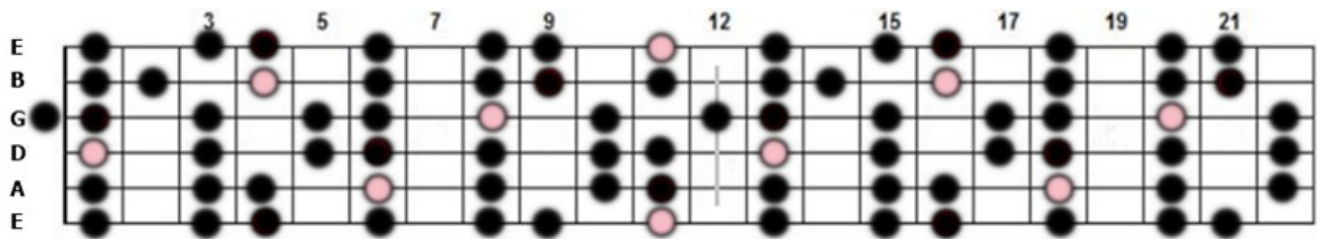
C Phrygian



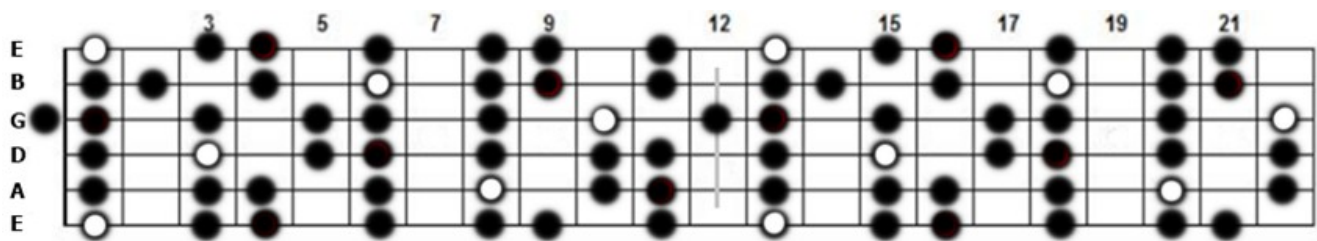
Db Lydian



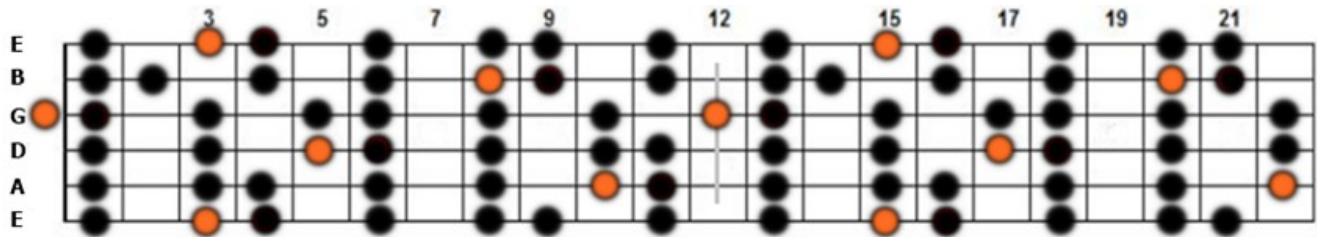
E $\flat$ Mixolydian



F Aeolian



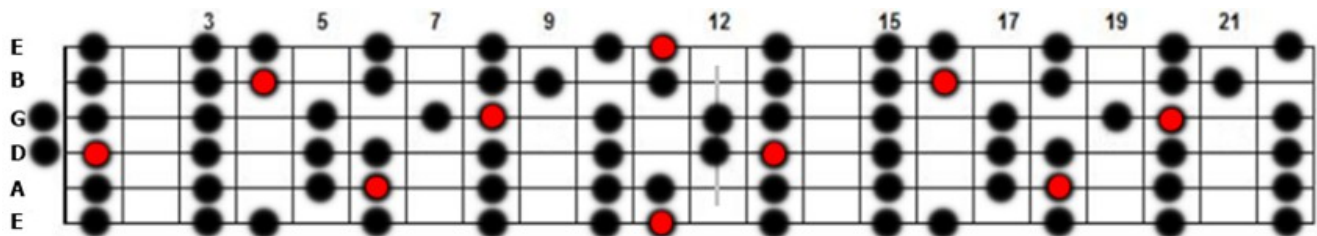
G Locrian



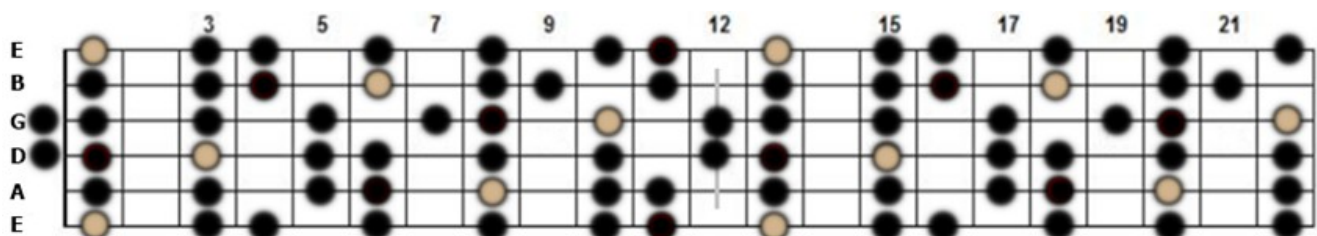
Modes of Eb major

Any Colored Note other than Black = Tonal Center

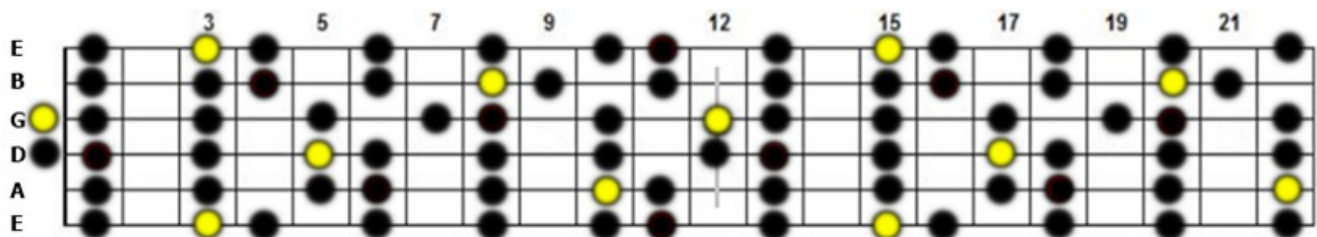
Eb Ionian



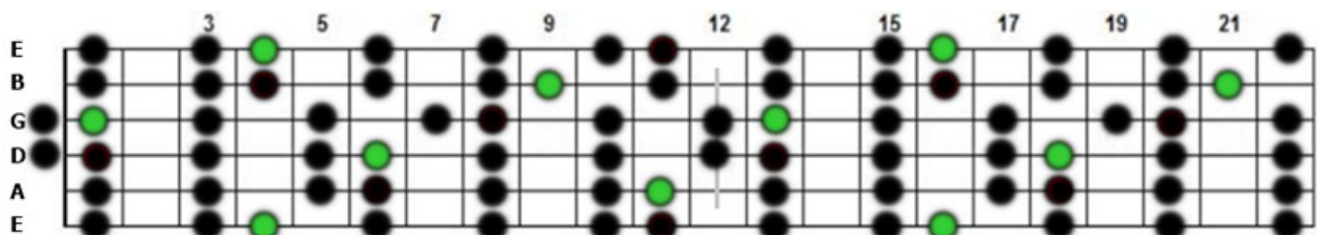
F Dorian



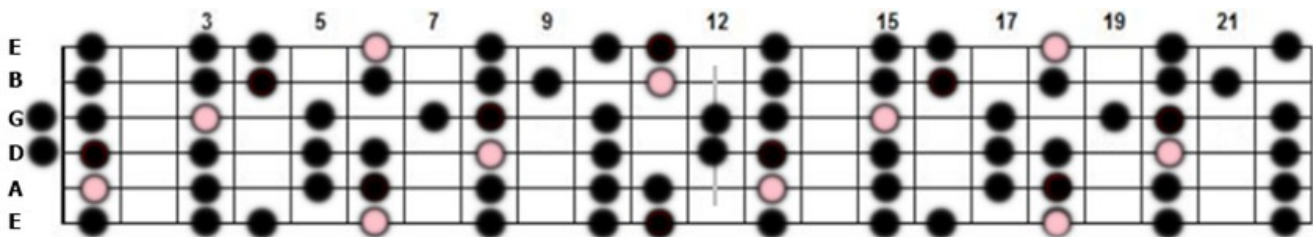
G Phrygian



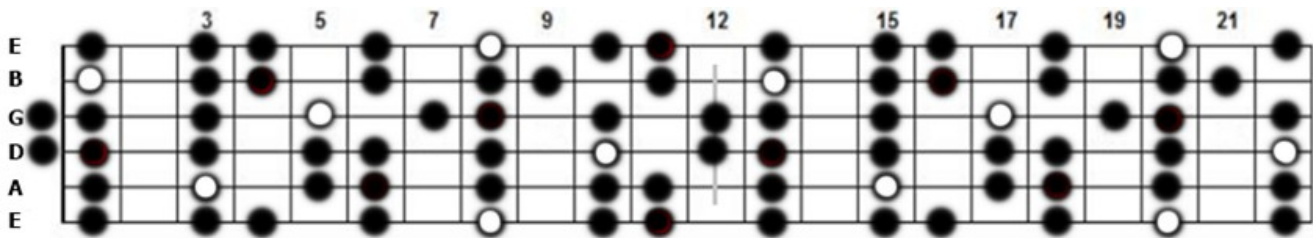
Ab Lydian



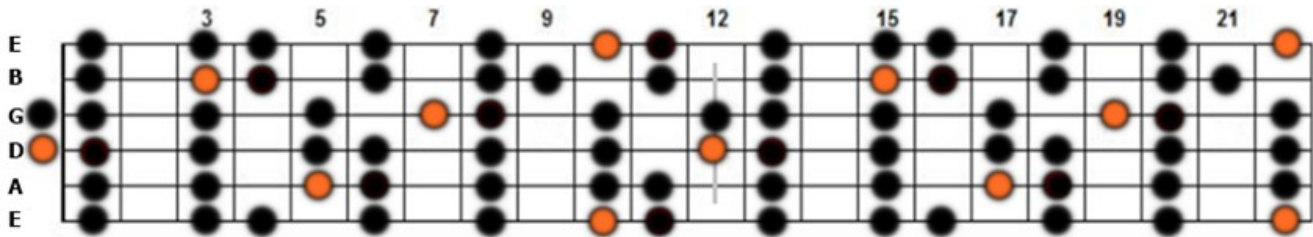
Bb Mixolydian



C Aeolian



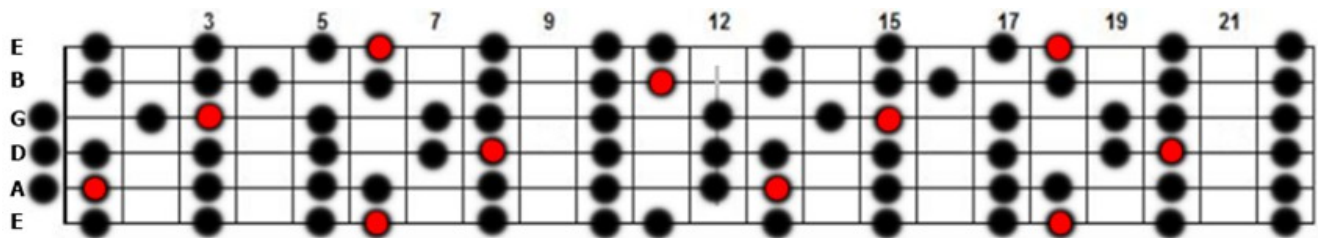
D Locrian



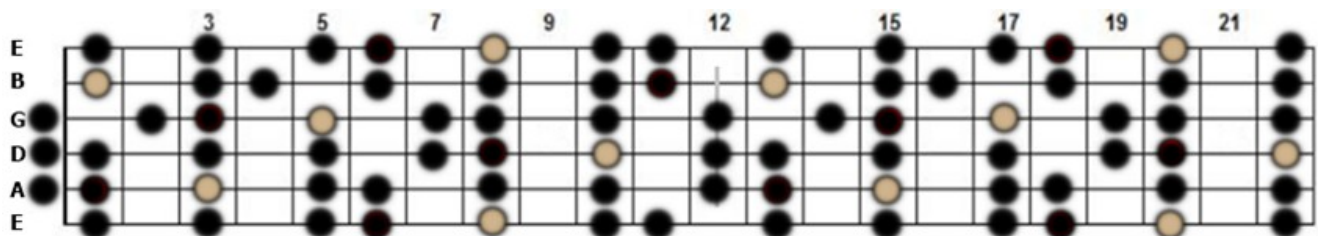
Modes of Bb major

Any Colored Note other than Black = Tonal Center

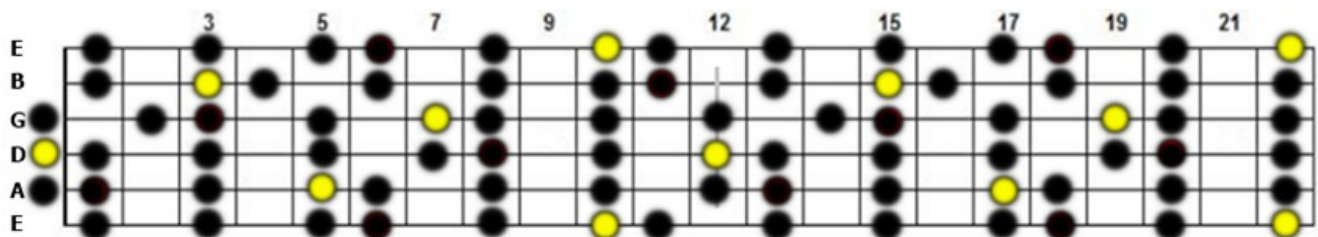
Bb Ionian



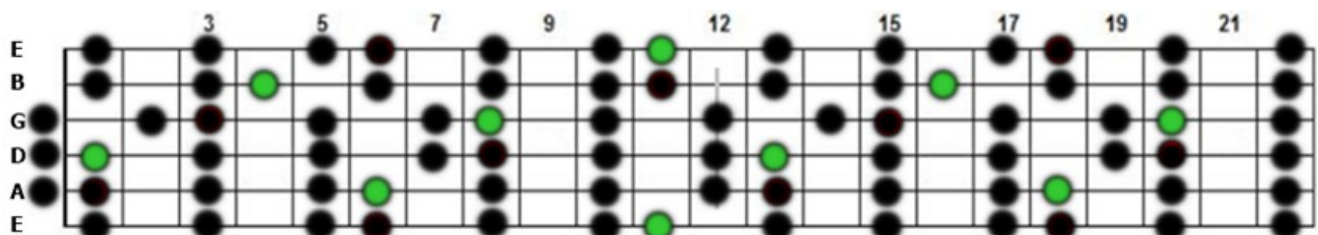
C Dorian



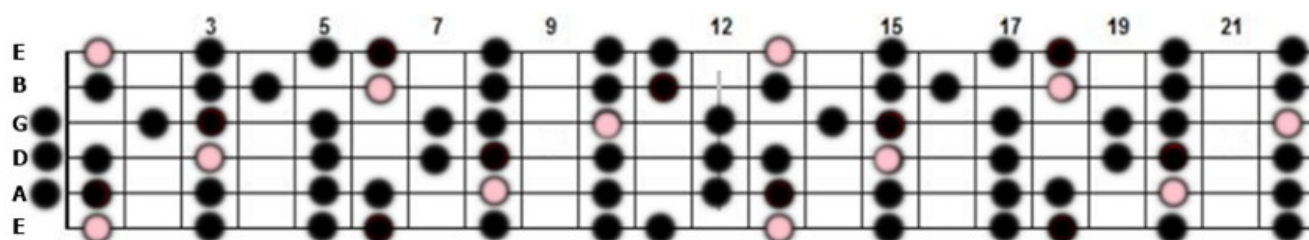
D Phrygian



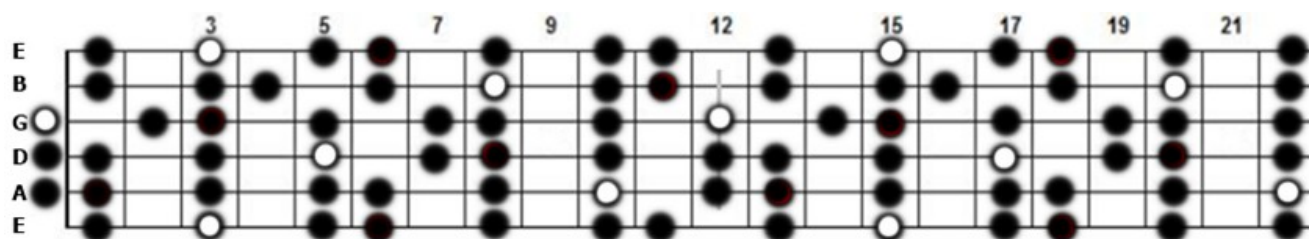
Eb Lydian



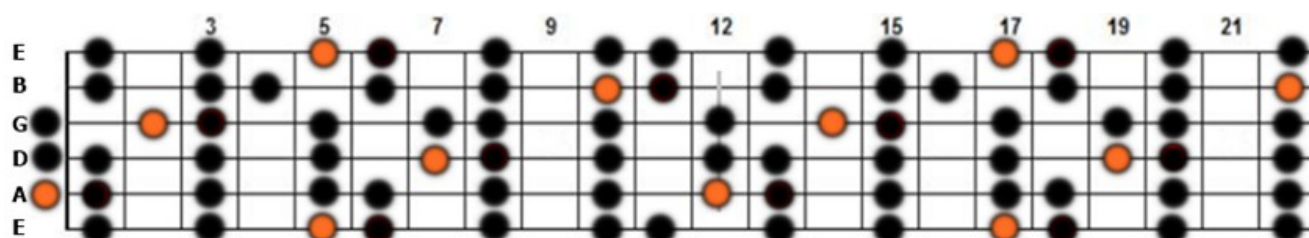
F Mixolydian



G Aeolian



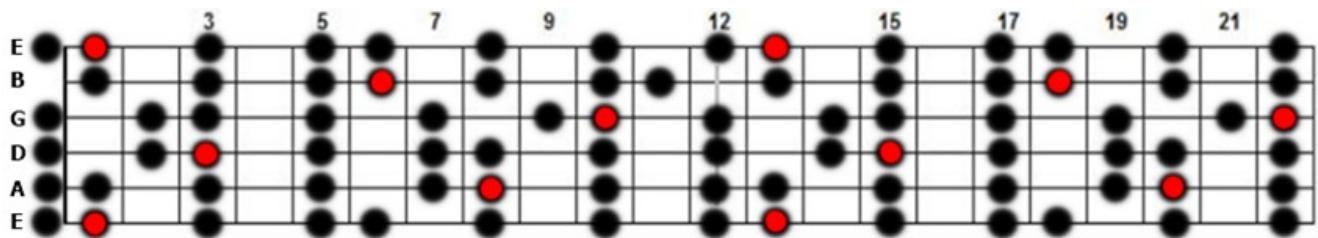
A Locrian



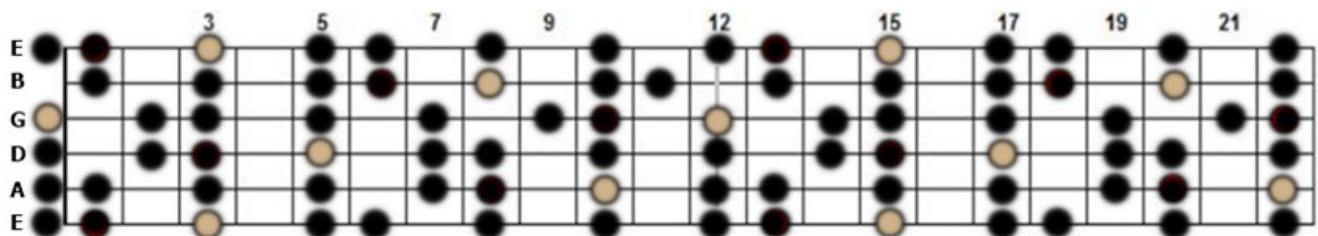
Modes of F major

Any Colored Note other than Black = Tonal Center

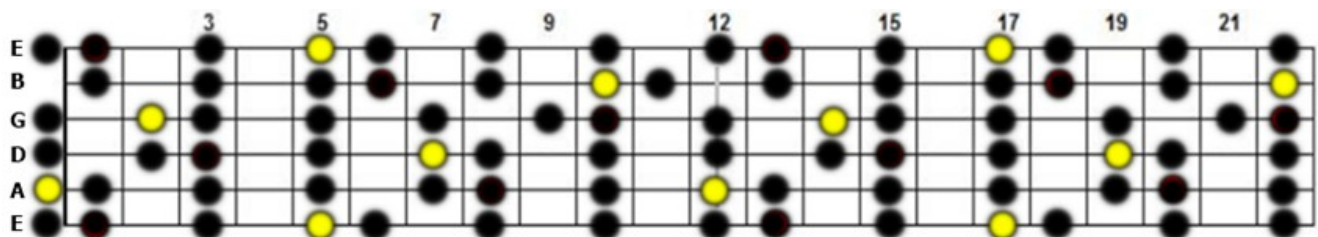
F Ionian



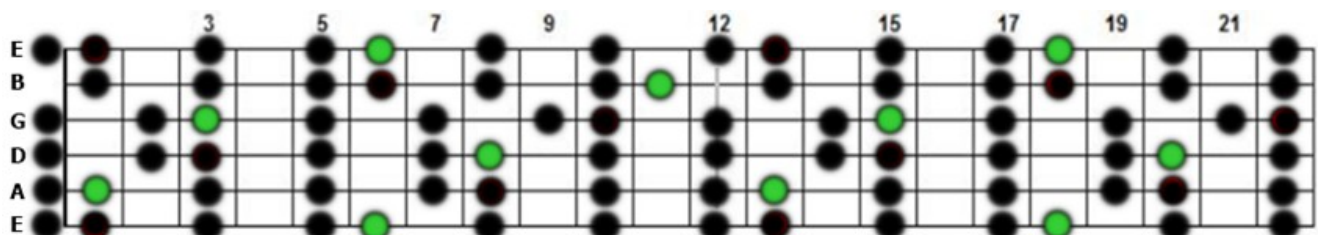
G Dorian



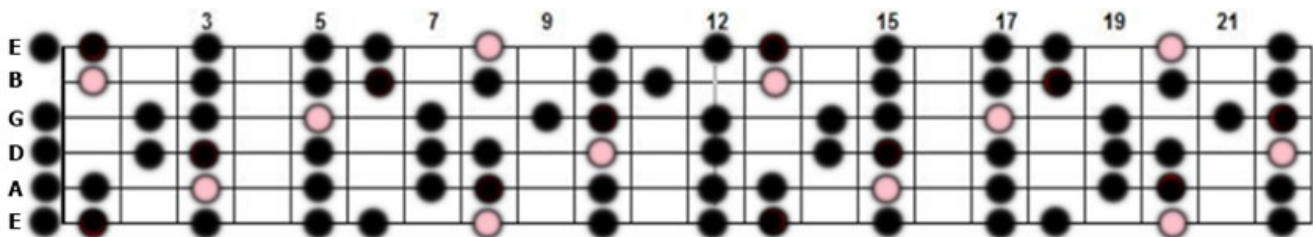
A Phrygian



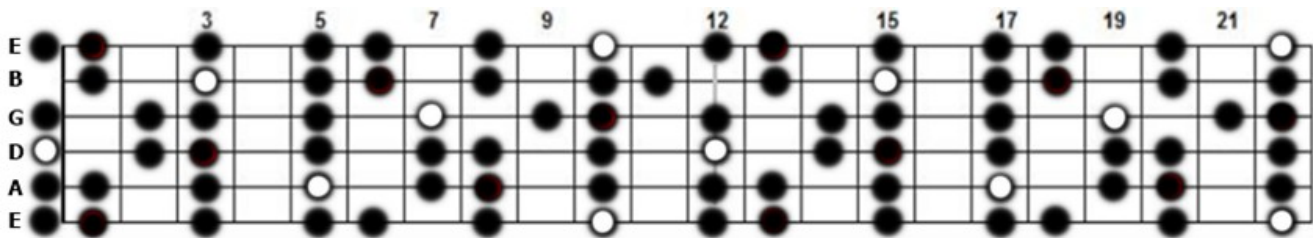
Bb Lydian



C Mixolydian



D Aeolian



E Locrian

