Len Collins - Guitar Edition



The Music Readers Toolbox

Introduction: Modes - Chords

This, the final section of The Music Readers Toolbox, brings you to an area of music few musicians understand.

When reading music the scale, in the shape of the key signature, indicates the notes used in the song plus, if needed, the occasional accidental.

There's something else is in a scale, something powerful, and on a need to know basis, is essential.



I held the Guinness World Record for the largest guitar lesson from 2004 -c2007

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Within each scale other scales are waiting for you to discover. To avoid confusion these seven scales have a different name, they are modes.

Each mode contains a chord. I will teach you how to find the seven natural chords, one from each mode, and how and where to play them on the guitar.

It is at that moment a scale becomes a key.

When you understand and can play the natural chords for a key I will introduce you to Expected Changes. Expected changes are chords used to replace the natural chords when a composer needs to change the expression of the music.

The next step is for you to discover the modes where the Expected Changes come from.

I became a professional guitar player and musician a few short months after discovering for myself this vital and unknown aspect on music theory. I discovered something else, I could play anything, anywhere, with anybody and so I did.

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Chords don't have a reputation for having a creative side, but I know for a fact, a great lead guitar player must first be an ever better rhythm player.

When accompanying a singer it is important the needs of the vocalist should be at the top of list of things to focus your attention on. To do this I will teach you awareness of the sound of chords and chord extensions that enhance you way play rhythm.

Whatever style of music you intend to explore chords and rhythm influence what you play and what the audience hear.

It's time to start learning the modes. Chords, and where they come from, will follow after the modes.

If you have arrived here at the final section of The music Readers Toolbox without knowing the notes on the fretboard I suggest you go to section one and start there. I can ask you the same concerning your ability to read music and, if you have a limited knowledge of scales you will understand nothing this section of The Music Readers Toolbox has to offer.

Playing Chords

If you are new to playing chords it's sometimes hard to press three or four fingers on the fretboard at the same time. Please remember there was a time when you didn't know the note names on the fretboard. You couldn't play scales or read music either.

Eventually you will play chords and enjoy the art of rhythm guitar.

The final building block is now ready to be put in place.

Six things that matter

Modes and chords the final section of The Music Readers Toolbox As I have said all the way through this course guitar playing is a combination of three things:

Brain (to organise)
Fingers (to play)
Ears (to listen)

The brain has to learn where the fingers have to play and what the ears are supposed to be listening to. It's also about

Practice, **Patience** and **Performance**.

Don't rush this last section, please.

Len Collins - Guitar Edition

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The Music Readers Toolbox

What are Modes

Modes are scales within scales.

Modes are the most important tool a musician can use when wanting to improvise.

Modes provide the chords natural to a scale: essential for songwriting, sight reading a chord sequence, playing in recording studios and enjoying yourself at home.

Modes are music's gift to creativity.

Before we can use modes we have to build, play and understand them.

Naming the Modes

Each major scale has seven modes. One for each note in the scale.

Each mode has its own name:

Ionian

Dorian

Phrygian

Lydian

Mixolydian

Aeolian

Locrian

Naming the Modes

They are the names given to the modes by Pythagoras an ancient Greek philosopher.

If Pythagoras who may, or may not have existed, had realised how offputting learning these seven names were to be centuries later I'm sure he would have thought of something else.

So please just learn them without making a fuss.

Mode Names: Say out loud

<u>Practice</u> saying the names of the modes.

Ionian (pronounced I own ian)

Dorian (pronounced Door ian)

Phrygian (pronounced Fridge ian)

Lydian (pronounced Lid ian)

Mixolydian (pronounced Mixo Lid ian

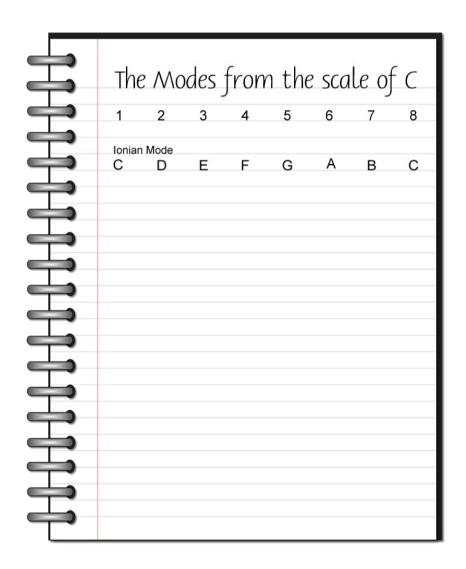
Aeolian (pronounced A O lian)

Locrian (pronounced Lock rian)

<u>Do not</u> let these names gets in the way of the huge advantage playing the modes will give you.

Making Modes

Here is the scale of C – The Ionian Mode. Write the Ionian mode of the scale of C into your workbook.



Modes: Dorian

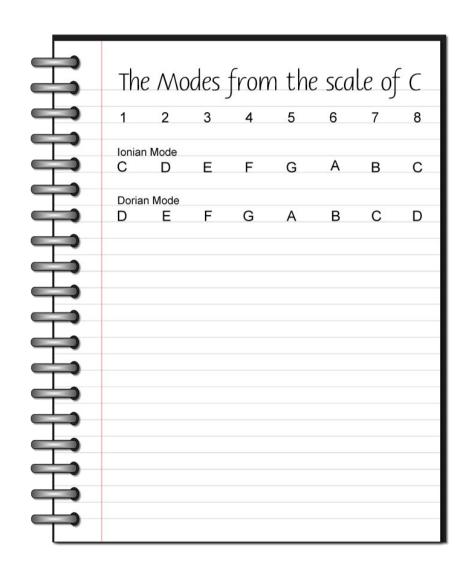
To create the Dorian Mode start from the 2nd note of the scale of C. Write the Dorian mode underneath the Ionian mode in your workbook.



It is still the scale of C because this mode doesn't have any sharps. The scale of D has two sharps.

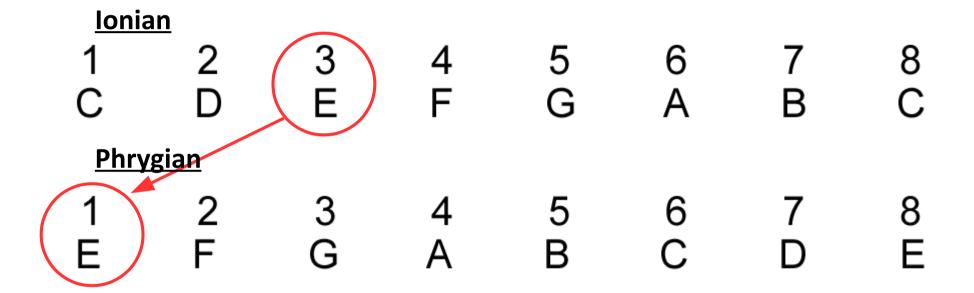
Write the modes down carefully

Ionian mode. Dorian Mode. Write it in your workbook.



Modes: Phrygian

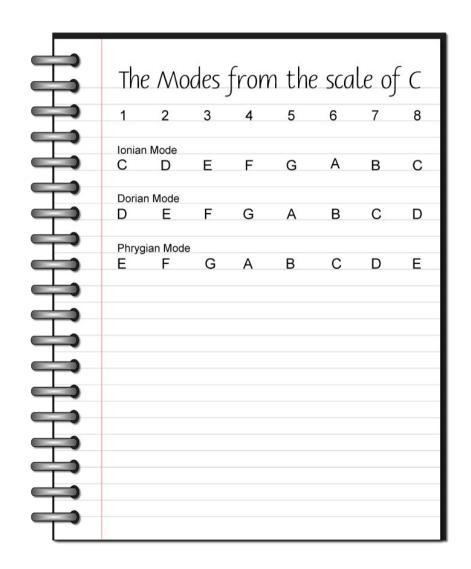
To create the Phrygian Mode start from the 3rd note of the scale of C. Write the Phrygian mode underneath the **Dorian** mode in your workbook.



It is still the scale of C because this mode doesn't have any sharps. The scale of E has four sharps.

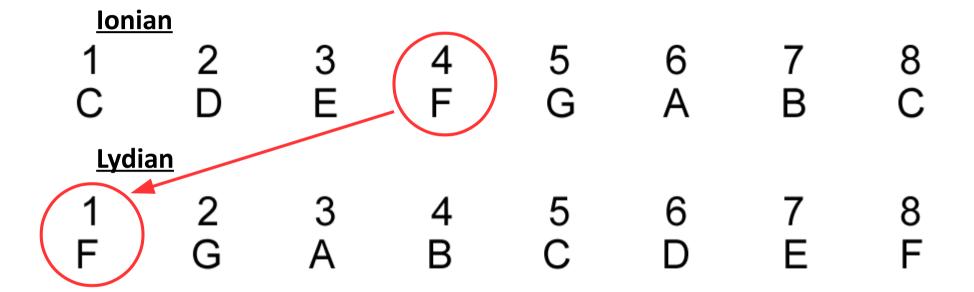
Add the Phrygian Mode

Ionian mode. Dorian Mode. Phrygian Mode. Write it in your workbook.



Modes: Lydian

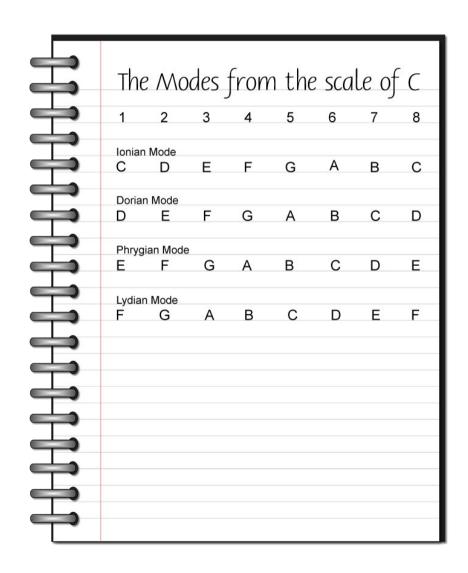
To create the Lydian Mode start from the 4th note of the scale of C. Write the Lydian mode underneath the Phrygian mode in your workbook.



It is still the scale of C because this mode doesn't have any sharps. The scale of F has one flat.

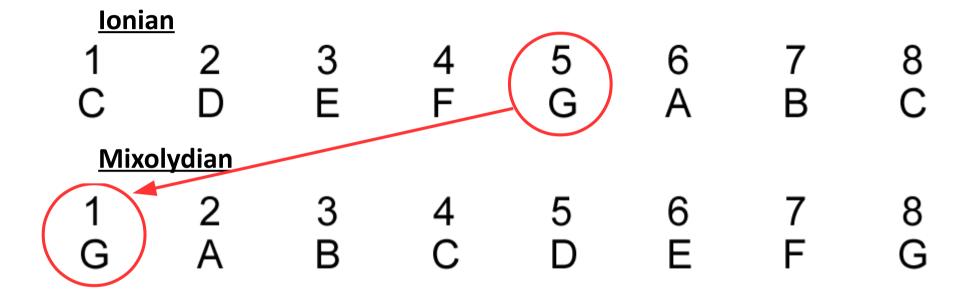
Write the Lydian mode down carefully

Ionian mode. Dorian Mode. Phrygian Mode. Lydian Mode. Write it in your workbook.



Modes: Mixolydian

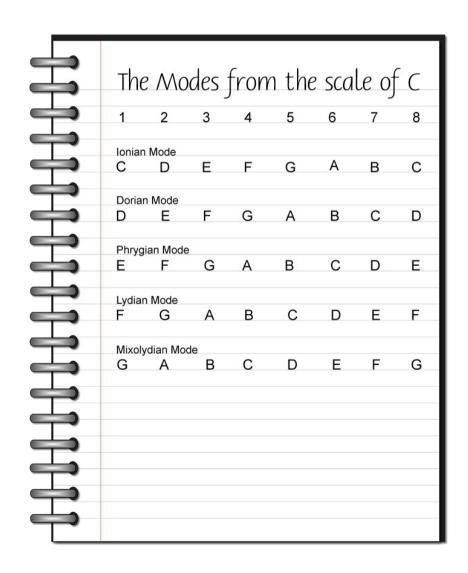
To create the Mixolydian Mode start from the 5th note of the scale of C. Write the Mixolydian mode underneath the Lydian mode in your workbook.



It is still the scale of C because this mode doesn't have any sharps. The scale of G has one sharp.

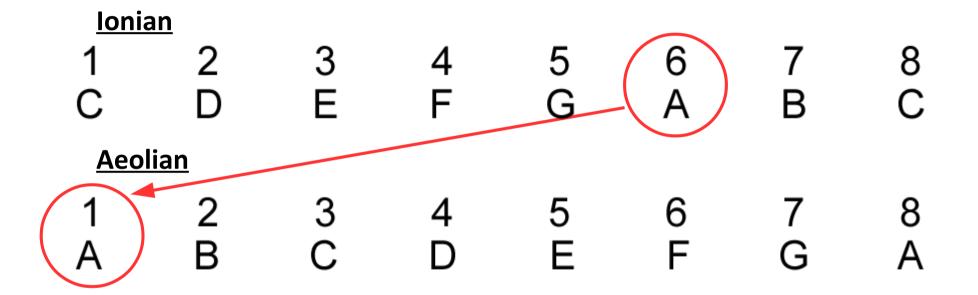
Write the Mixolydian mode down carefully

Ionian mode. Dorian Mode. Phrygian Mode. Lydian Mode. Mixolydian Mode. Write it in your workbook.



Modes: Aeolian

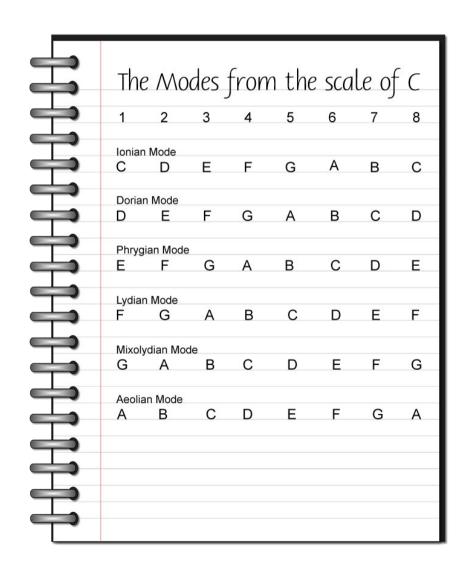
To create the Aeolian Mode start from the 6th note of the scale of C. Write the Aeolian mode underneath the Mixolydian mode in your workbook.



It is still the scale of C because this mode doesn't have any sharps. The scale of A has three sharps.

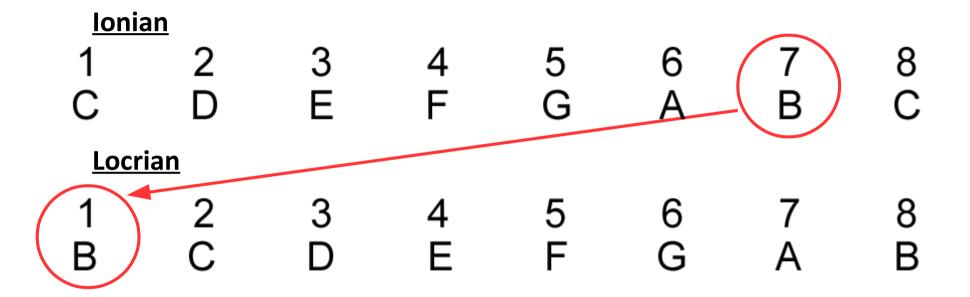
Add the Aeolian mode

Ionian mode. Dorian Mode. Phrygian Mode. Lydian Mode. Mixolydian Mode. Aeolian Mode. Write it in your workbook.



Modes: Locrian

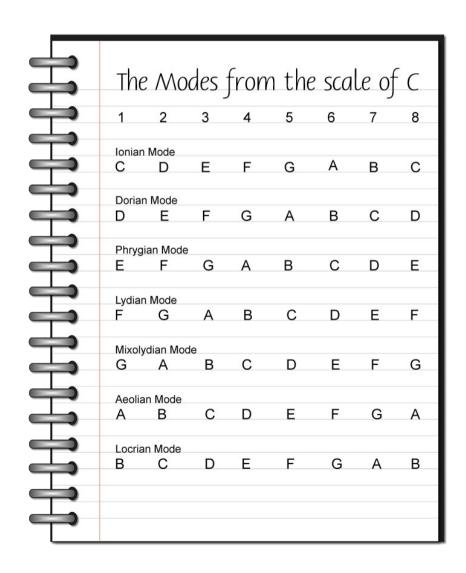
To create the Locrian Mode start from the 7th note of the scale of C. Write the Locrian mode underneath the Aeolian mode in your notebook.



It is still the scale of C because this mode doesn't have any sharps. The scale of B has five sharps.

Write the Locrian mode down carefully

Ionian mode. Dorian Mode. Phrygian Mode. Lydian Mode. Mixolydian Mode. Aeolian Mode. Locrian Mode. Write it in your workbook.



Modes v Scales

The important thing is not to get confused between scales and modes. The Dorian Mode of C starts from the second note of the scale of C: No sharps.

Dorian Mode of C

1 D I ;

4 G 5

6 B 7 C

8 D

This is not the scale of D, it's the Dorian Mode of C.

The scale of D has two sharps.

† 1 D

2 F



4 G

6 B



8

Modes: E (major)

The modes from **every scale** are formed the same way.

Here is the scale of E- The Ionian Mode.

All the modes of E will have four sharps, the same four sharps.

Ionian Mode

Modes: E (major)

Here are the starting notes of all modes in key of E.

Ionian E

Dorian F#

Phrygian G#

Lydian A

Mixolydian B

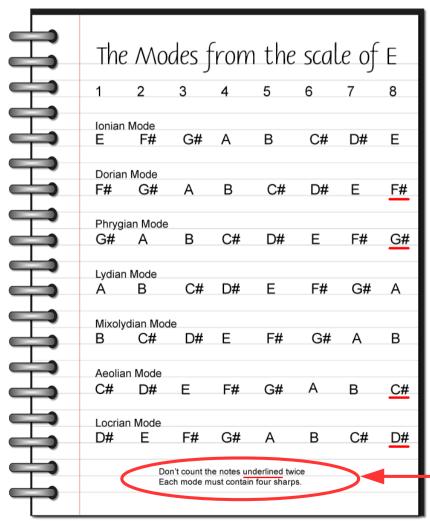
Aeolian C#

Locrian D#

All the modes within the scale of E (major)

Write them in your workbook.

All modes in the scale of E have four sharps. Don't include the # on the 8th note.



Write it in your workbook

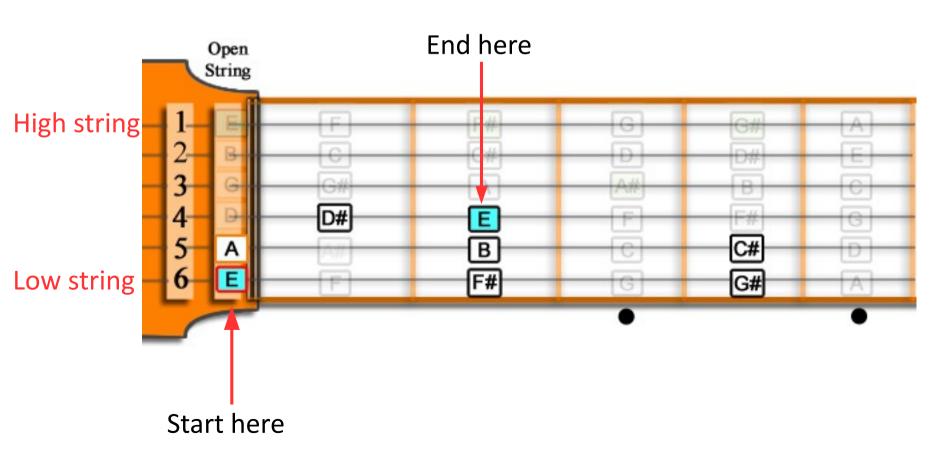
Choose any scale, work out the modes

Whatever scale you decide to work on the name of the modes remain the same. Only the note names are changed because of the chosen scale.

Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Locrian	
1	2	3	4	5	6	7	8
F	G	Α	B♭	С	D	Е	F
Ionian	Dorian	Phrygian	Lydian	Mixolydian	Aeolian	Locrian	
1	2	3	4	5	6	7.	8
G	Α	В	С	D	Ε	F#	G

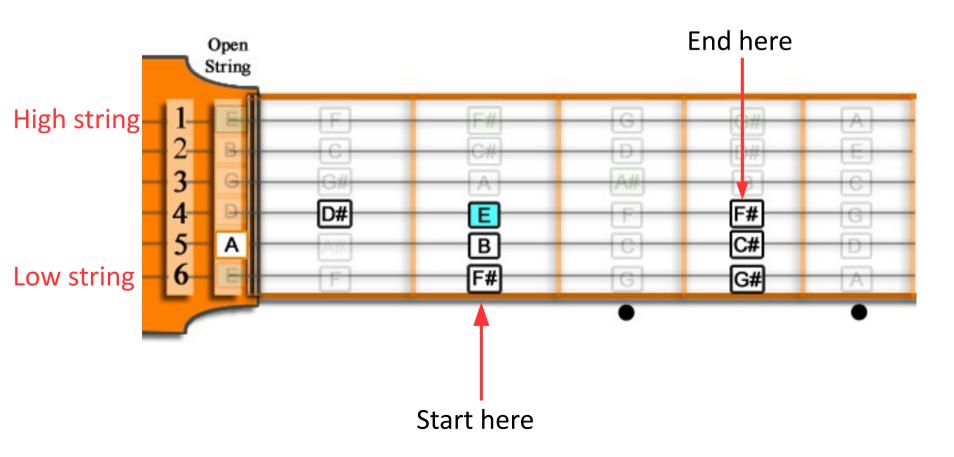
Playing a mode from within the scale of E (major) - Ionian Mode

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



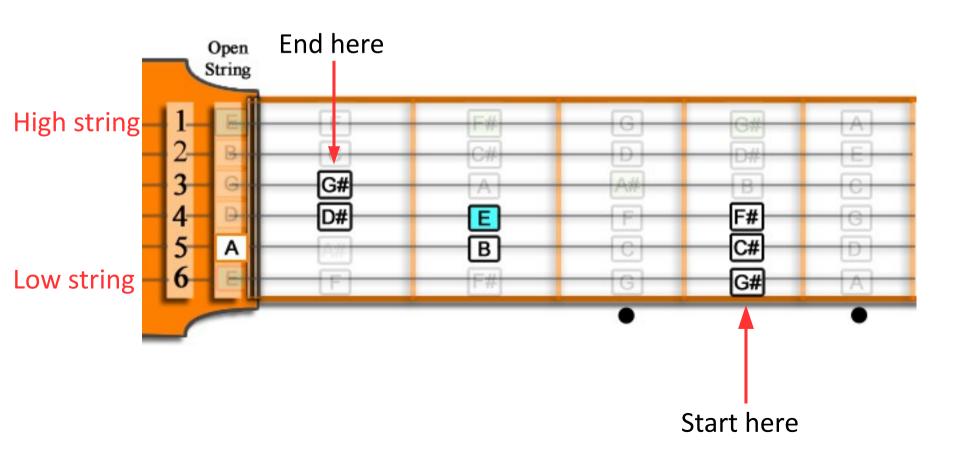
Playing a mode from within the scale of E (major) - Dorian Mode

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



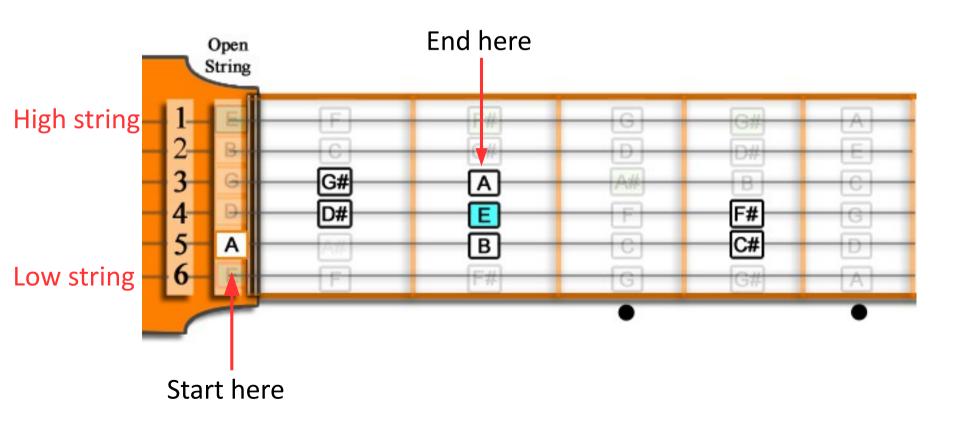
Playing a mode from within the scale of E (major) - Phrygian Mode

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



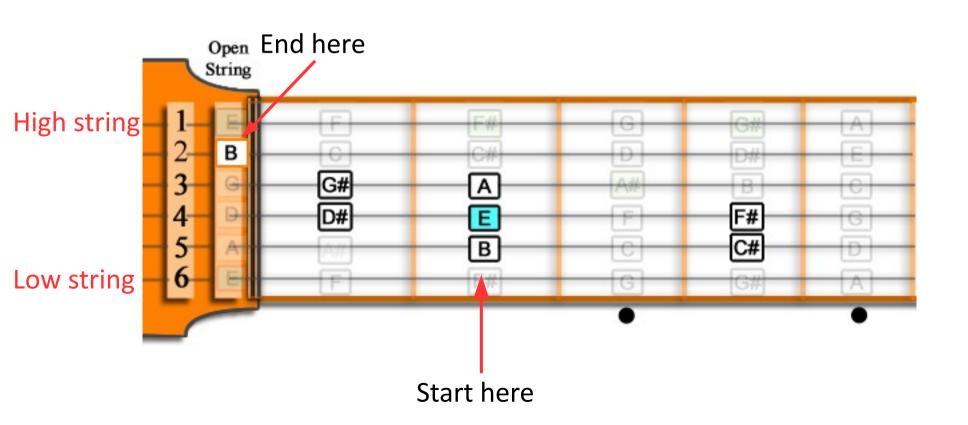
Playing a mode from within the scale of E (major) - Lydian Mode

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



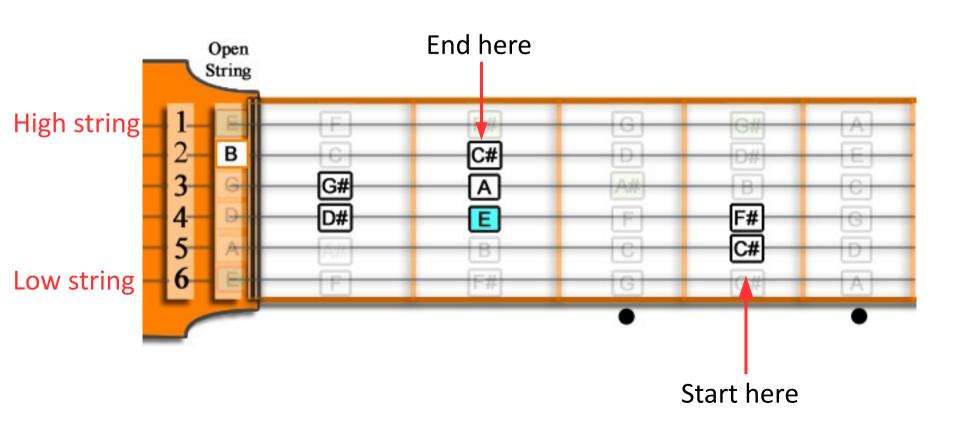
Playing a mode from within the scale of E (major) - Mixolydian Mode

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



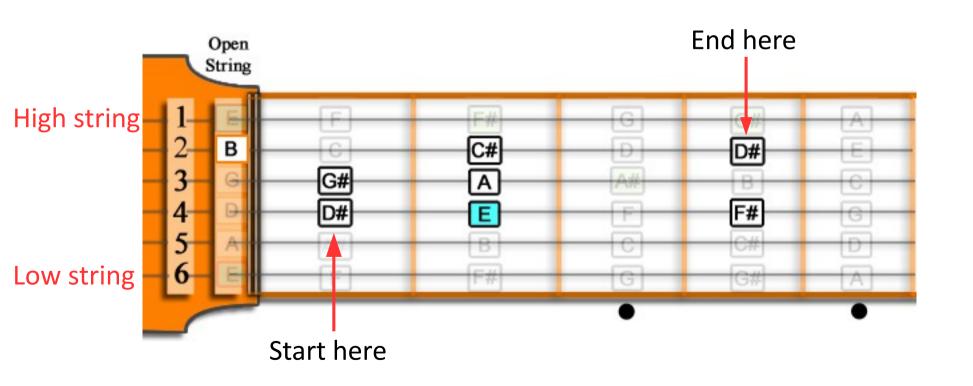
Playing a mode from within the scale of E (major) - Aeolian Mode

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



Playing a mode from within the scale of E (major) - Locrian Mode

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



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Four types of chords

If all this is new to you, don't worry. I promise you will learn it, eventually.

- 1. Major chords Strong sounding chords.
- 2. Minor chords Dramatic, emotional chords.
- 3. Augmented chords Provide a light, lifting sound.
- 4. Diminished chords Spooky chords.

4 types of chords

<u>Major chords</u> are represented by a letter of the alphabet, for example, $\underline{\mathbf{C}} = \mathbf{C}$ (major)

<u>Minor chords</u> are represented by a letter of the alphabet and a small 'm', for example, <u>Cm</u> = C minor.

<u>Augmented chords</u> are represented by a letter of the alphabet and small '+' for example, $\underline{C+}$ = C augmented – sometimes Caug.

<u>Diminished chords</u> are represented by a letter of the alphabet and a small 'O' for example, **CO**= C diminished — sometimes Cdim.

The Natural chords for the scale of C(major)

The notes of a scale sound nice together, chord sequences also sound nice together.

The first question is: Why?

The second question is: Where do chords that sound nice together come from?

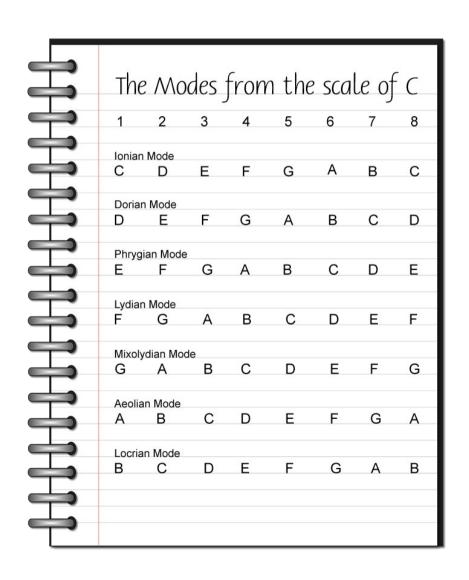
The answer to the first question is because chords come from modes. The answer to the second question, chords come from modes.

The next step is learn how to find the chords within the modes.

As always, whatever there is to learn in one scale is the same for all scales.

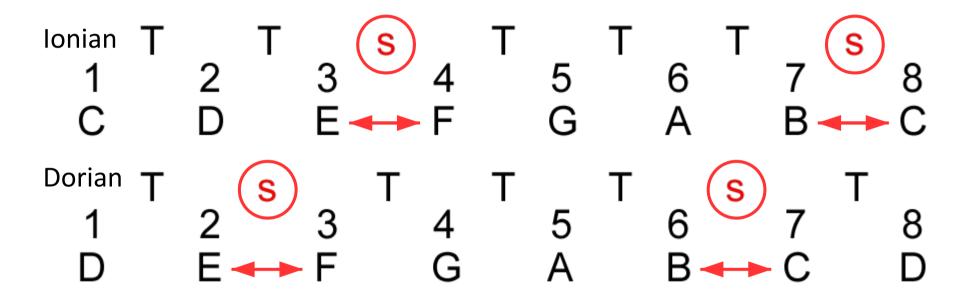
The modes from the scale of C (major)

Copy the following into your workbook



Moving semitones

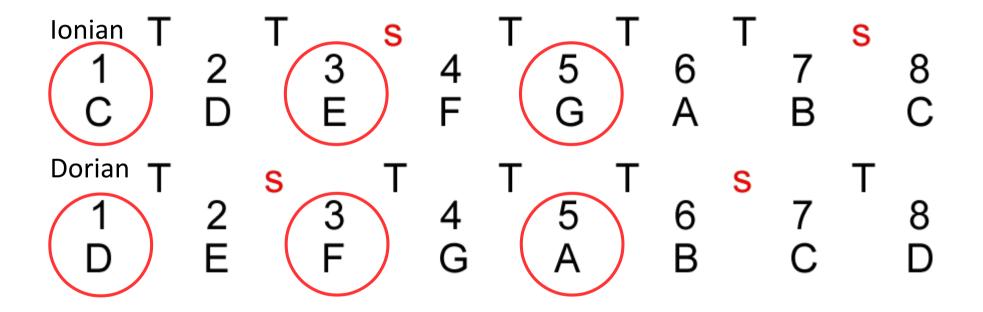
The semitones in each mode are in a different place to each other.



The semitones are always between $\mathbf{E} - \mathbf{F}$ and $\mathbf{B} - \mathbf{C}$

Creating Chords: 1 - 3 - 5

A chord is made up from the 1st - 3rd - 5th notes of each mode.

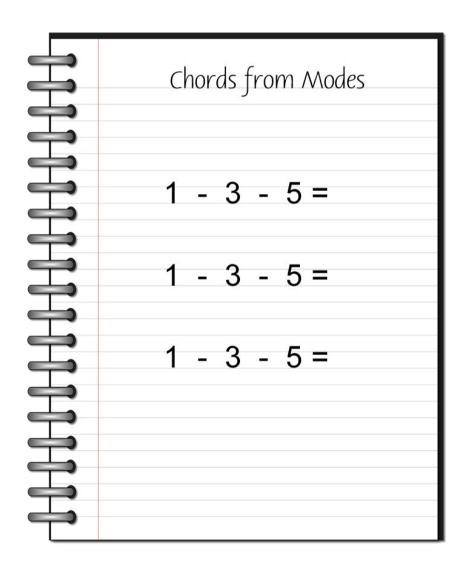


1st - 3rd - 5th notes in the modes of C

Ionian В Dorian Phrygian Lydian Mixolydia hG Aeolian В Locrian

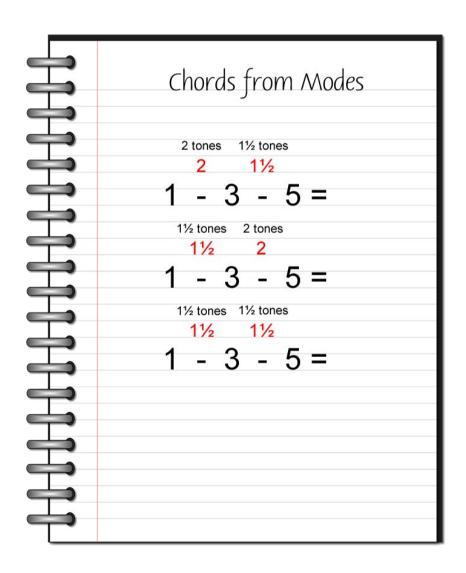
Chords from Modes (1)

This is the method for working out whether the chord from a mode is Major or Minor. Copy the following into your workbook.



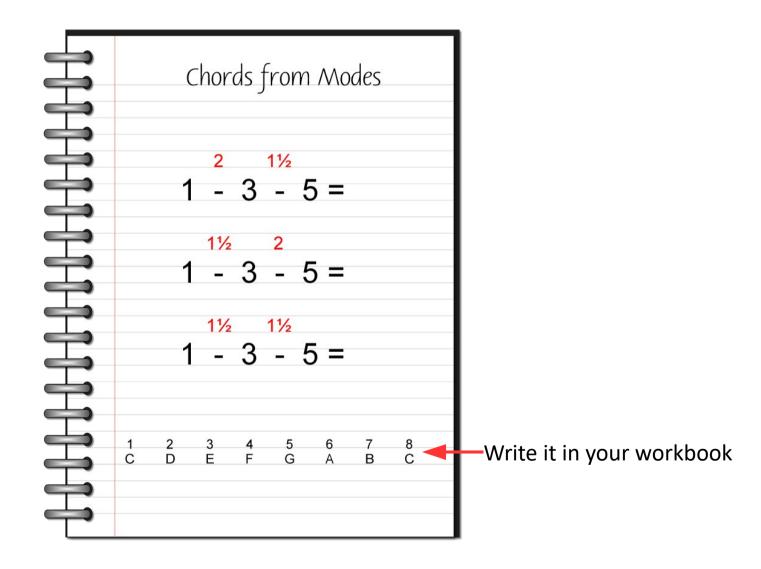
Chords from Modes (2)

Add the red numbers to the page in your workbook.



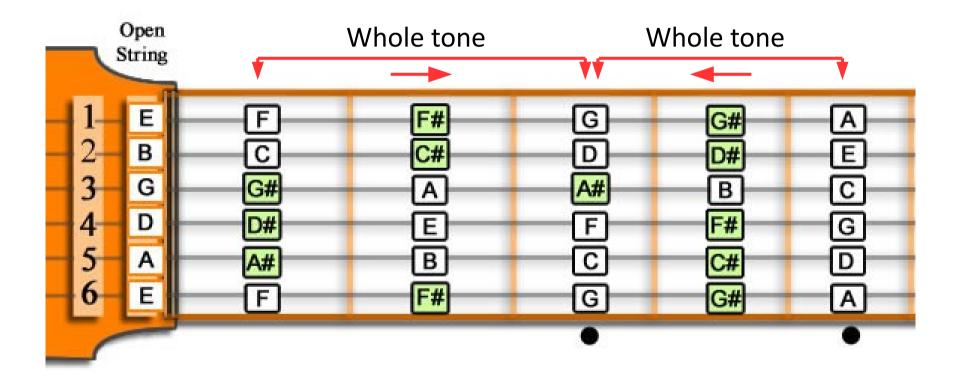
Chords from Modes (3)

Add the scale of C near the bottom of the page. You will need this information soon.



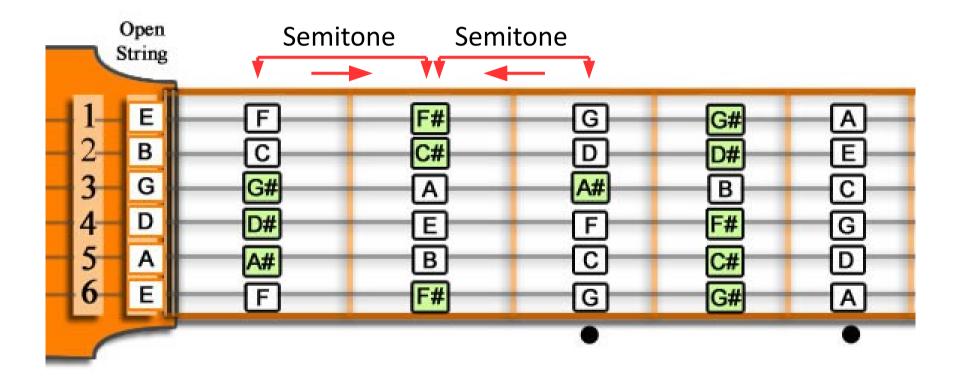
Working with Whole tones

A whole tone is two frets up or down from any particular note.



Working with Semitones

A semitone is one fret up or down from any particular note.



Major

If between the 1^{st} and 3^{rd} notes of a mode the interval is 2 tones, and between the 3^{rd} and 5^{th} notes of a mode the interval is $1\frac{1}{2}$ tones.

The chord is Major

$$1 - 3 - 5 = major$$

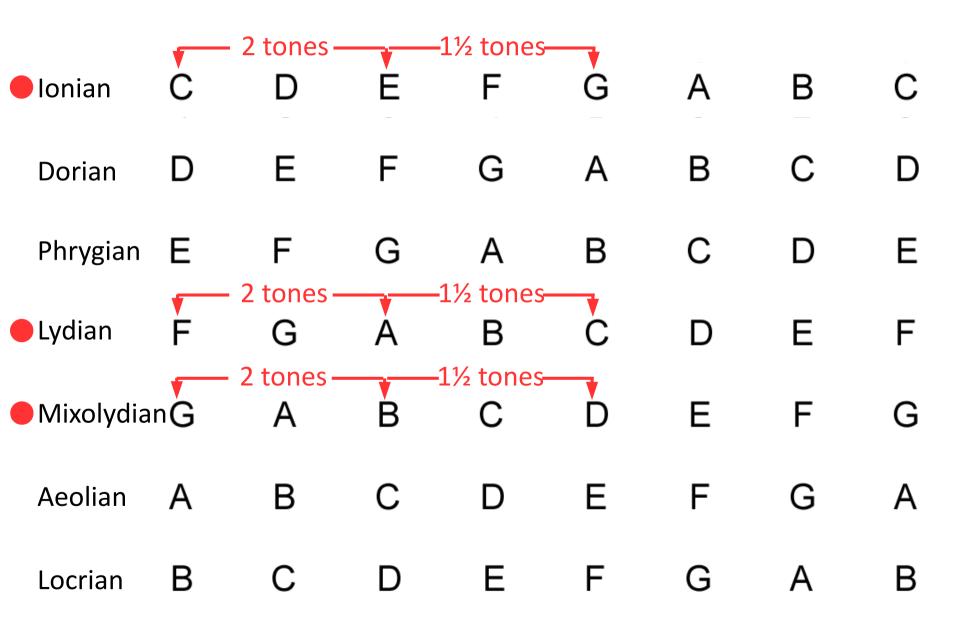
Minor

If between the 1^{st} and 3^{rd} notes of a mode the interval is $1\frac{1}{2}$ tones, and between the 3^{rd} and 5^{th} notes of a mode the interval is 2 tones.

The chord is Minor

$$1 - 3 - 5 = minor$$

3 modes produce Major chords



Major Chords

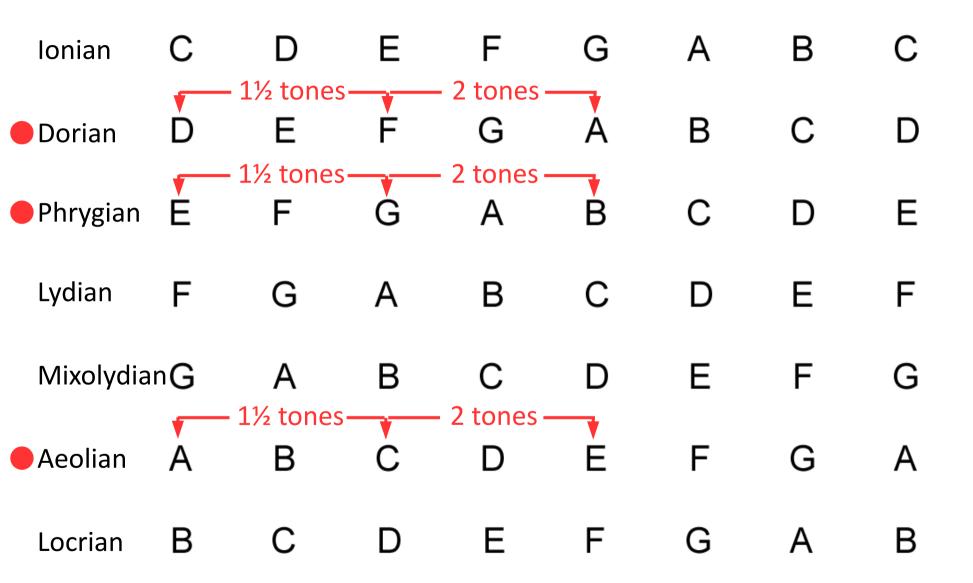
The Ionian – Lydian – Mixolydian modes all produce Major chords.

Between the 1st and 3rd notes of these modes the interval is 2 tones, and between the 3^{rd} and 5^{th} notes of these modes the interval is $1\frac{1}{2}$ tones.

$$1 - 3 - 5 = major$$

	•	2 tones –		—1½ tones—	_				
	1	2	3	4	5	6 ^s	7	Т	8
Ionian	С	D	Ε	F	G	Α	В		С
	1	2	3	4	5	6	7		8
Lydian	F	G	Α	В	С	D	Е		F
	1	2	3	4	5	6	7		8
Mixolydian	G	Α	В	С	D	E	F		G

3 modes produce Minor chords



Minor Chords

The Dorian – Phrygian – Aeolian modes all produce Minor chords.

Between the 1st and 3rd notes of these modes the interval is 1½ tones, and between the 3rd and 5th notes of these modes the interval is 2 tones.

$$1 - 3 - 5 = minor$$

		- 1% tones	<u> </u>	- 2 tonos.				
Dorian	1 D	T 2 S	V	– 2 tones T 4 G	т 5 А	^T 6 s	7 C	^T 8
Phrygian	1	2	3	4	5	6	7	8
	E	F	G	A	B	C	D	E
Aeolian	1	2	3	4	5	6	7	8
	A	B	C	D	E	F	G	A

1st - 3rd - 5th notes of the Locrian Mode

Ionian	С	D	Ε	F	G	Α	В	С
Dorian	D	E	F	G	Α	В	С	D
Phrygian	Е	F	G	Α	В	С	D	Е
Lydian	F	G	Α	В	С	D	Е	F
Mixolydia	nG	Α	В	С	D	Е	F	G
Aeolian	Α	B 1½ tones	С	D 1½ tones	E	F	G	Α
Locrian	В	С	D	E	F	G	Α	В

Locrian Mode

The Locrian mode produces a Minor chord with a difference.

Between the 1^{st} and 3^{rd} notes of the Locrian mode the interval is $1\frac{1}{2}$ tones, and between the 3^{rd} and 5^{th} notes of the Locrian mode the interval is $1\frac{1}{2}$ tones, not the expected 2 tones.

$$1 - 3 - 5 = minor$$

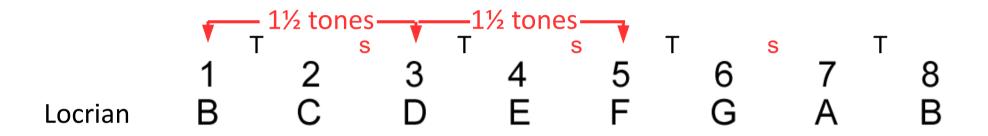
$$1 - 2 - 3 - 5 = minor$$

$$1 - 3 - 5 = minor$$

1½ tones between the 1st and 3rd intervals of any mode indicates a minor chord.

Bm 5

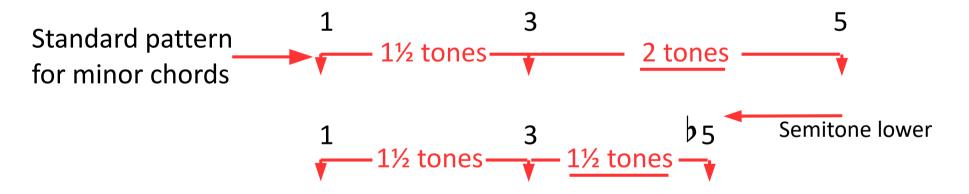
The name of the chord produced by the Locrian mode is Bm 5



Bm 5

Although the name of the chord is Bm 5, you don't have to flatten the 5th note, because it has already been flattened by belonging to the scale of C

The flattened 5th relates to the standard pattern for minor chords.



More about this chord later. It's not quite finished.

All the chords from the scale of C (major)

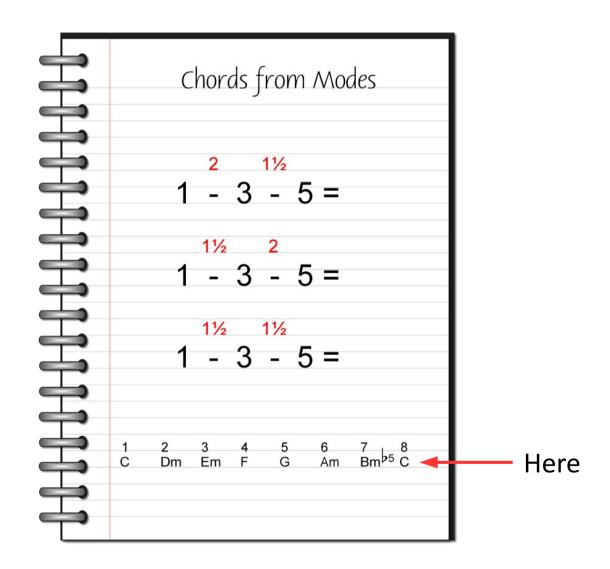
To distinguish between major and minor chords, minor chords are accompanied by a lower case 'm'.

For example, the chord of C = C major, Dm = D minor.

Major	Minor	Minor	Major	Major	Minor	Minor 5	
1	2	3	4	5	6	7 _b _	8
С	D_m	Em	F	G	Am	Bm ⁵	С

Creating chords: The intervals

Add the list of chords to the bottom of the page in your notebook.



All major scales: The same chord sequence

I highly recommend you work through all the different scales. The list below highlights two scales demonstrating the major and minor chords all take up the same positions whatever the scale.

Major	Minor		Major	Major	Minor	Minor ^b 5	
1	2	3	4	5	6	7 Bm⁵	8 C
С	Dm	⊏m	F	G	Am	Bm	C
Major	Minor	Minor	Major	Major	Minor	Minor ^b 5	
1	2	3 A m	4	5	6 Dm	7 ₅ 5	8 F
F	G_m	Am	B♭	С	Dm	Em ⁵	F

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Putting the chords on the fretboard

A chord is created by finding the 1^{st} - 3^{rd} - 5^{th} notes from a mode and, if possible, placing one of the notes on each of the 6 strings on the guitar.

This isn't always possible.

Open strings and **closed notes** are used to play the three notes to form a chord.

The 1st - 3rd - 5th notes can be used more then once.

The three notes are also referred to as a **Triad**.

Plenty of P's to remember

This section demonstrates how chords are structured.

After this, students will be able to create their own chords anywhere on the fretboard or any other instrument.

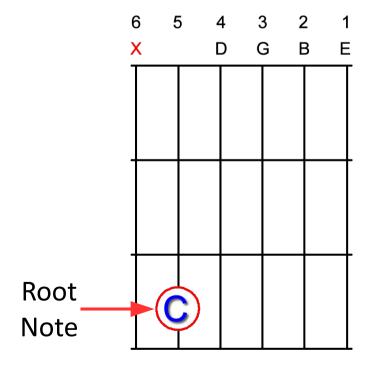
Practice, **Patience** and **Performance**.

The Root Note

The **lowest** note in a chord should be the first note of the mode.

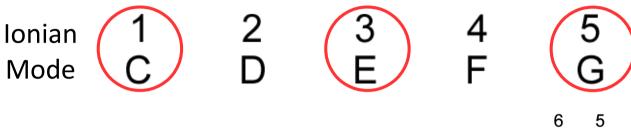
This is called the **Root note**. The chord takes its name from the root note.

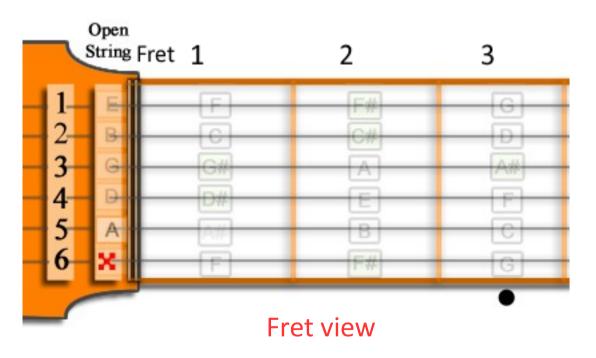
In the chord diagrams that follow the root note will have a red circle.

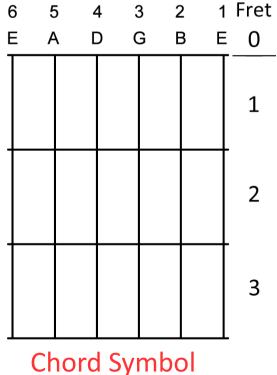


The chord of C (major)

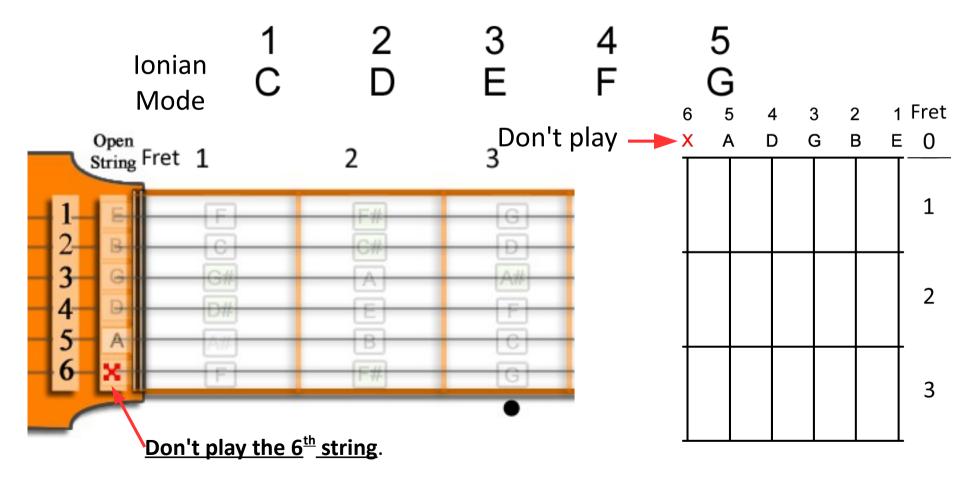
The chord of C is a combination of the 1st - 3rd - 5th notes from the **lonian mode**



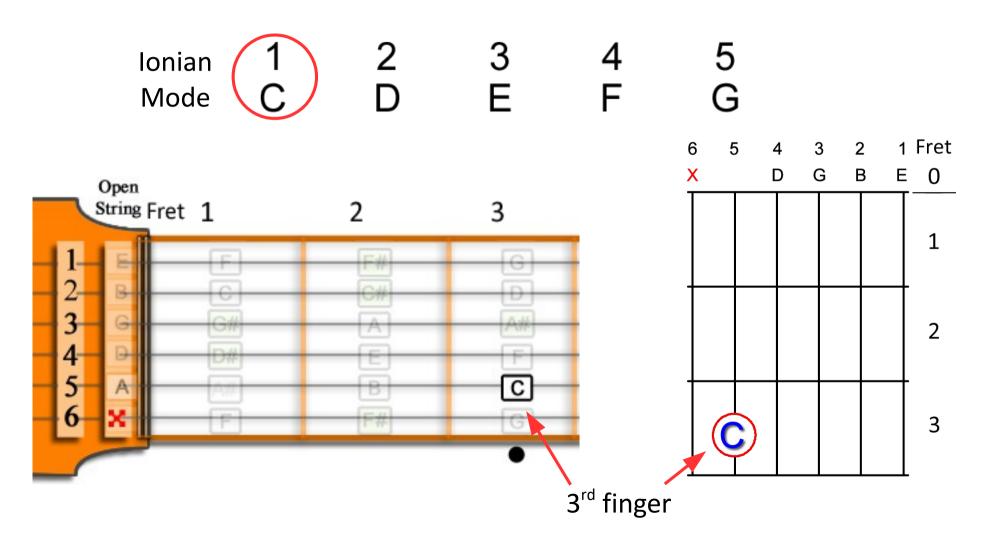




At the moment we are only using the first three frets. String number 6 is an open E. Although E is the 3rd note in the mode, part of the chord, the lowest note should be the root note. The low E won't sound that wrong if you play it but best start from the root note.

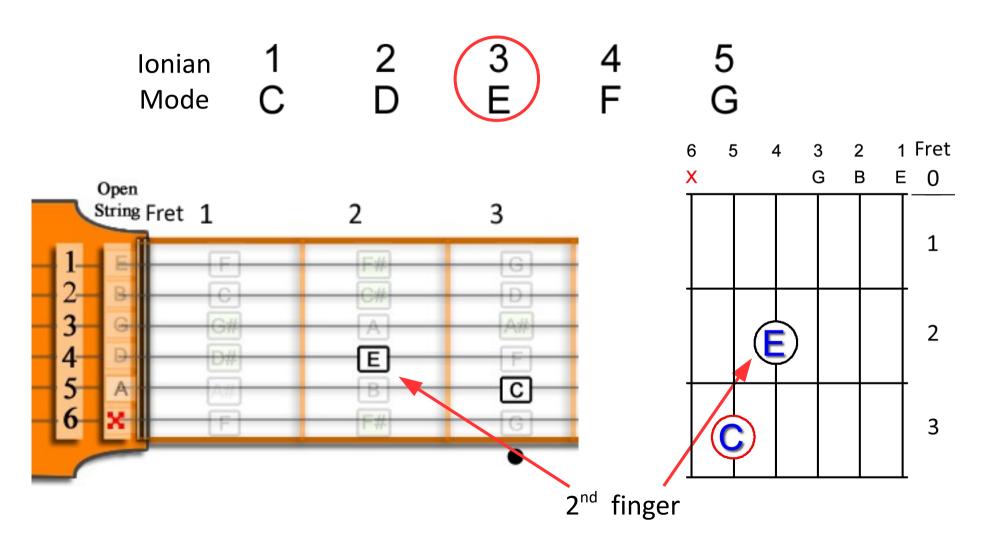


String number 5 is an open A, not C, E or G.
Find a C on the 3rd fret using the <u>3rd finger</u>.



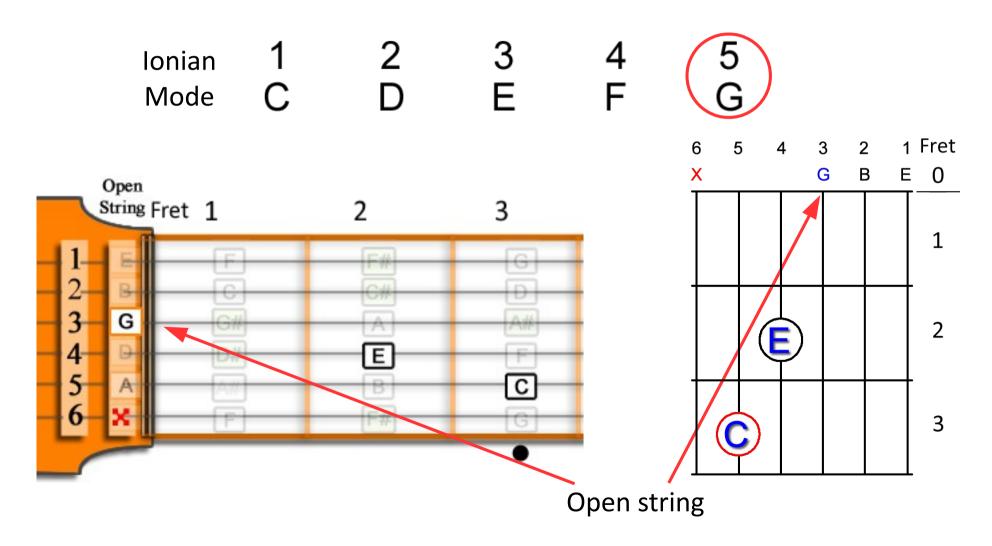
String number 4 is an open D, not C, E or G.

Find an E on the 2nd fret using the <u>2nd finger.</u>

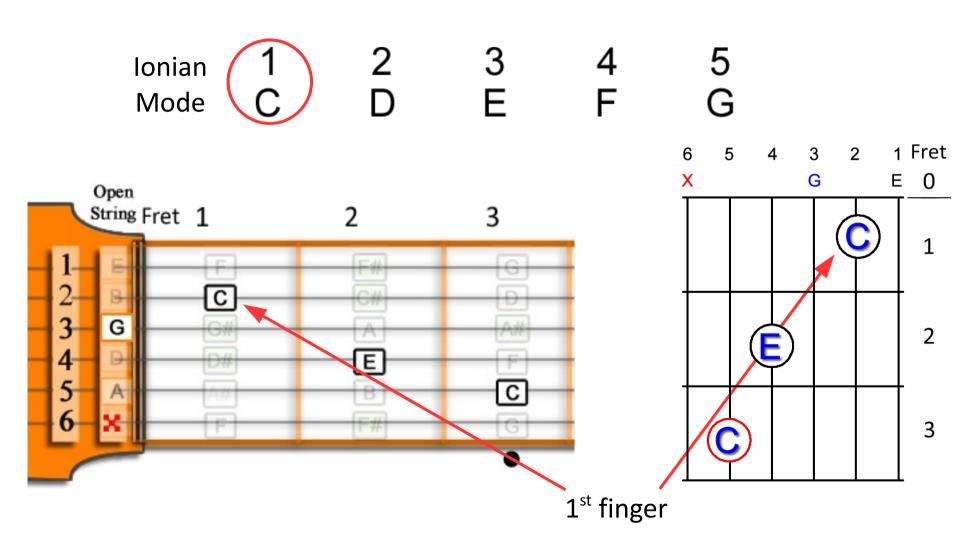


String number 3 is an open G.

Use the open G.

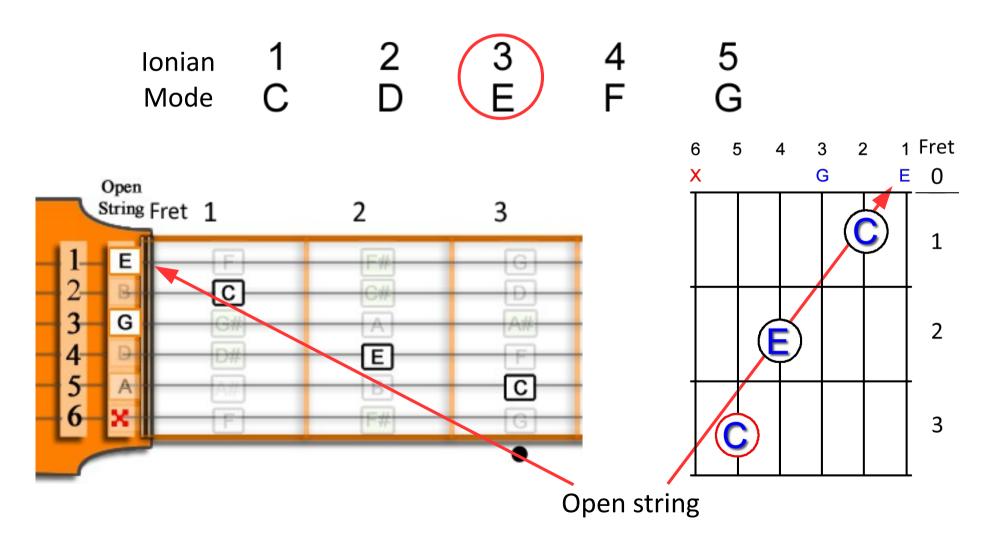


String number 2 is an open B, not C, E or G. Find a C on the 1^{st} fret using the $\underline{1}^{st}$ finger.



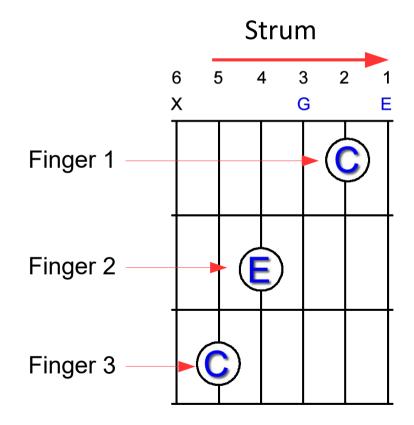
String number 1 is an open E.

Use the open E.



Strum the Chord of C (major)

Strum – with your plectrum – the chord of C. Start from string 5, strum down to string 1. Use the correct fingers. If you don't get a clear sound straight away keep trying until the sounds on all 5 strings vibrate without any buzzing or dull sounds.



A reminder – before learning the next chord

The **lowest** note in a chord should be the first note of the mode.

This is called the **Root note**. The chord takes its name from the root note.

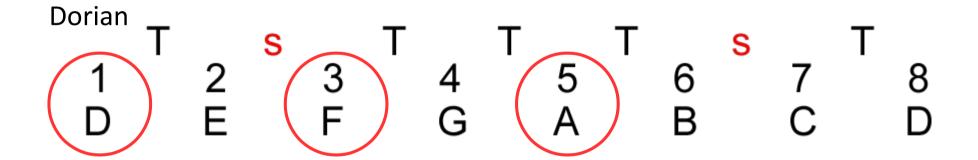
In the chord diagrams that follow the root note will have a red circle.

Dm (Minor)

The chord of Dm is a combination of the 1st - 3rd - 5th notes from the

Dorian mode

The second mode in the scale of C



It is very important to remember chords come from the modes of each scale.

The chord of Dm (minor)

The chord of Dm is a combination of D F A the 1^{st} - 3^{rd} - 5^{th} notes from the **Dorian mode**

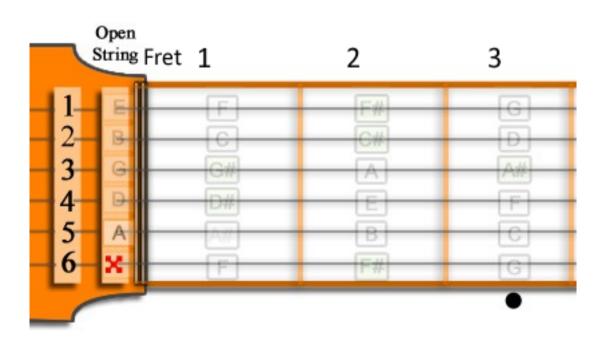


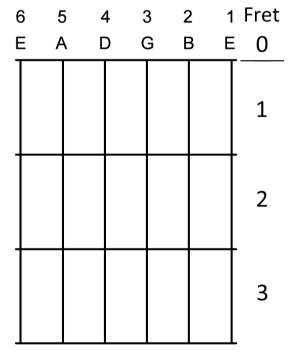
2 E



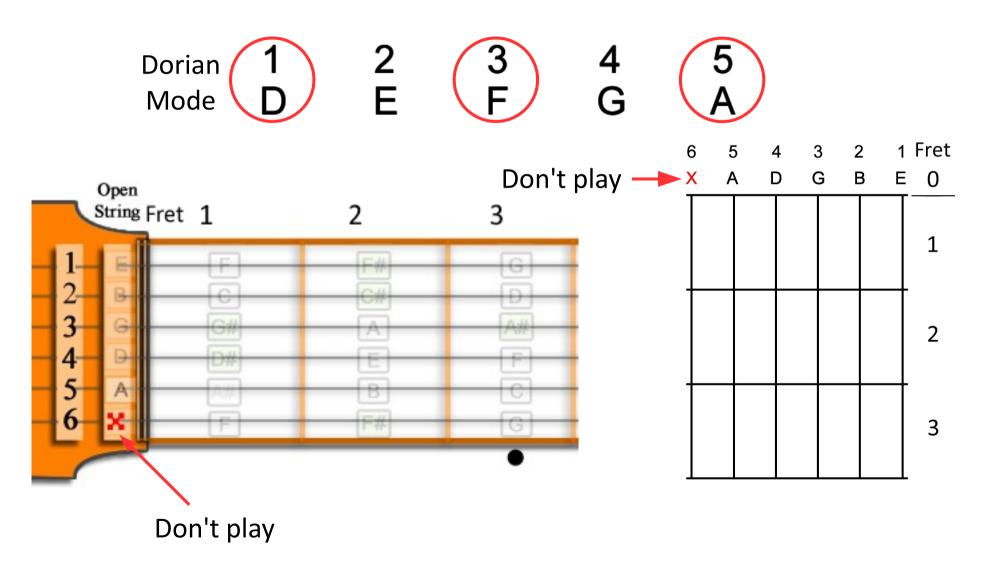
4 G



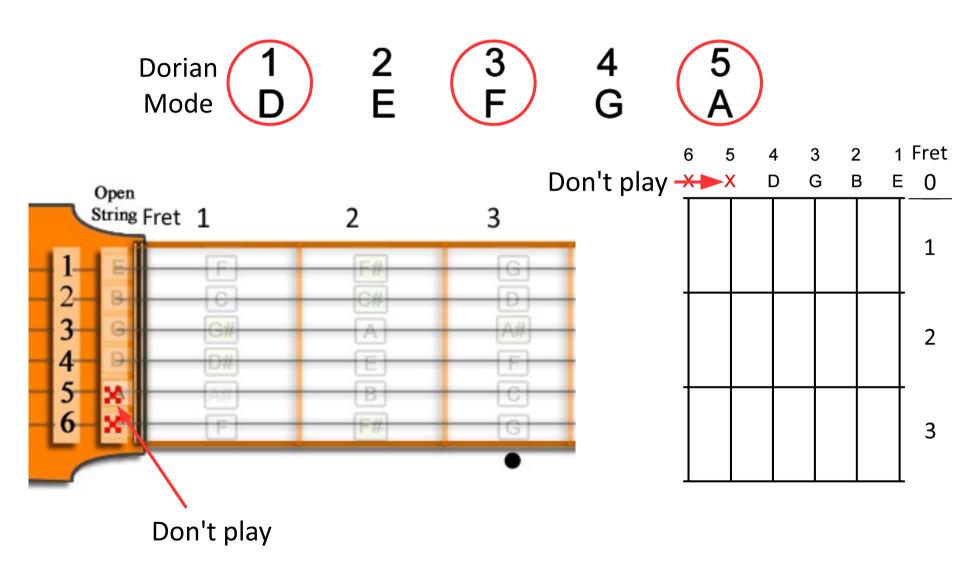




String number 6 is an open E. This is lower than the Root Note D. Don't play the 6th string when strumming Dm.

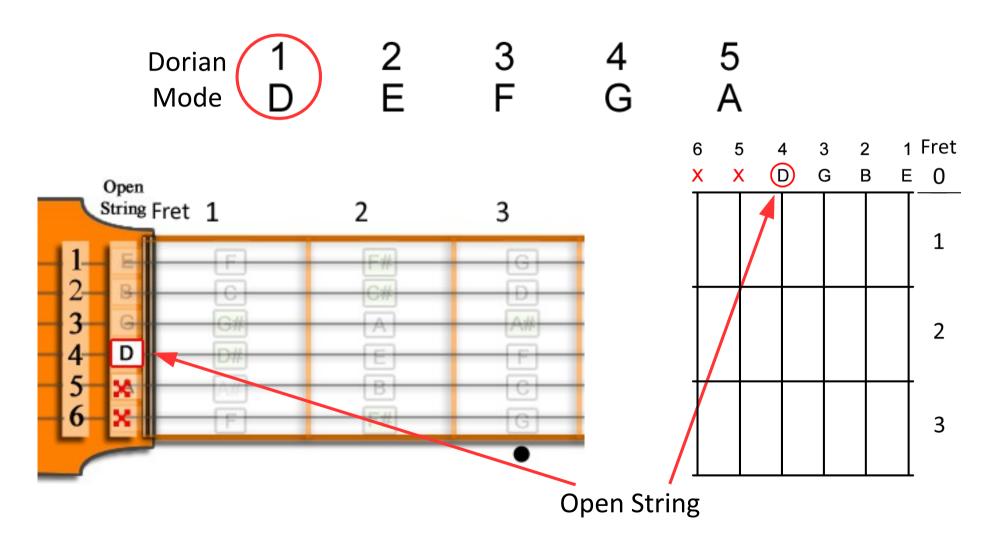


String number 5 is an open A. Lower than the Root Note D. Don't play the 5th string when strumming Dm.



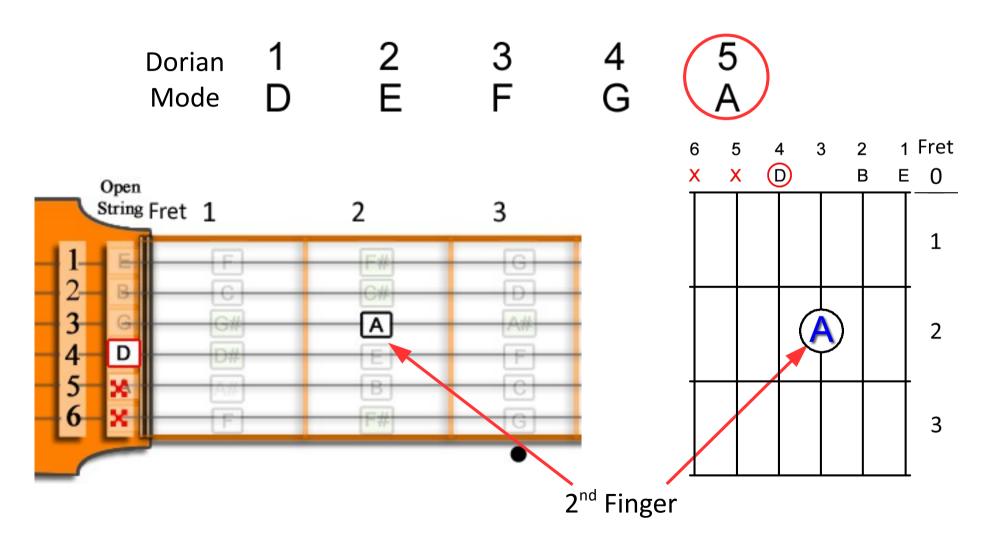
String number 4 is an open D.

Use the open D – It is the Root note.



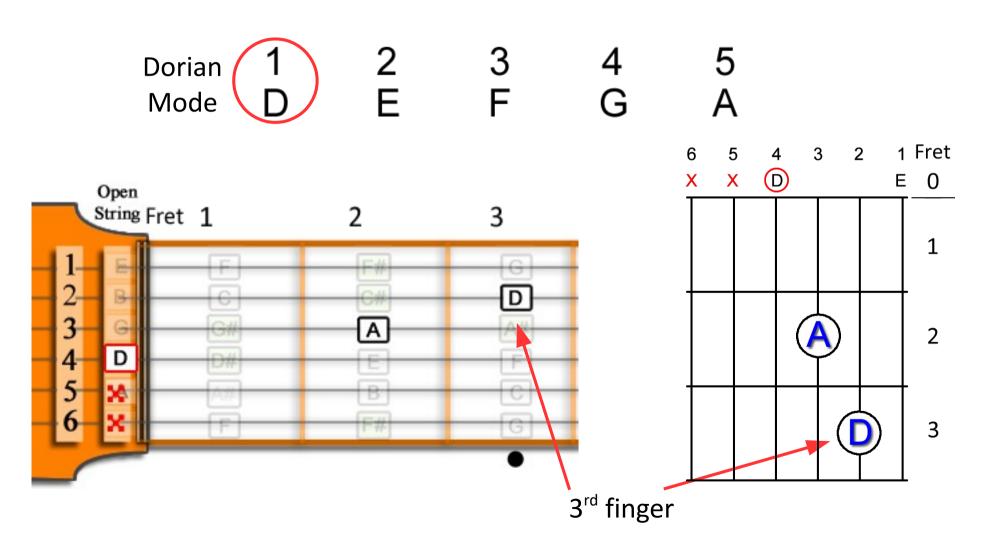
String number 3 is an open G, not a D, F or A.

Find a A on the 2nd fret using the <u>2nd finger.</u>

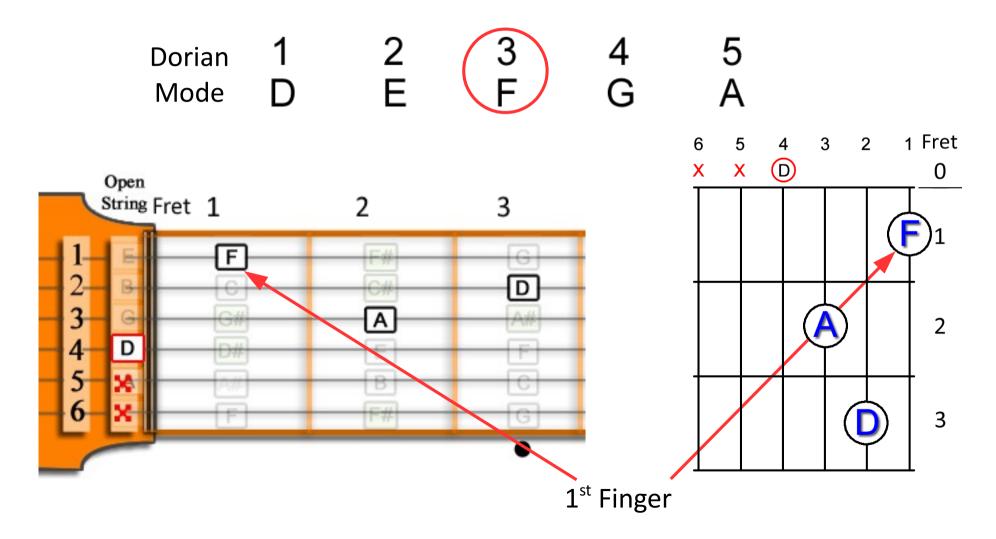


String number 2 is an open B, not a D, F or A.

Find a D on the 3rd fret using the <u>3rd finger.</u>



String number 1 is an open E, not a D, F or A. Find an F on the 1^{st} fret using the $\underline{1}^{st}$ finger.

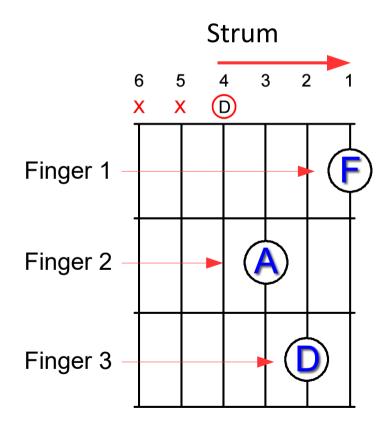


Strum the Chord of Dm (minor)

Strum – with your plectrum – the chord of Dm.

Start from string 4, strum down to string 1. Check the fingers.

If you don't get a clear sound straight away keep trying until the sounds on all 5 strings vibrate without any buzzing or dull sounds.



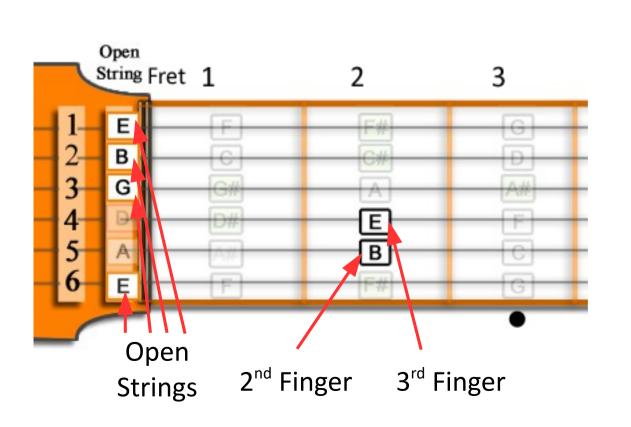
Building the chord of Em (Minor)

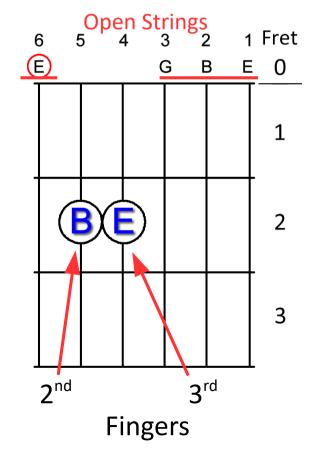
1st 3rd 5th (E G B) notes come from the Phrygian Mode of C.

Please, check all the notes in the chord of Em.

They must match the 1st 3rd 5th (E G B) notes of the Phrygian mode.

Strum all six strings



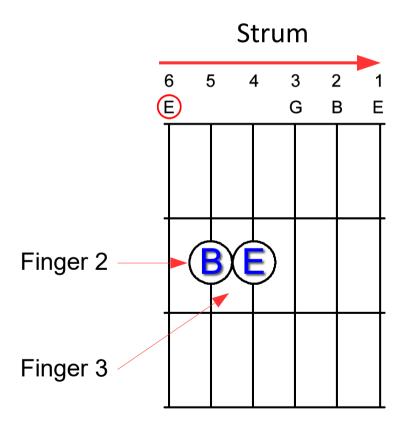


Strum the Chord of Em (minor)

Strum – with your plectrum – the chord of Em.

Start from string 6, strum down to string 1.

As always, if you don't get a clear sound straight away keep trying until the sounds on all 5 strings vibrate without any buzzing or dull sounds.

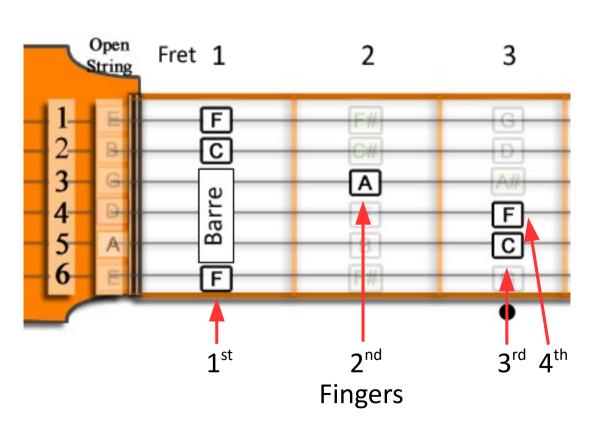


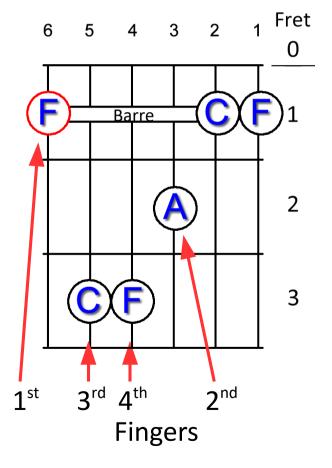
F (Major)

1st 3rd 5th (F A C) notes come from the Lydian Mode of C.

Barre Chord: 1st finger covers all 6 strings.

Strum all six strings



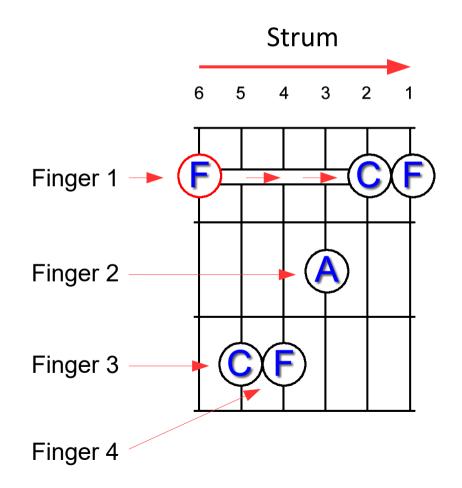


Strum the Chord of F (major)

Strum – with your plectrum – the chord of F.

Start from string 6, strum down to string 1.

F (major) is a <u>barre chord</u>, the first finger has to cover all the notes on the first fret. This is difficult for beginners. Keep trying, one day it will be clear.

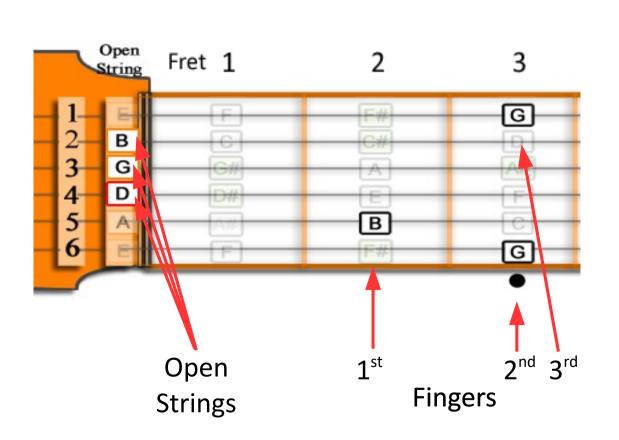


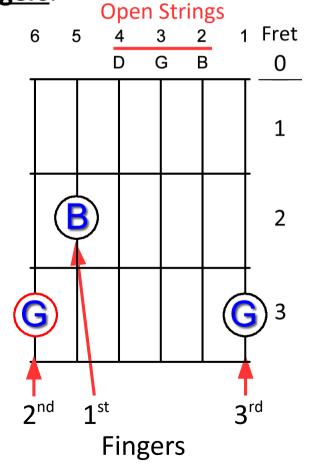
G (Major)

1st 3rd 5th (G B D) notes come from the Mixolydian Mode of C.

Chords are a combination of closed and open strings.

Not just the notes played by fingers.





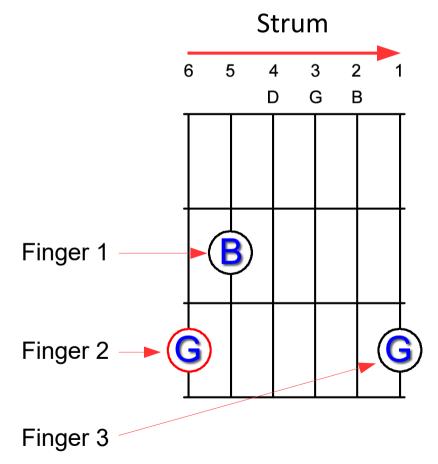
Strum all six strings

Strum the Chord of G (major)

Strum – with your plectrum – the chord of G.

Start from string 6, strum down to string 1.

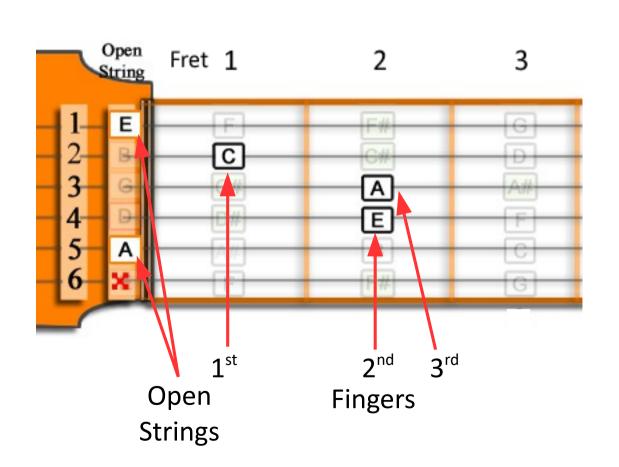
This chord can be a bit of a stretch. Check each string until all the notes are clear.

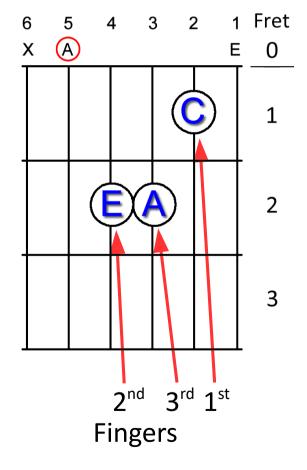


Am (Minor)

1st 3rd 5th (A C E) notes come from the Aeolian Mode of C.

<u>Strum five strings – not string 6</u> <u>it's lower than the root note (A)</u>



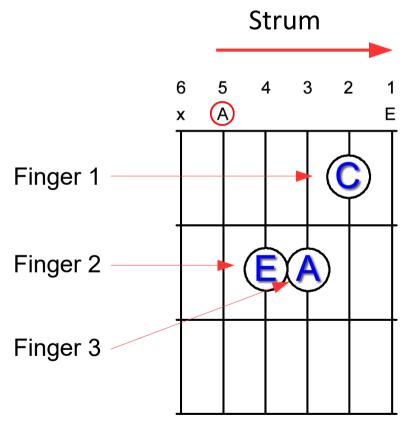


Strum the Chord of Am (major)

Strum – with your plectrum – the chord of Am.

Start from string 5, strum down to string 1.

It's the effort to overcome all the problems that's what will make you a great guitarist.



Bm⁵ (Minor 5)

1st 3rd 5th (B D F) notes come from the Locrian Mode of C.



It's a very weak sounding chord. To strengthen it we add the 7^{th} note 1^{st} 3^{rd} 5^{th} 7^{th} (B D F A) notes from the Locrian Mode of C.

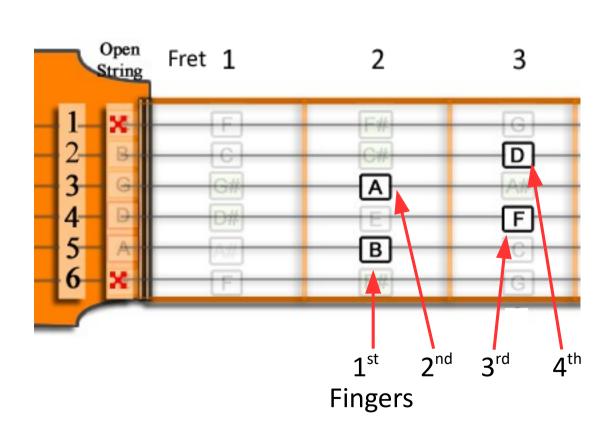
Bm 7 (Minor 7 flat 5)

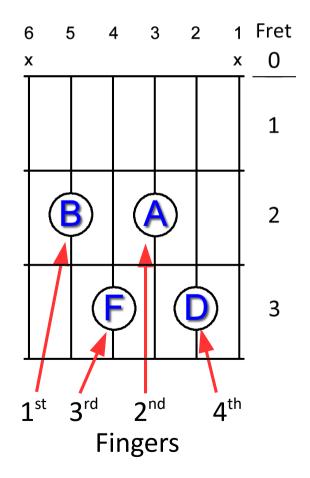
Bm 7 (Minor 7 flat 5)

1st 3rd 5th 7th notes from the Locrian Mode of C.

B D F A

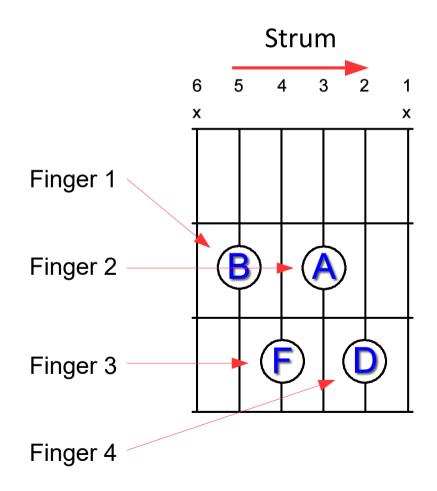
Don't strum strings 1 or 6





Strum the Chord of Bm⁷/₅

Strum – with your plectrum – the chord of Bm⁷ ⁵ 5 Start from string 5, strum down to string 2. This chord uses all four fingers. This chord is not often used.



Chord Extensions

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Chord Extensions – what the numbers mean

Chords often have numbers next to them.

Adding these numbers to a chord means more than just placing an extra finger of the fretboard or removing a finger from a chord.

Some chords (suspended chords) offer a clue to what the next chord might be.

6th chords soften the effect of a strong major chord.

Maj7 chords add lightness, others ,dominant 7 chords bring power.

Each chord extension has its reason yet all can be played to the songwriters whim.

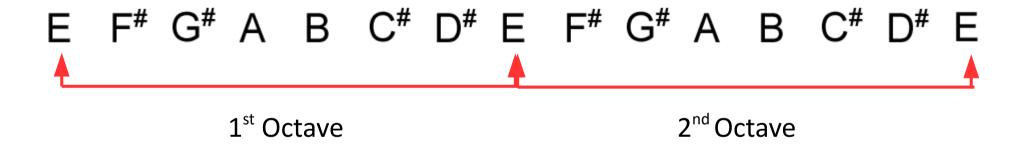
The rhythm guitarist should be the conductor of the other musicians especially for the singers.

Octaves

An octave is 8 notes.

All major scales contain 8 notes.

This is the scale of E (major) 2 octaves



From low to high

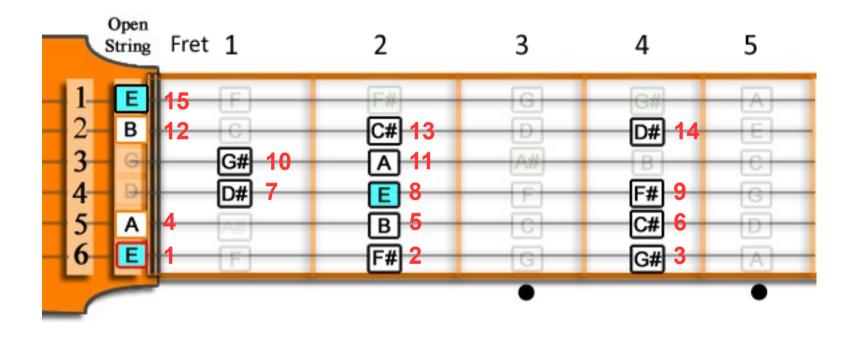
The higher the number. The higher the note. The 2nd note (F#) is lower than the 9th note (F#) 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th 13th 14th 15th F# G# A B C# D# E F# G# A B C# D# 2nd Octave 1st Octave High Low

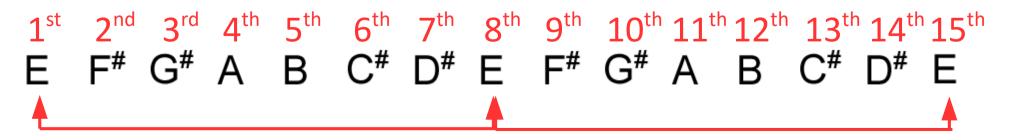
On the Fretboard

Play the scale of E (Major) over 2 octaves.

The first octave starts on the 6th string ending on the 4th string.

The second octave starts on the 4th string ending on the 1st string.

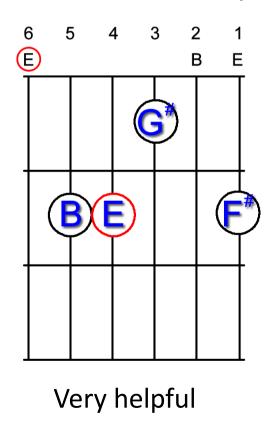


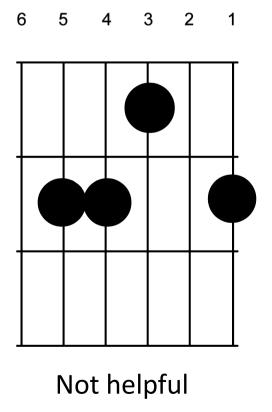


Chords are more than just shapes

All the chord diagrams in this music manual have their individual note names, either open strings or closed notes, written where the the note is to be played.

Many website guitar teachers don't show this, just blobs where fingers are placed, which isn't very helpful.





Chord diagrams in this section

For this manual I have created a series of chord diagrams to help guitar students understand chord structure.

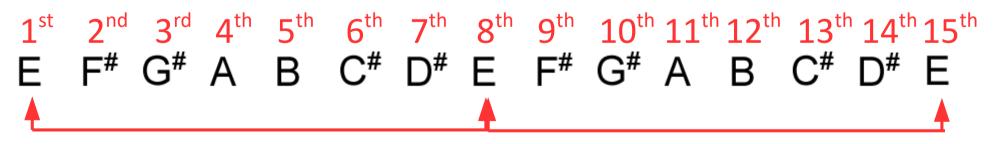
The importance of these chord diagrams is to give my students the ability to understand chord structure and to be able to work chords out for themselves.

Buying a good chord book is a very good idea.

Please, only purchase a publication that has the name of the notes used to build the chord clearly printed by the diagram.

Numbers to think about and remember

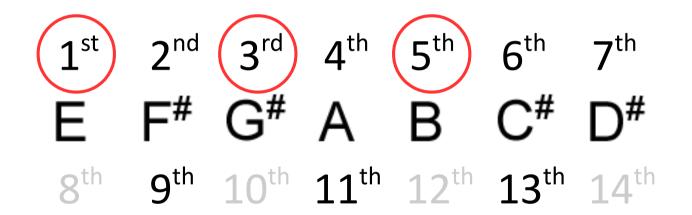
Here are the 2 octaves of the scale of E placed on top of each other.



This number isn't used

Chord Extensions

1st 3rd 5th notes from the scale make up the chord so the 8th 10th 12th notes aren't used. Neither is the 14th



Chord Extensions

As I describe each chord I might say this chord has a pretty 'feel' to it, or a dramatic style. This is purely personal to me.

When you strum a chord if you think of a another way to describe the sound **use your own description**. This is a good thing to do, it means you are listening to the chord you are playing.

Remember:

Brain (to organise)
Fingers (to play)
Ears (to listen)

Chords and Composers

When composing it's the prerogative of the songwriter to choose and use the chord sequence best suited for the composition.

Composing is a personal skill, although songwriters need to draw their inspiration from a wide range of experiences and a have wide range on chords to choose from.

Many songwriters use a small array of chords to write their songs, some are very successful, many are not. Most aren't memorable and are quickly forgotten.

To avoid this a composer's imagination pot needs filling with exciting chords and thoughtful use of them.

Suspended chords

Suspended chords are **signposts**, they tell where the chord sequence is heading.

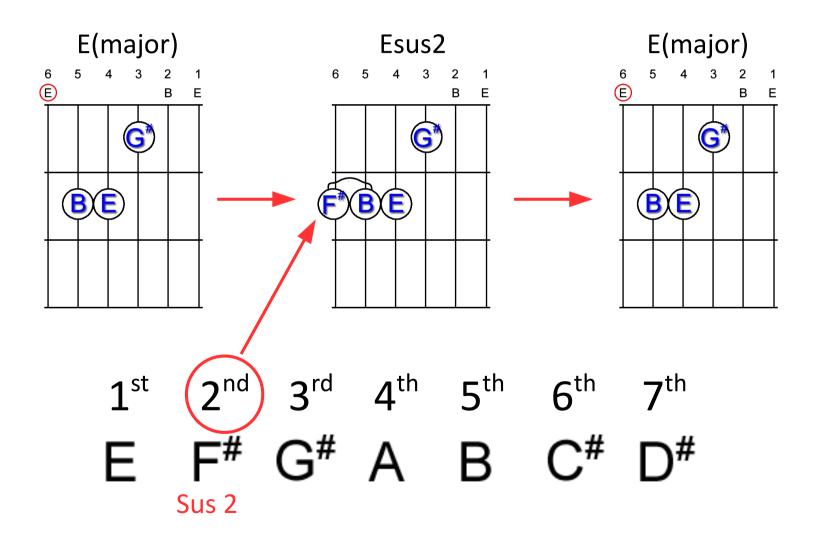
Suspended 2nd (Sus2) leads you back to the previous chord.

Suspended 4th (Sus4) leads you to the chord named by the sus4.

$$1^{st}$$
 2^{nd} 3^{rd} 4^{th} 5^{th} 6^{th} 7^{th} E F# G# A B C# D#

Suspended 2nd (sus2)

In this example the the chord sequence starts with E (major) - the suspended 2nd is added - then returns to E (major).

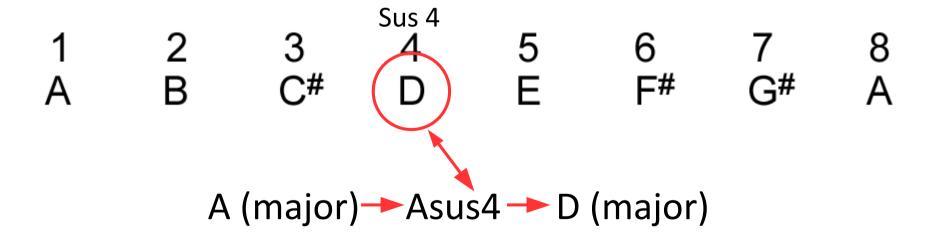


Suspended 4th (sus4)

The sus4 can be thought of as an advert for the chord coming next.

If, for example, the 4thnote of the scale of A (D) is added to the chord of A (major) the next chord should be D (major). This helps a guitarist to anticipate the next chord although there isn't anything stopping a composer changing to a different chord.

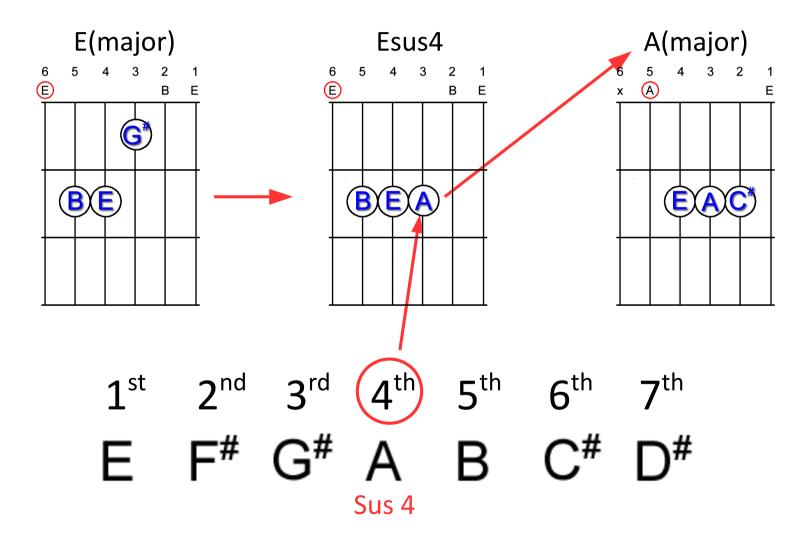
The rules of music are there to be challenged, changed and explored.



Suspended 4th (sus4) – example 2

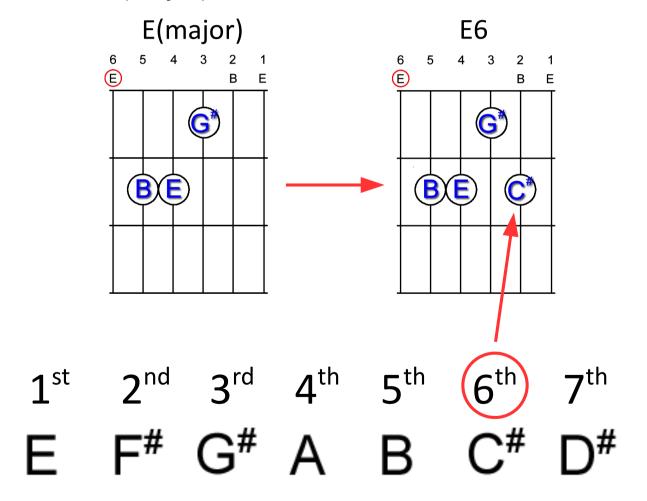
In this example the chord sequence starts with E (major) -

- the suspended 4th (A) is added to the chord, the chord then changes to A (major)



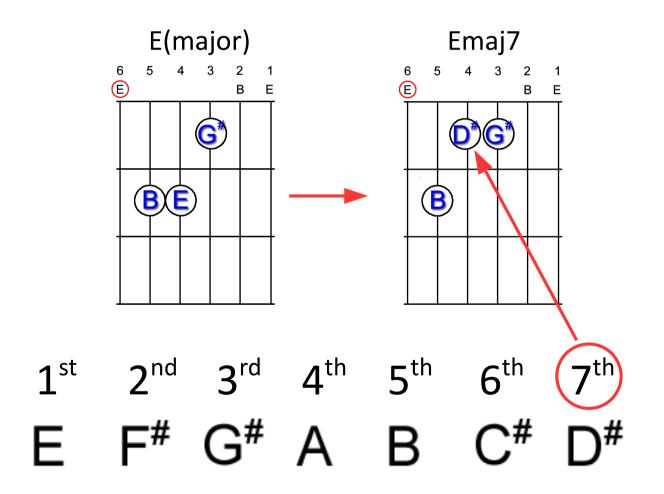
6^{th}

The 6th note from a scale is added to a chord to create a softer, more gentle feel. Halfway between and major chord and a minor chord. In this example a C# is added to the chord of E (major).



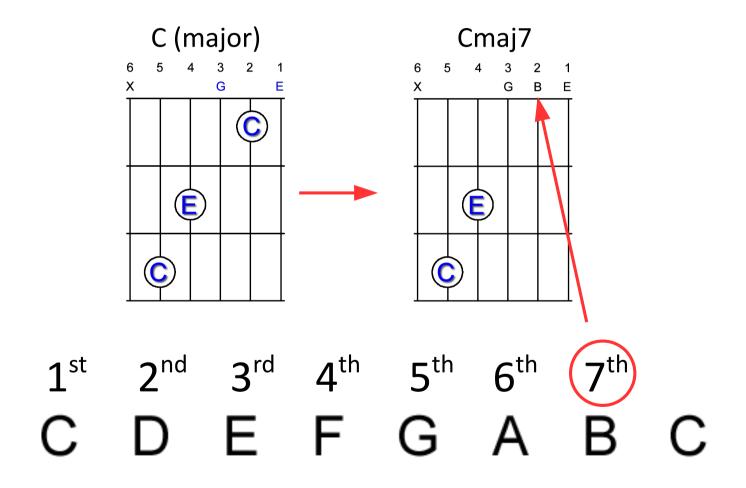
Major 7th - maj⁷

Add the 7th note of a scale to create a maj7 (major 7). In this example a D# is added to the chord of E (major).



Cmaj⁷

In this example a B note is introduced to the chord of C (major) producing a very pleasing sound.

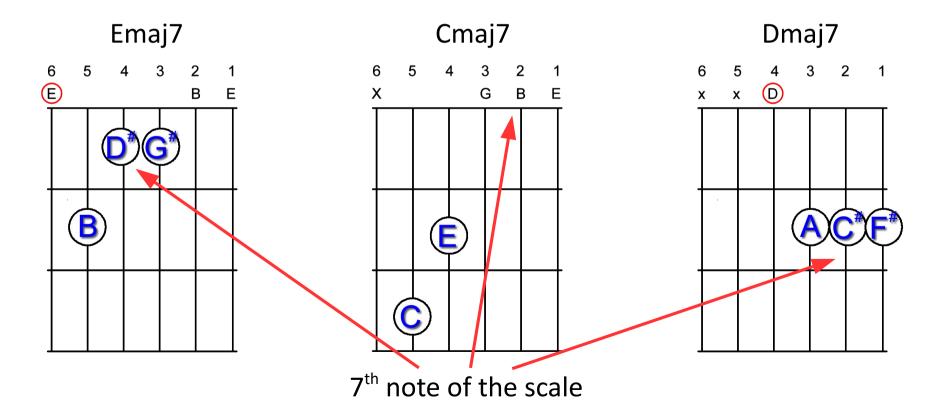


Major 7 v Dominant 7

There are two types of sevenths used when playing chords.

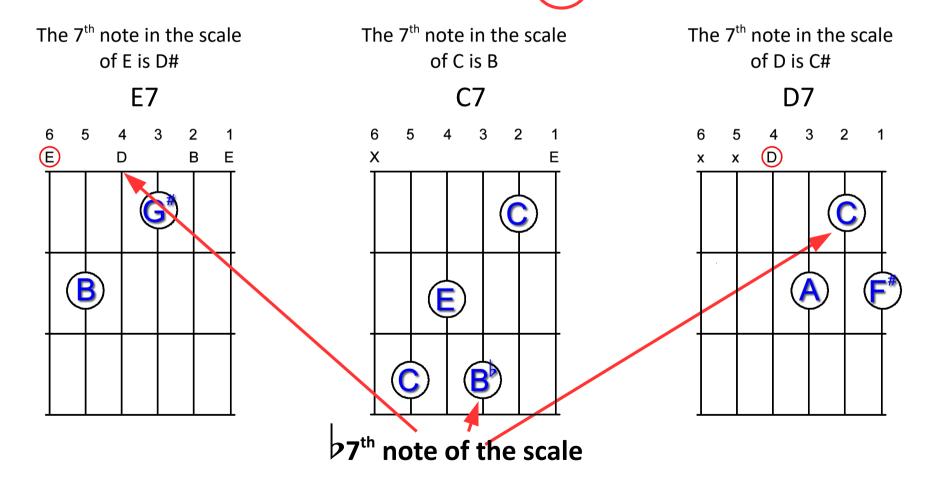
First, the major 7

The major7 is the natural of the two extensions to the chord because the 7^{th} note of the scale is added to the triad - 1^{st} 3^{rd} 5^{th} 7^{th}



Dominant 7

The dominant 7 (the word dominant is never used when referring to the chord) is a strident chord. The extension uses a note not found in the key. The note used is the 27 note in the scale.



Chord Extensions – past the 7th note

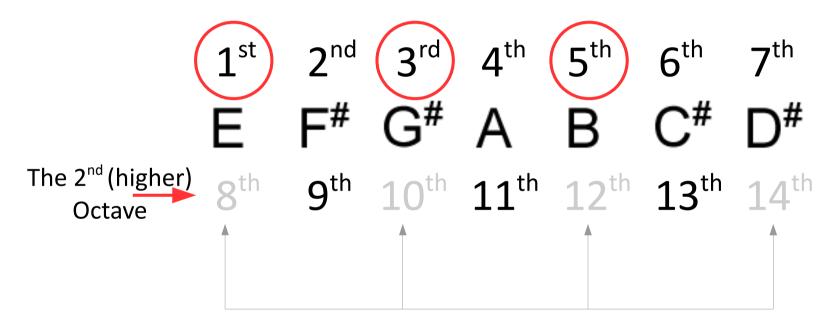
Using the 2nd Octave



The 2nd (higher) Octave

Chord Extensions – past the 7th note

Using the 2nd Octave



These numbers aren't used.

Adding the 7th note in the scale

Adding notes from the second octave must (unless otherwise stated) include either the <u>major 7</u> or the <u>dominant 7</u>. The word dominant is never used when writing down the chord, just the number 7.

Maj7 chords: Add the 7th note in the scale

1 3 5 7

For example Emaj7 - Bmaj7 - Cmaj7

Dominant 7 chords: Add the 7th note in the scale

1 3 5 7

For example E7 – B7 - C7

Eadd9 (in numbers)

You can create this type of chord using this pattern from any scale. Eadd9 – Gadd9 – Aadd9 etc.

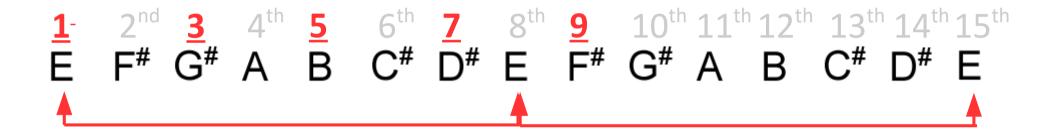
Eadd9 (7th note of the scale not is included)



Emaj9 (in numbers)

You can create this type of chord using this pattern from any scale. Emaj9 – Gmaj9 – Amaj9 etc.

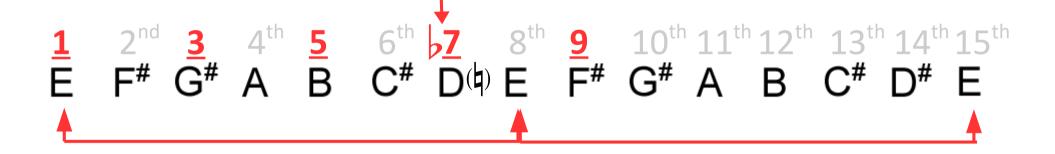
Emaj9 includes the 7th note of the scale



E9 (in numbers)

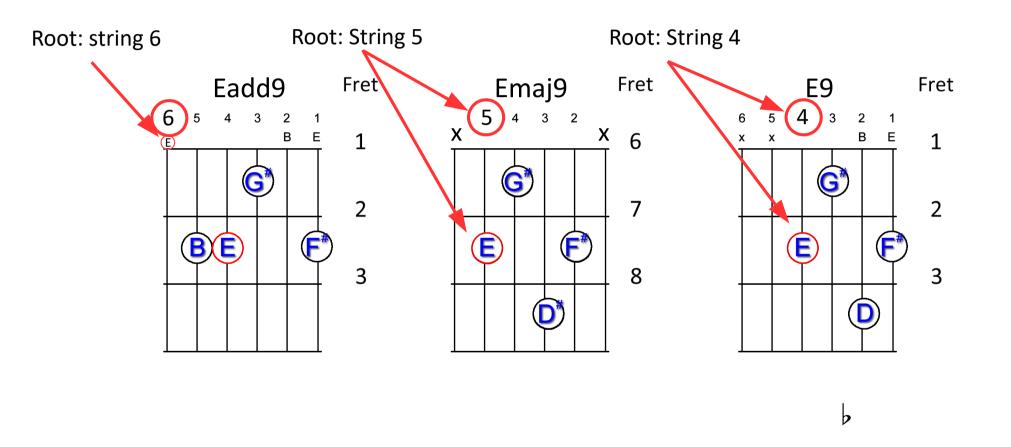
You can create this type of chord using this pattern from any scale. E9 - G9 - A9 etc.

E9 includes the dominant 7th (this note is really coming from a different key)



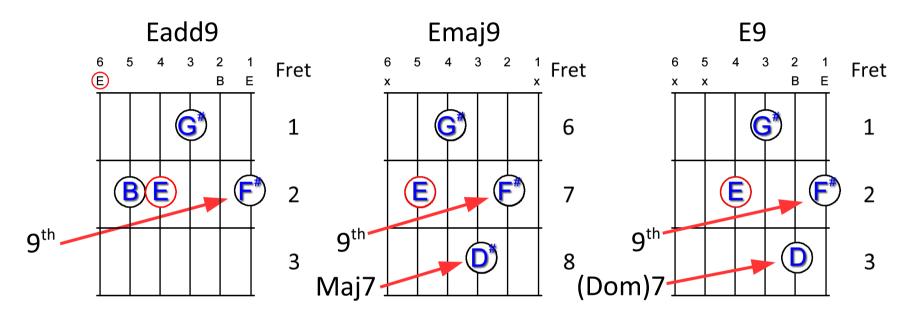
E9 chords

Three types of E9 chords. Check which string the root is on.



E9 chords

Three types of E9 chords



No 7th between the chord and the 9th note

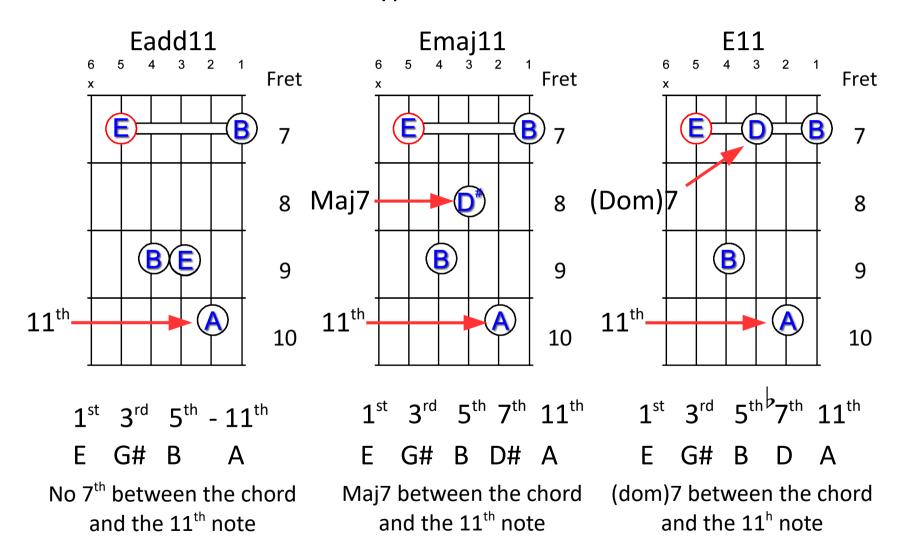
Maj7 between the chord (dom)7 between the chord and the 9th note

> ▲ Neither of these two chords contain ▲ a B note.

Of the three notes the 5th note of a chord is least important

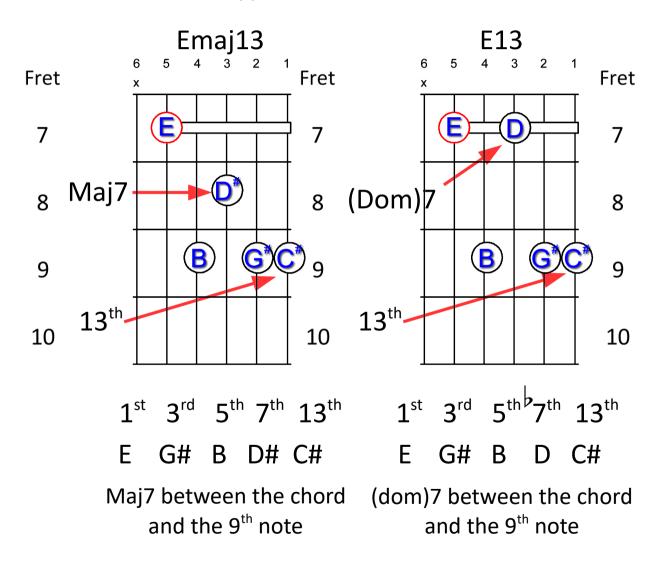
11th chords

Three types of 11th chords



13th chords

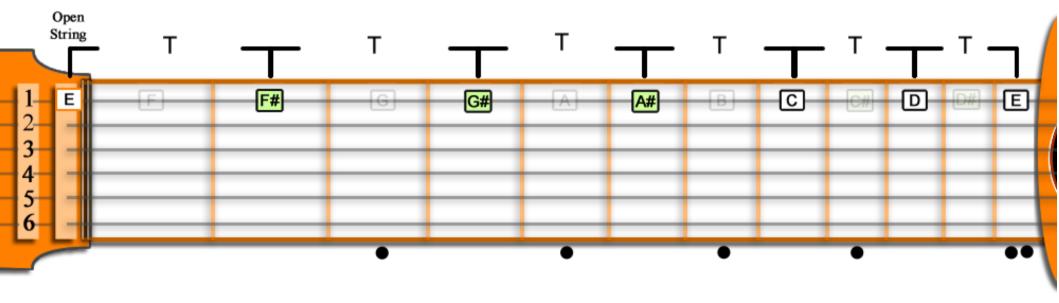
Two types of 13th chords



Whole Tone Scale – Augmented scale

Each note is a whole tone apart.

Fretboard View

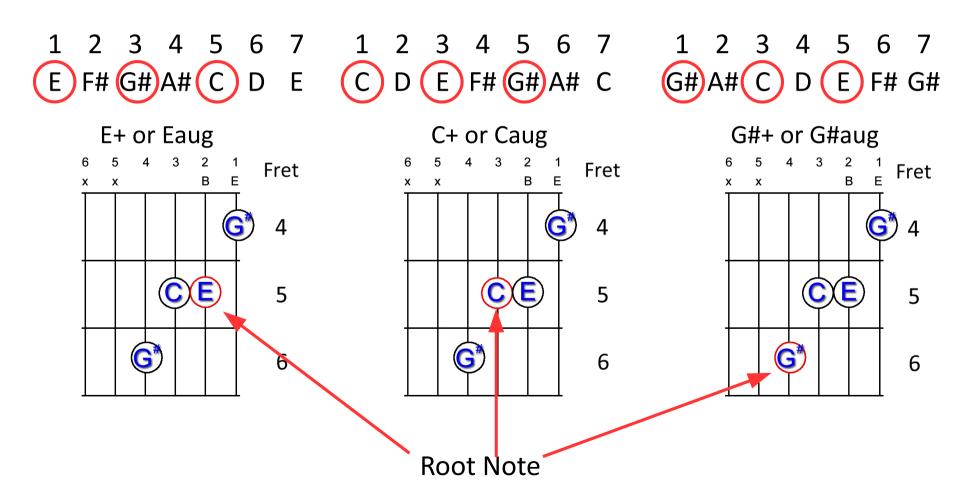


Whole Tone Scales – 7 Intervals

Augmented Chords from Augmented scales.

3 chords from the same Augmented scale.

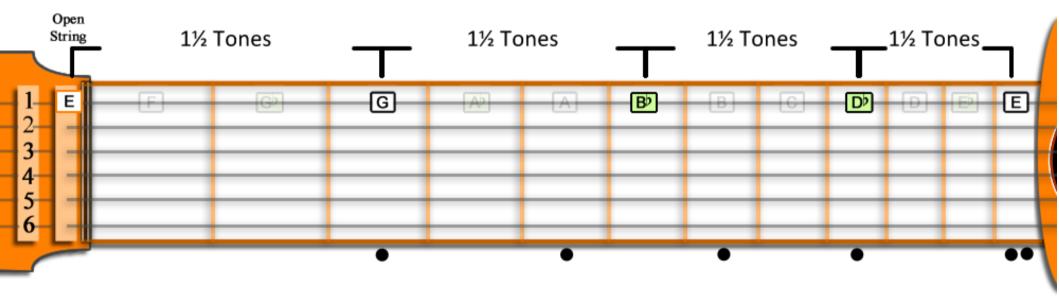
The symbol for an augmented chord is either + or aug



Diminished Scale

Each note is a 1½ tones apart.

Fretboard View

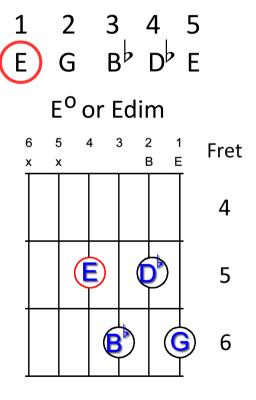


Diminished Scale

4 chords from the same Diminished scale.

The same four notes that make up E diminished also make up G diminished, B diminished and D diminished.

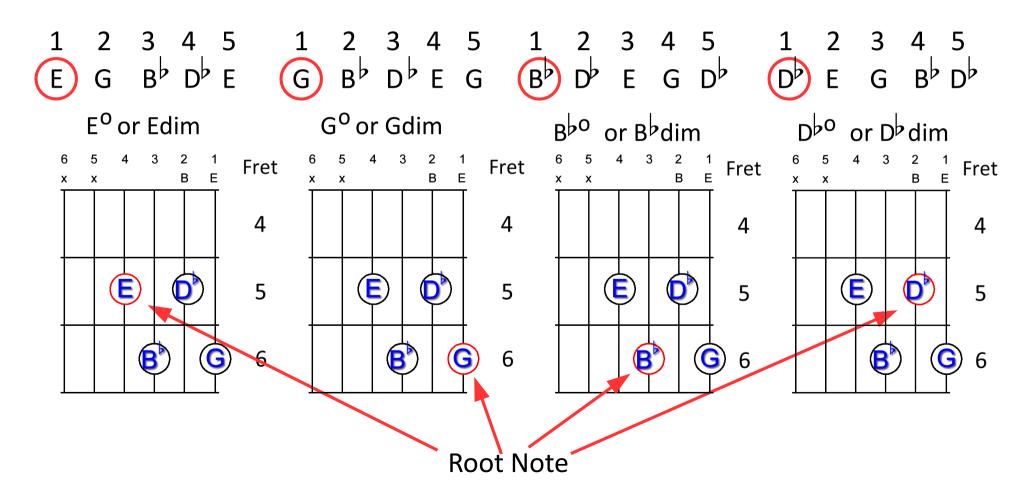
Using all the notes in the scale.



Diminished Chords

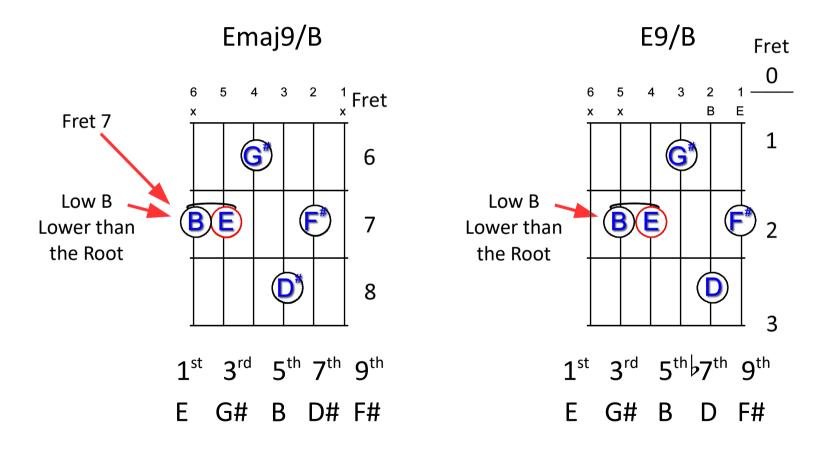
Diminished Chords from Diminished scales. The chord uses all the notes from the scale.

The symbol for a Diminished chord is either ^oor dim



Slash chords /

The B note can be used as a slash chord. A slash chord uses a note lower than the root. In this case the B. See video



Minor Scales

Introduction

<u>Modes</u> <u>Minor Scales</u>

<u>Chords from Modes</u>

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Creating Chords

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<u>Improvisation</u>

Summary

The Music Readers Toolbox

Minor Scales come from Major Scales

You would have thought minor scales would be explained in the scales section, not here among the modes.

<u>A minor scale is a mode</u>. All modes that produce minor chords are minor scales.

<u>Dorian – Phrygian – Aeolian – Locrian are all minor scales.</u>

Of these four modes one stands out from the rest:

The **Aeolian** mode, the **6**th mode in the scale.

The Relative Minor

Please listen carefully to each of the 7 modes of the scale of C.

Play the modes from low to high and back again.

The Ionian mode of C (major) sounds complete when finished.

The Dorian mode (D) feels incomplete, as does the Phrygian (E), Lydian (F), Mixolydian (G) and the Locrian (B) modes.

Not so the Aeolian mode, the 6th mode in the scale of C.

Just like the Ionian mode, when played from low to high and back again, the Aeolian mode sounds complete.

The Relative Minor the 6th note in every scale

We now have a **new use** and a **new name** for the Aeolian Mode.

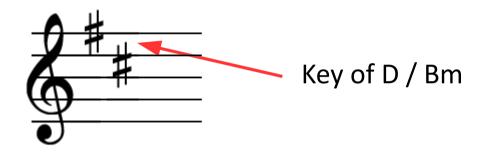
The 6th mode in every scale is called the **Relative Minor**.

Once your brain understands the concept, repetition steps in to help you.

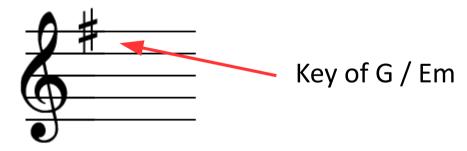
The Relative Minor and Key Signatures

No two scales can have the same key signature, but **they can share**.

The scale of D (major) shares its key signature with B minor.



The scale of G (major) shares its key signature with E minor



Next: The chords that make the difference.

Chords in the key of C and A minor

What's the difference? Nothing much.

The major scale and it's relative minor contain the same notes, therefore have the same modes and the same chords.

What changes is their position in the scale, this, as you will see, has quite an impact.

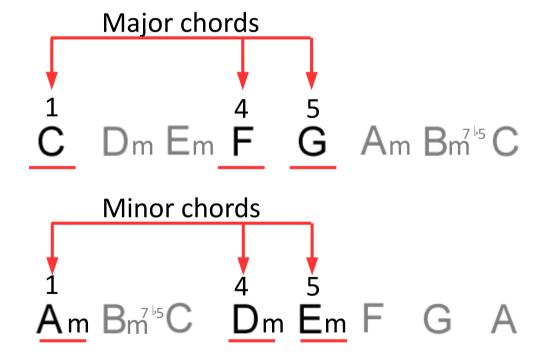
This example shows the scale of C and its relative minor (A minor).

1	2	3	4	5	6	7	8
C	D	E	F	G	A	B	C
1	2	3	4	5	6	7	8
A	B	C	D	E	F	G	A

Chords in the key of C and A minor

Now, we add the chords. In the example below I have highlighted 1-4-5 they are the most important positions for a chord in a scale.

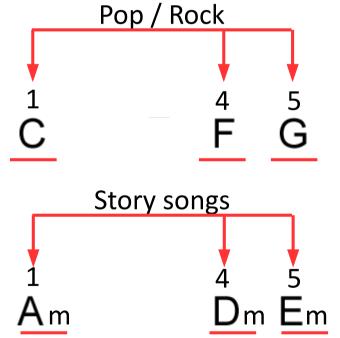
Play them to hear for yourself.



Chords in the key of C and A minor

Now, we add the style.

Choosing the right type of key to match a song you want to write, or when looking at a chord sequence for the first time, shows you are in control.



3 types of Minor Scales – The reason why

As you know each <u>major key</u> has a collection of chords associated with it. There isn't a lot of emotion in those chords.

Minor scales, are built to handle emotion. They are the scales for the story teller, the folk singer, the lonely jazz guitarist.

Stories come in many styles. Some very simple, some make you dance, others sing of love lost and love discovered.

Sad songs, obviously need sad chord sequences.

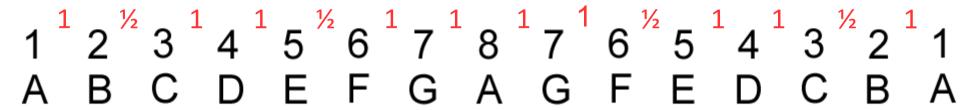
We need more than the relative minor to harmonise with the poetry.

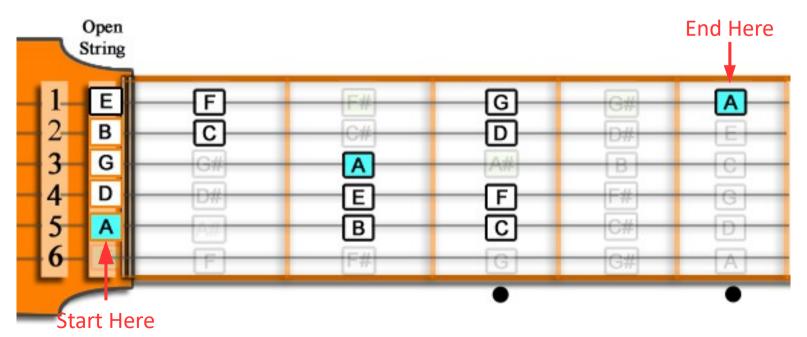
Play the relative minor of C (major)

A minor - the relative minor of C major:

Play two octaves low to high and back again.

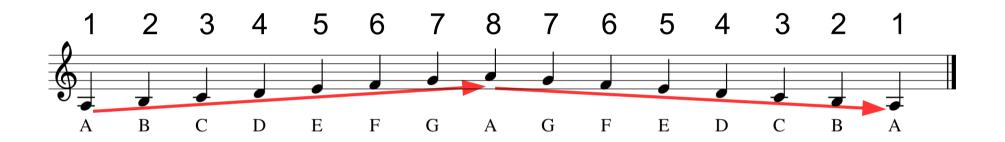
Intervals between notes



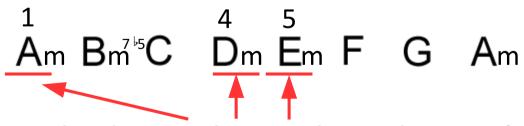


Relative Minor and Chords

Relative minor of C



Natural chords for the Relative minor. Suitable for composing English folk songs.

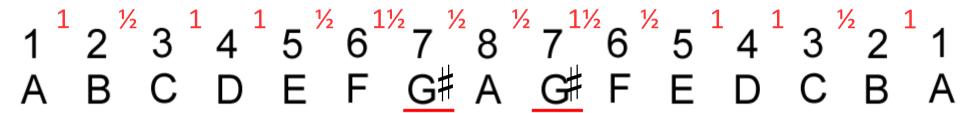


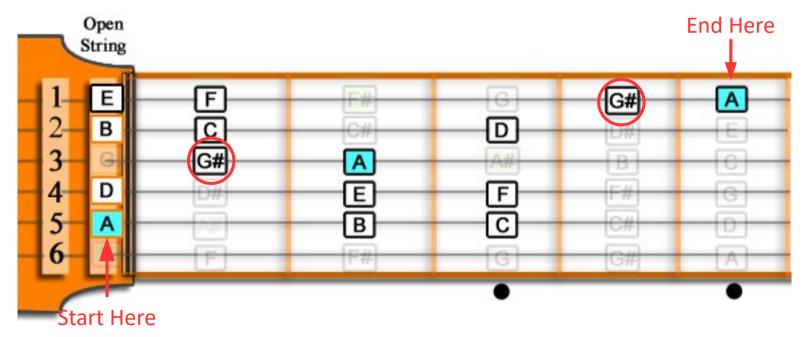
The 1-4-5 chords natural to a scale are the main feature.

A Harmonic Minor

<u>A harmonic Minor</u> – the <u>G</u> note has been replaced with a <u>G#</u> Two octaves low to high and back again. Listen to the difference the G# makes.

Intervals between notes

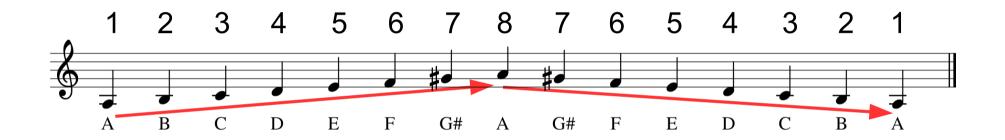




A Harmonic Minor and Chords

Harmonic minor –

G# is written as an accidental because we're still in the scale of C, with 0 sharp key signature.



Natural chords for the Harmonic minor. Suitable for composing English folk songs.

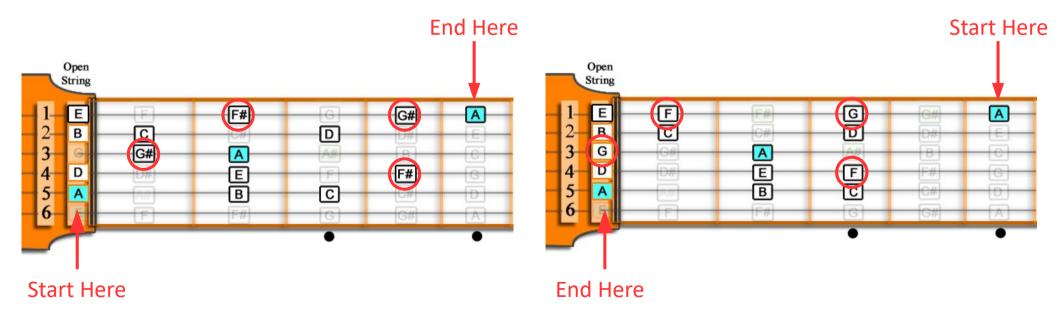
The 1-4-5 chords natural to a scale are the main feature.

A Melodic Minor

Another Minor Scale all based on the relative minor of C Major.

Two octaves low to high (include F# - G#) and back again (without F# - G#)

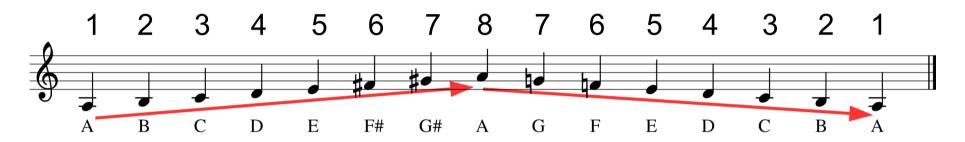
Intervals between notes



A Melodic Minor and Chords

A Melodic Minor scale on the stave and the chords it produces.

G# and F# are written as accidentals because we're still in the scale of C, with 0 sharp key signature.



Chords from a Melodic Minor and their notes

Am	ACE	Bm 7♭5	BDFA
Bm	BDF#	C+	CEG#
C	CEG	Dm	DFA
D	DF#A	Em	EGB
E7	EG#BD	F#♭5	F#AC
F	FAC	G# ^O	G#BDF
G	GDB		

A Melodic Minor and Chords

As the name suggests the Melodic Minor scale is a very tuneful scale.

It offers every possibility to compose something special.

You can see this from the variety of chords available.

Chords from a Melodic Minor and their notes

Am	ACE	Bm 7♭5	BDFA
Bm	BDF#	C+	CEG#
С	CEG	Dm	DFA
D	DF#A	Em	EGB
E7	EG#BD	F#♭5	F#AC
F	FAC	G# ^O	G#BDF
G	GDB		

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The Music Readers Toolbox

When I was young I recorded all my daily practice sessions to listen to them later in the day. By the time I had taught myself the fretboard, scales and how to read music I was in a band and starting to make progress.

I could improvise using my ability to read music. I understood that if a scale could turn into a melody on the stave I could adapt a scale to play lead guitar.

The last piece of the puzzle were the chords in a sequence that didn't belong with the key and the bigger puzzle, how to solo over them.

One day I saw something that nobody (I think) had ever seen before. I worked out the modes that went with the expected changes.

Expected changes are a series of chords that replace the expected chords in any given key.

Here again are the natural chords for the scale of C (major)

Occasionally, a chord used in a songs chord sequence doesn't fit with those chords expected. (Hang in there, please.)

This happens when a songwriter, for example, thinks the Em chord is too soft for the words of the song or the F (major) chord is too strong.

I discovered the expected changes a long time ago when I was trying to improvise over them. I would spend many hours practising soloing.

If, in the key of C for example, an E (major) chord appeared when I was expecting an Em I knew the chord of E had a G# in it (E - G# - B), so I played the scale of C with a G# note added but it still didn't sound right.

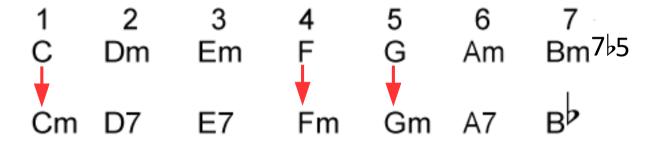
What surprised me were two other notes - C# and F# - I had to play. They didn't belong to the key of C either.

One day I realised what the problem was. **Expected Changes** were born.

From Major to Minor

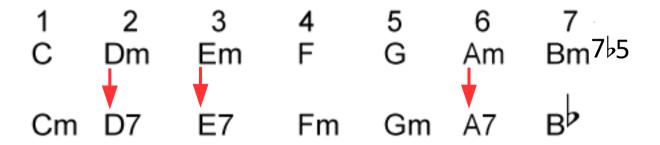
It was quite simple: The three major chords changed to minor chords.

Instantly changing strong chords to softer sounding chords



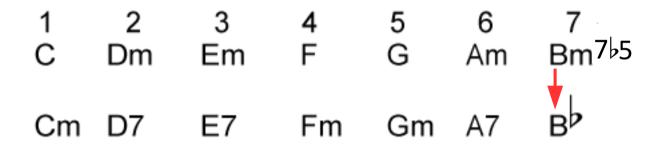
From Minor to Major

The three minor chords change to major.
Changing softer, dramatic chords to strong sounding chords.
Often with a dominant 7 adding more power to the sound.



The odd one out

The only one that needs some thought is the Bm $7\slash 5$ The expected change takes its name from the dominant 7 of C (major) The Bm $7\slash 5$ changed into the major chord B



Expected Changes – All keys

All scales function the same way.

The major chord become minor. The minor chords become major.



Expected Changes – The tricky bit

These expected changes are **key changes** – they are not natural to the key of C. Therefore the modes to play with the expected changes have to be found elsewhere.

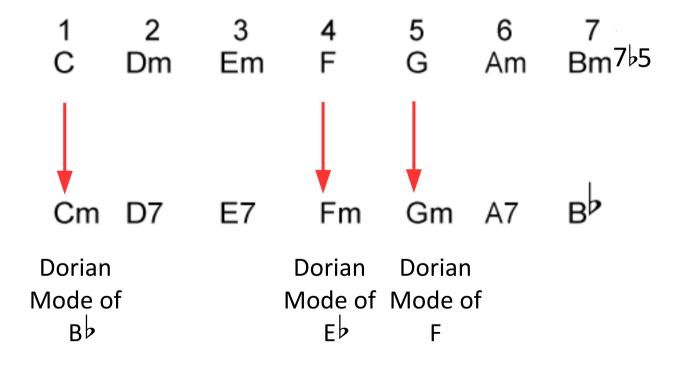
Here, again, are the names of the modes for all keys.

- 1. Ionian
- 2. Dorian
- 3. Phrygian
- 4. Lydian
- 5. Mixolydian
- 6. Aeolian
- 7. Locrian

Expected Changes – Dorian Modes

The modes to play with the expected changes are found in different keys. They match the key changes.

I discovered that to improvise over the major to minor expected changes I had to use **Dorian Modes**.



What does all this mean?

It meant I found an amazingly easy way to improvise over all the chords in any key. Improvisation is made from four parts.

<u>The first part</u> is where to find the notes you need on the guitar. (<u>Section 1 of this music manual – The fretboard</u>)

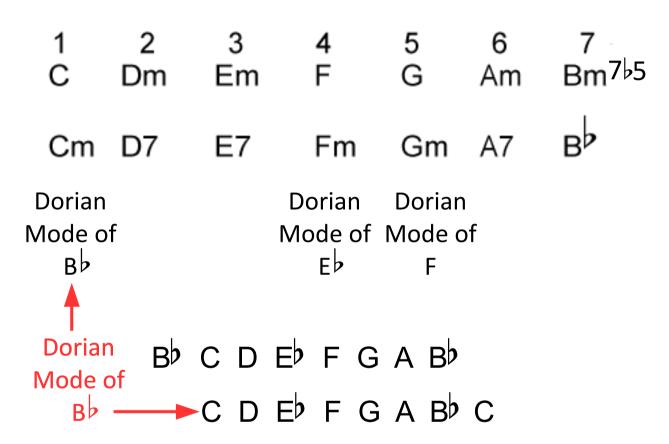
<u>The second part</u> is to understand how scales separate out the notes you need from the notes you don't.

(Section 2 of this music manual - scales)

The third part is to think of a scale as a tuneful thing. **(Section 3 of this music manual – music reading)**

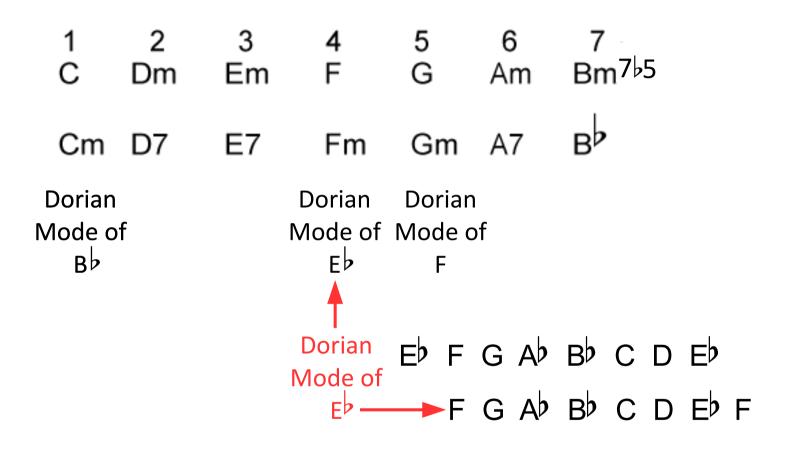
<u>The fourth part</u> is to understand Modes. <u>(Section 4 of this music manual – Modes and Chords)</u>

Putting it all into practice



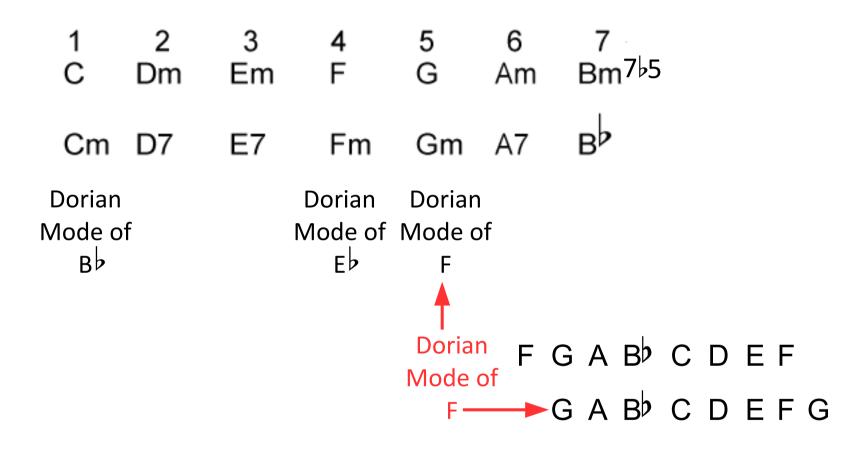
Basically, when playing / improvising in the key of C and the chord changes to Cm you wouldn't be expecting to play any flat notes when you solo. Knowing the key changes to the Dorian mode of B makes everything possible.

Putting it all into practice



Three flats this time. No problem, we're now using the Dorian mode of E

Putting it all into practice

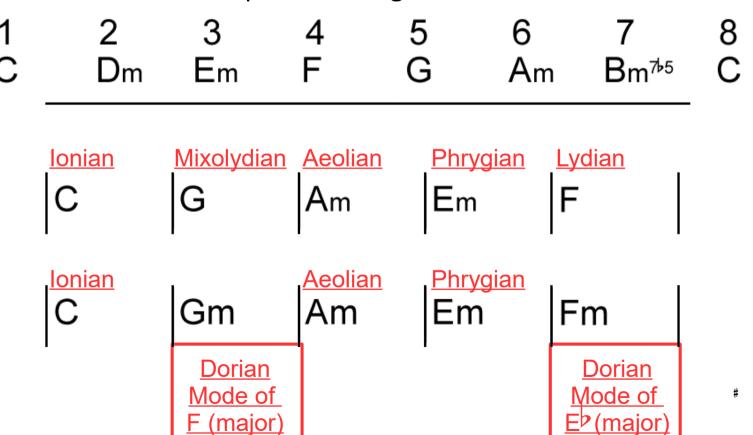


Only one flat this time. We're going to improvise using the Dorian mode of F.

A Chord Sequence with expected changes

Look at the chord sequence below. It's written in the key of C. On the second line the Gm (minor) and the Fm (minor) are the Expected Changes.

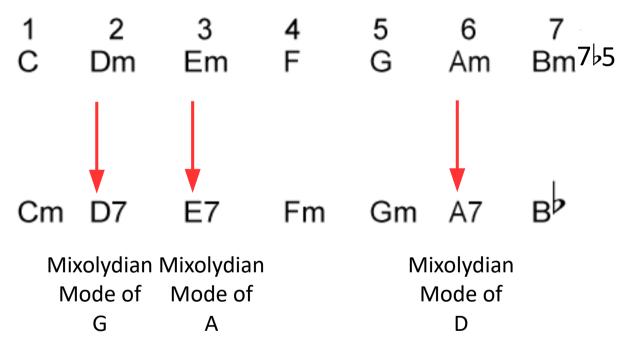
The modes the chords came from are written above the chords. The modes where the expected changes come from are written below.



Expected Changes – Mixolydian Modes

I then discovered to improvise over the minor to major expected changes I had to use **Mixolydian modes**.

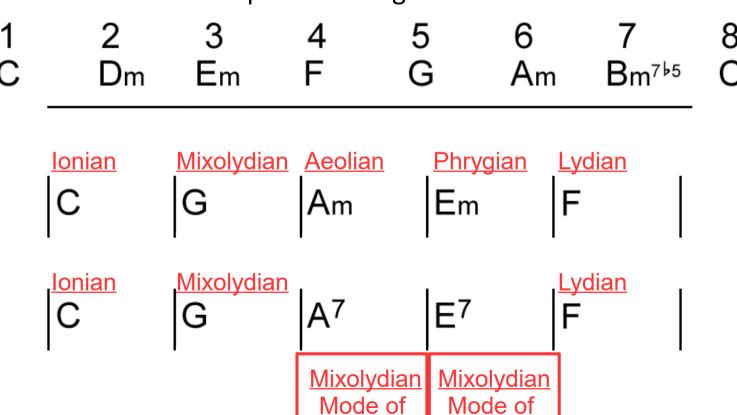
The minor to major expected changes use **Mixolydian Modes**.



Expected Changes – Use Mixolydian Modes

The chord sequence below Is written in the key of C. On the second line the A7 (major) and the E7 (major) are the Expected Changes.

The modes the chords came from are written above the chords. The modes where the expected changes come from are written below.

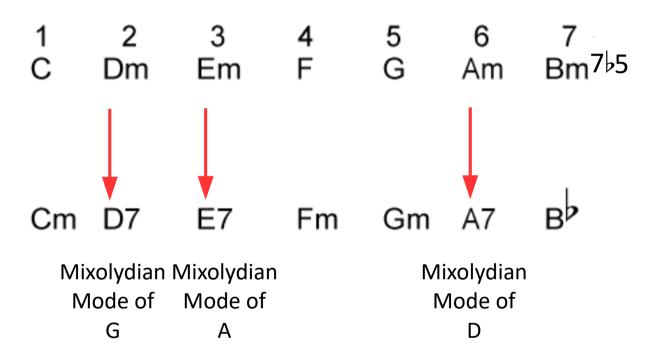


(major)

A (major)

Expected Changes – Mixolydian Modes

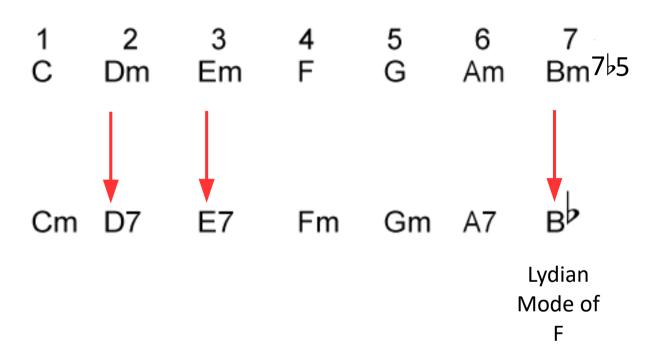
The minor to major expected changes use **Mixolydian Modes**.



This uses the same principles as the major to minor expected change this time it's the 5th note of a scale that gives us the clue. If, for example, the expected change is D7 find the scale with D as number five. That's the mixolydian mode we need to solo with.

Expected Changes – Lydian Mode

The mode for the expected change at the 7th note uses the **Lydian Mode**.

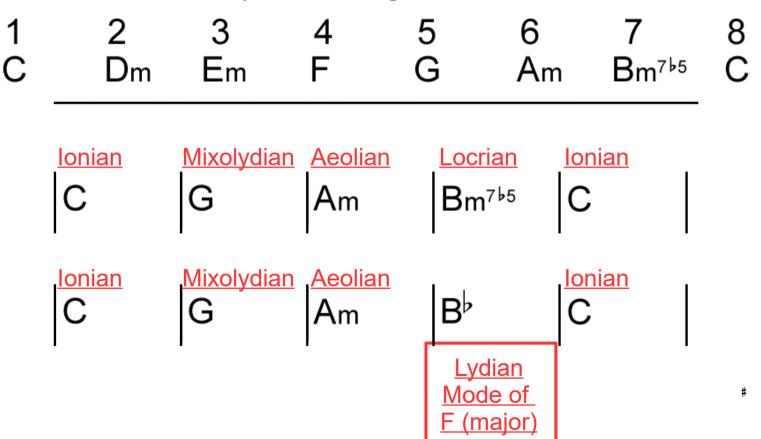


What I find so pleasing when I think back to day I made my great discovery was that I knew my modes, my fretboard and how to build chords. Without that knowledge and a whole load of practice it would have slipped away without me knowing.

Expected Changes – Use Lydian Mode

Look at the chord sequence below. It's written in the key of C. On the second line the $B \not\models (major)$ is the Expected Change.

The modes the chords came from are written above the chords. The mode where the expected changes comes from is written below.



Improvisation

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Improvisation: The Fretboard

Nobody can teach you to improvise, not even me. All I can do is give you the tools and let let you work it out. I've already given you the tools and left enough clues to help you improvise with speed and accuracy.

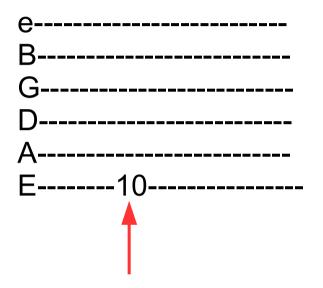
Improvisation is built into every aspect of my Stave Breakthrough method. I have been talking about improvisation from the very first page of this music manual.

We began this course by naming the sounds on the fretboard and discovering each fret and it's accompanying note.

The names of the fretboard notes were used in music reading, scales and chords sections. Therefore it's very important.

TAB: Don't waste your time on it

Using TAB offers little or no help to finding a note name of the fretboard.



This is easy to play. Put your finger on fret 10 string 6. The question is, can you play the same note on a different string?

Not unless you know it's a D note, then you can play the note on fret 5 string 5 and open string 4.

The Stave - The home of improvisation

Learning the stave is so much more than learning how to play a tune.

Everything you need for improvisation is on the stave.

- Key signatures
- Time signatures
- Timing of notes
- Positions of notes on fretboard
- Fast fingers
- Dynamics
- Performance

Improvisation: Chords and Modes

The next and final step is to play chords and modes together.

This is at the very heart of improvisation because when accompanying a singer the mode has to fill a space left when, even for a few beats, the vocals stop.

It's the same when soloing over a whole verse without any vocals.

After this, all you have to do is make stuff up.

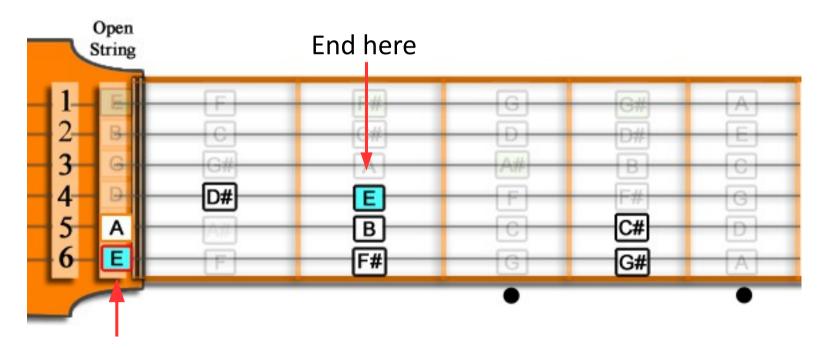
We're going to play some modes.

Play the Ionian Mode - Scale E

Play the Ionian mode from string 6 to string 4. Low to high and back again as fast as you can.

Stay on notes 1 - 3 - 5 a little longer than the others.

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

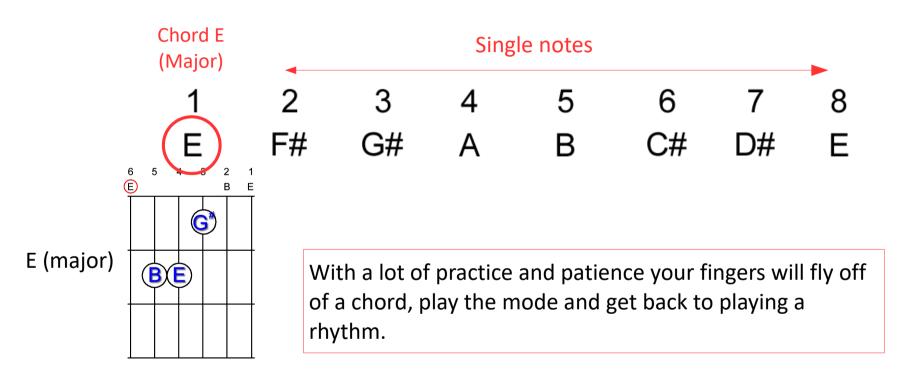


Start here

Start the mode with the chord of E (major)

Repeat the previous page replacing the first note of the mode with E (major)

Ionian Mode

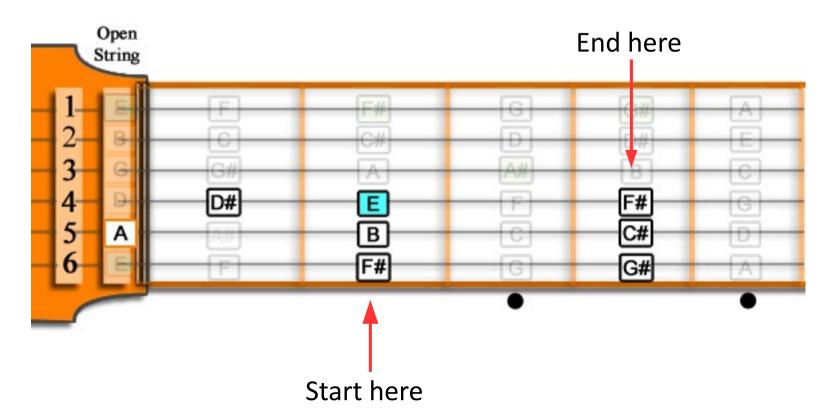


Play the Dorian Mode - Scale E

Play the Dorian mode from string 6 to string 4. Low to high and back again as fast as you can.

Stay on intervals 1 - 3 - 5 a little longer than the others.

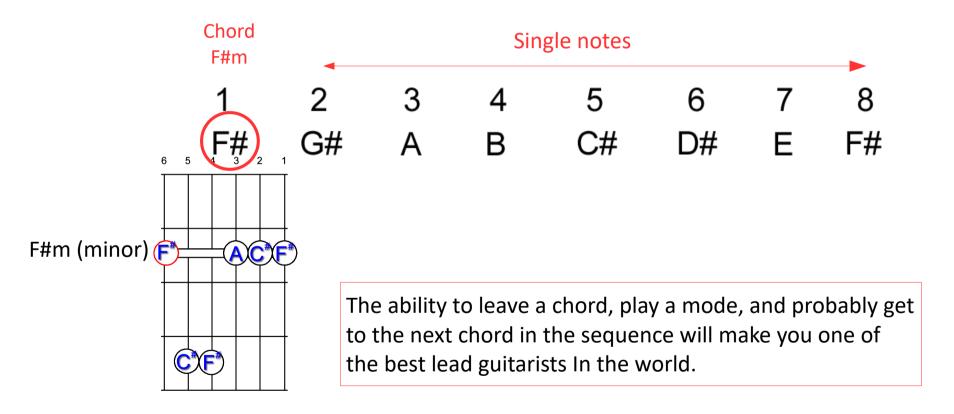
1 2 3 4 5 6 7 8 F# G# A B C# D# E F#



Start the mode with the chord of F#m (minor)

Repeat the previous page replacing the first note of the mode with F#m (minor)

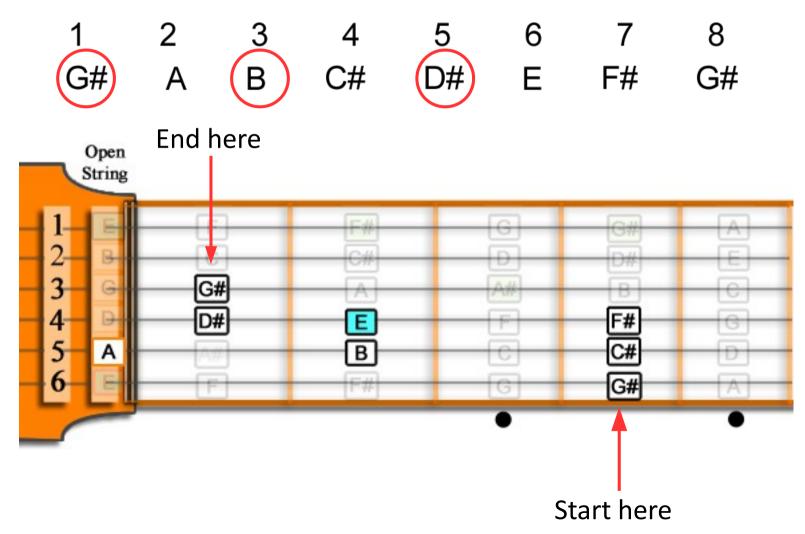
Dorian Mode



Play the Phrygian Mode - Scale E

Play the Phrygian mode from string 6 to string 4. Low to high and back again as fast as you can.

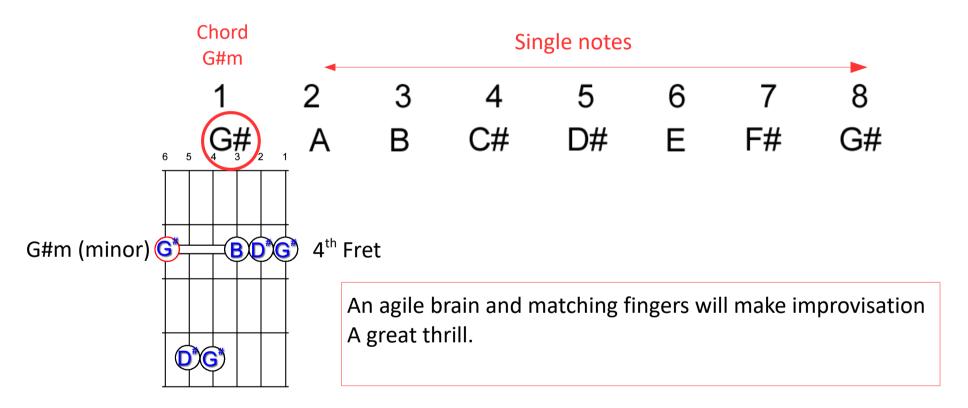
Stay on intervals 1 - 3 - 5 a little longer than the others.



Start the mode with the chord of G#m (minor)

Repeat the previous page replacing the first note of the mode with G#m (minor)

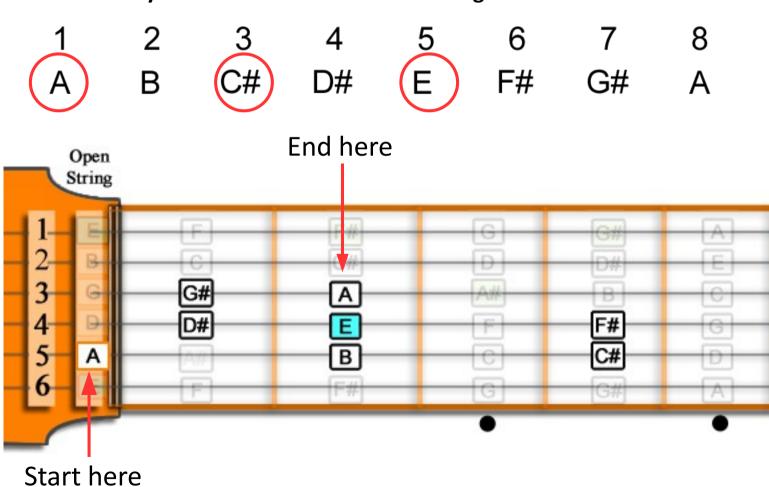
Phrygian Mode



Play the Lydian Mode - Scale E

Play the Lydian mode from string 5 to string 3. Low to high and back again as fast as you can.

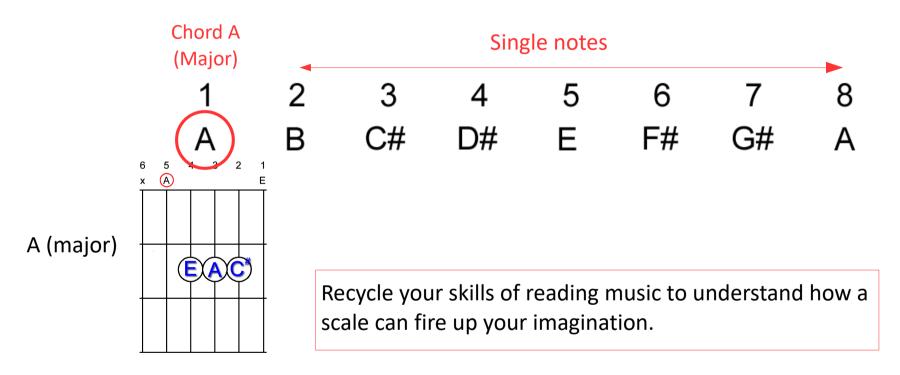
Stay on intervals 1 - 3 - 5 a little longer than the others.



Start the mode with the chord of A (major)

Repeat the previous page replacing the first note of the mode with A (major)

Lydian Mode

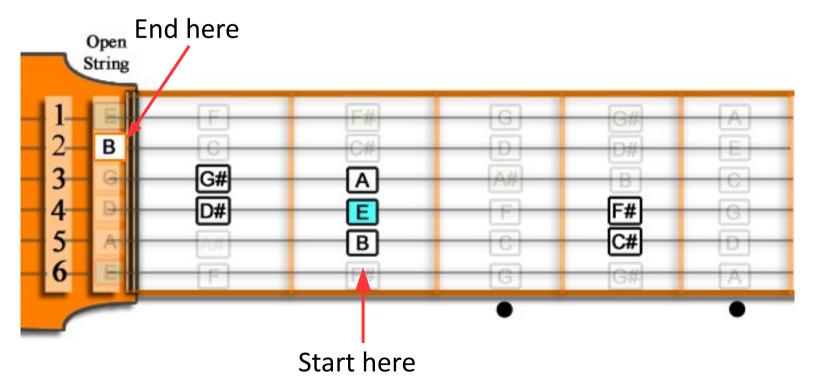


Play the Mixolydian Mode - Scale E

Play the Mixolydian mode from string 5 to string 2. Low to high and back again as fast as you can.

Stay on intervals 1 - 3 - 5 a little longer than the others.

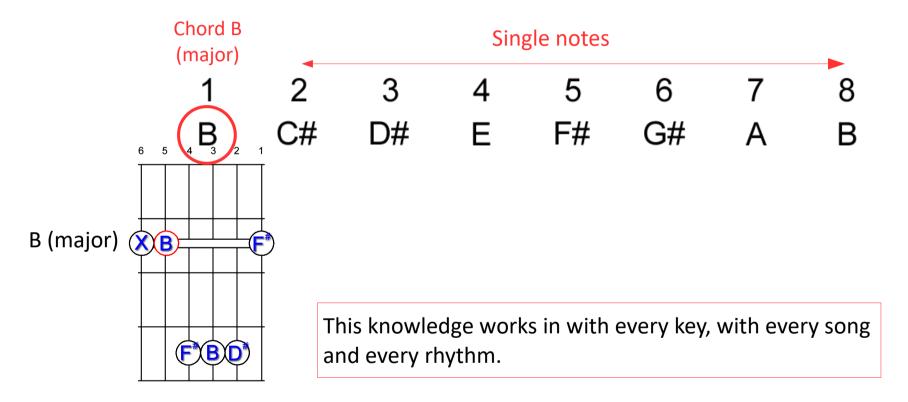
1 2 3 4 5 6 7 8 B C# D# E F# G# A B



Start the mode with the chord of B (major)

Repeat the previous page replacing the first note of the mode with B (major)

Mixolydian Mode

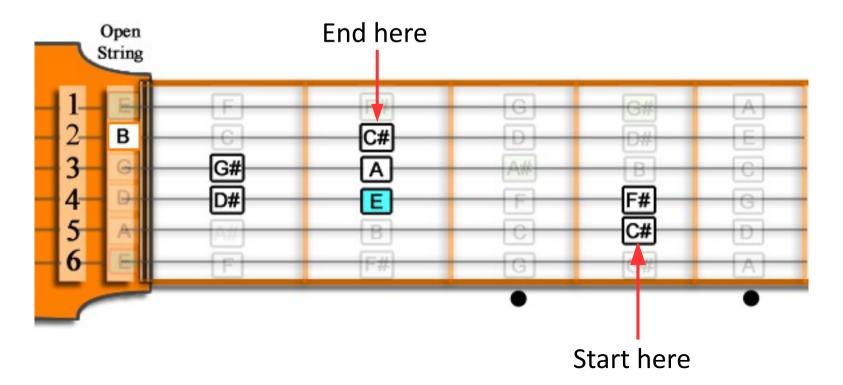


Play the Aeolian Mode - Scale E

Play the Aeolian mode from string 5 to string 2. Low to high and back again as fast as you can.

Stay on intervals 1 - 3 - 5 a little longer than the others.

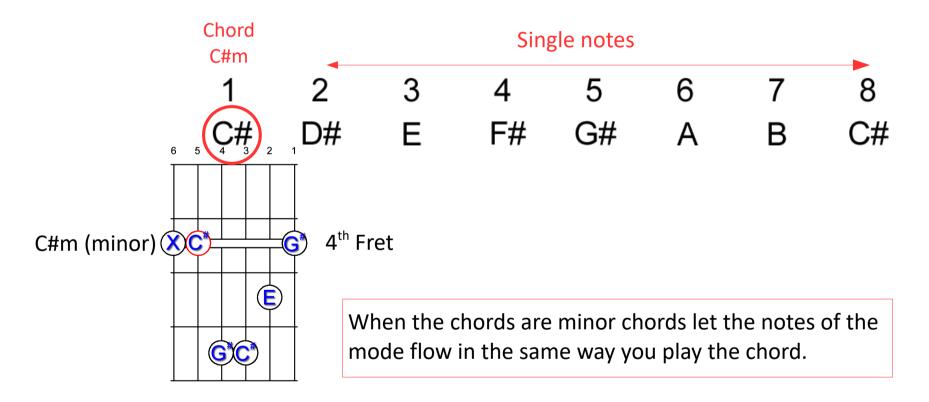
1 2 3 4 5 6 7 8 C# D# E F# G# A B C#



Start the mode with the chord of C#m (minor)

Repeat the previous page replacing the first note of the mode with C#m (minor)

Aeolian Mode

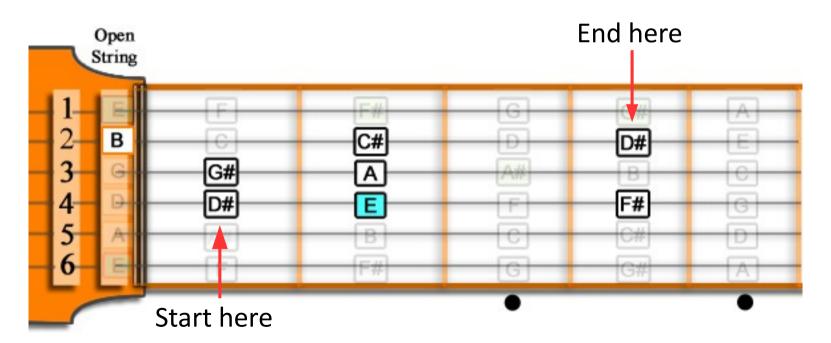


Play the Locrian Mode - Scale E

Play the Aeolian mode from string 5 to string 2. Low to high and back again as fast as you can.

Stay on intervals 1-3-5-7 a little longer than the others.

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

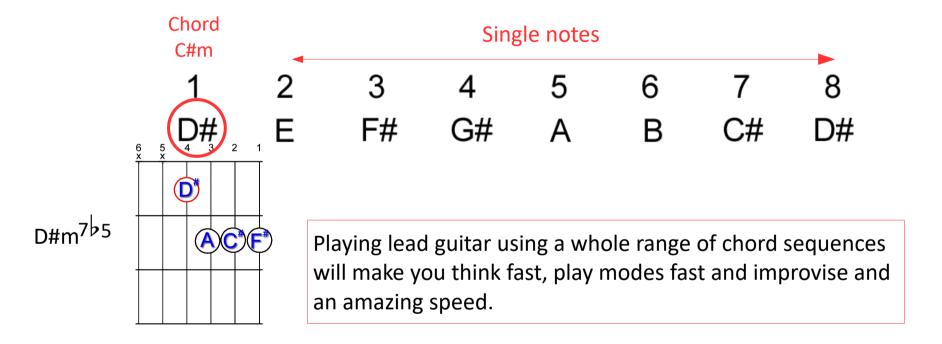


Start the mode with the chord of D#m^{7/5}

(D# minor 7th flat 5th)

Repeat the previous page replacing the first note of the mode with D#m 7 5

Locrian Mode



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Summary

The information within these lessons is there for you to think through and practise. How you use it is for you to decide. It's all a challenge.

We began with a blank fretboard and finished by planting the seeds of improvisation.

You may think of The Music Readers Toolbox as a reference book or your music teachers best friend.

Choosing to study guitar using The Music Readers Toolbox will begin a chain of events that will give your playing a future.

This course is for complete beginners and experienced musicians.

I suggest, whatever rung you are on the ladder to success, go back to the beginning and start reading The Music Readers Toolbox again.

Whenever you are in need of support these pages are here for you.