

Fundamentals Of Guitar Fretboard Theory

A Map To Help You Find Your Way
Around On The Guitar Neck

- Here is that basic information -
The stuff guitar players should know
(Sooner better than later)

This book is not directed toward any
particular style of guitar playing, nor any
particular genre of music.

Just A simple step by step explanation,
a guide to understanding.

NOTE TO BOOK SALESPERSONS AND GUITAR INSTRUCTORS:
File this book under Guitar Chord Books.

NOTE FROM THE AUTHOR: Although this book can be
used to great advantage as a guitar chord book,
it has been written and designed as a guide to get
around on the guitar "neck". A simple technique
using those common E, A, D, G, C, and F guitar
chord shapes ("forms", "voicings") as the tool.

By Stan Hirsch

(c)2014

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- The "musical alphabet" (Chromatic scale - semi-tone scale)
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(used in virtually all guitar playing!)

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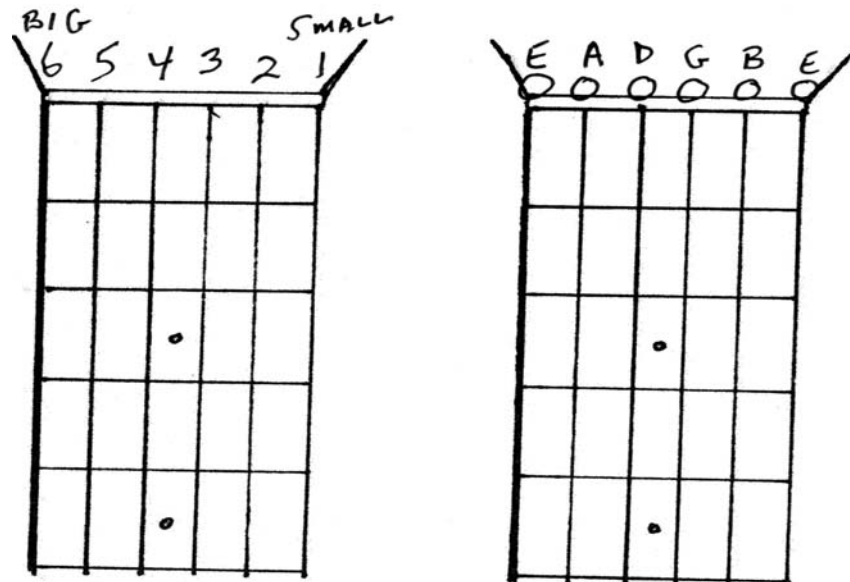
- Scales as seen thru those chord "shapes"
(Basic scale usage)

IN CONCLUSION: You should know how to...

PREFACE: First Things First

Here are the first two things you need.

(1) The names and numbers of the strings



(2) The "musical alphabet"

(Chromatic scale/semi-tone scale)

A | A#/Bb | B | C | C#/Db | D | D#/Eb | E | F | F#/Gb | G | G#/Ab | A

-These are in 1/2 (half) steps = one fret apart.

-12 note system (all equal)

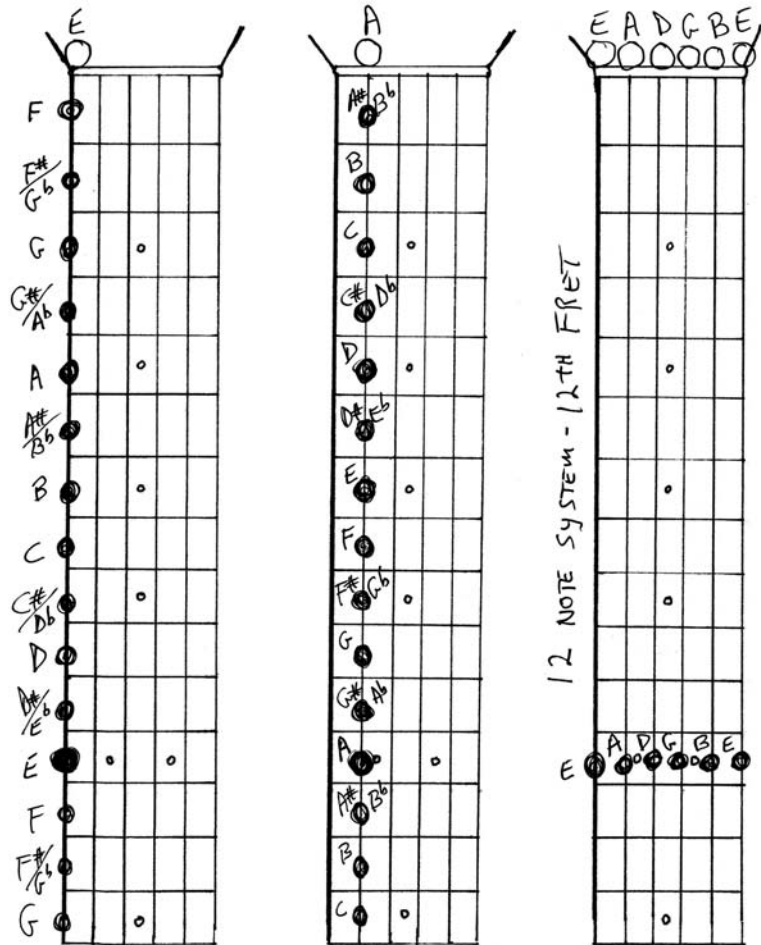
-Some notes have two names.

Sharp (#) and Flat (b) name. Not a more special or less special note than those with just one name! Which one to use? Don't worry, just know that five of these notes have two names!

Now, with these two things, you have a system to name every note on the guitar neck!

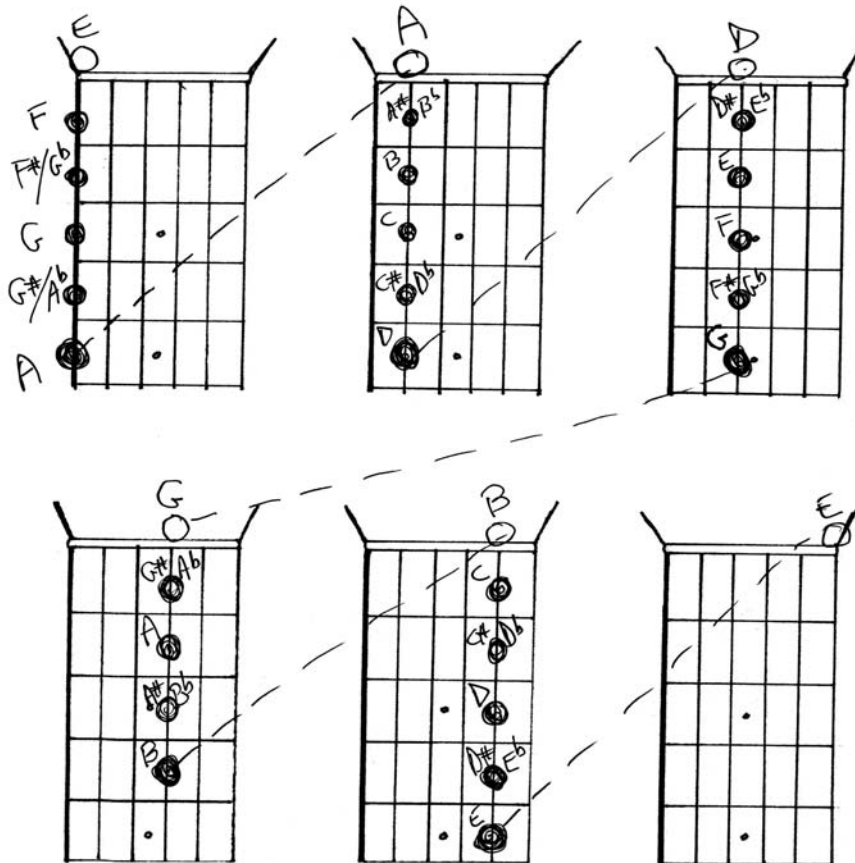
OK, now apply that info. to the guitar neck!

We just start with the note name of each open string
 And move on up the neck (up is toward the guitar body).



OK, I went up the 6th and 5th string for you.
 You should know how to do this for all strings.
 Also note how the alphabet starts over on the 12th
 fret (12 note system). That same name note on the
 12th fret is an OCTAVE higher than the open string!

This same info. gives us a way to tune the guitar!
 By using this method, the guitar will be in tune to itself.
 It is also a good way just to check out how you can play
 the same note/same octave in more than one place.

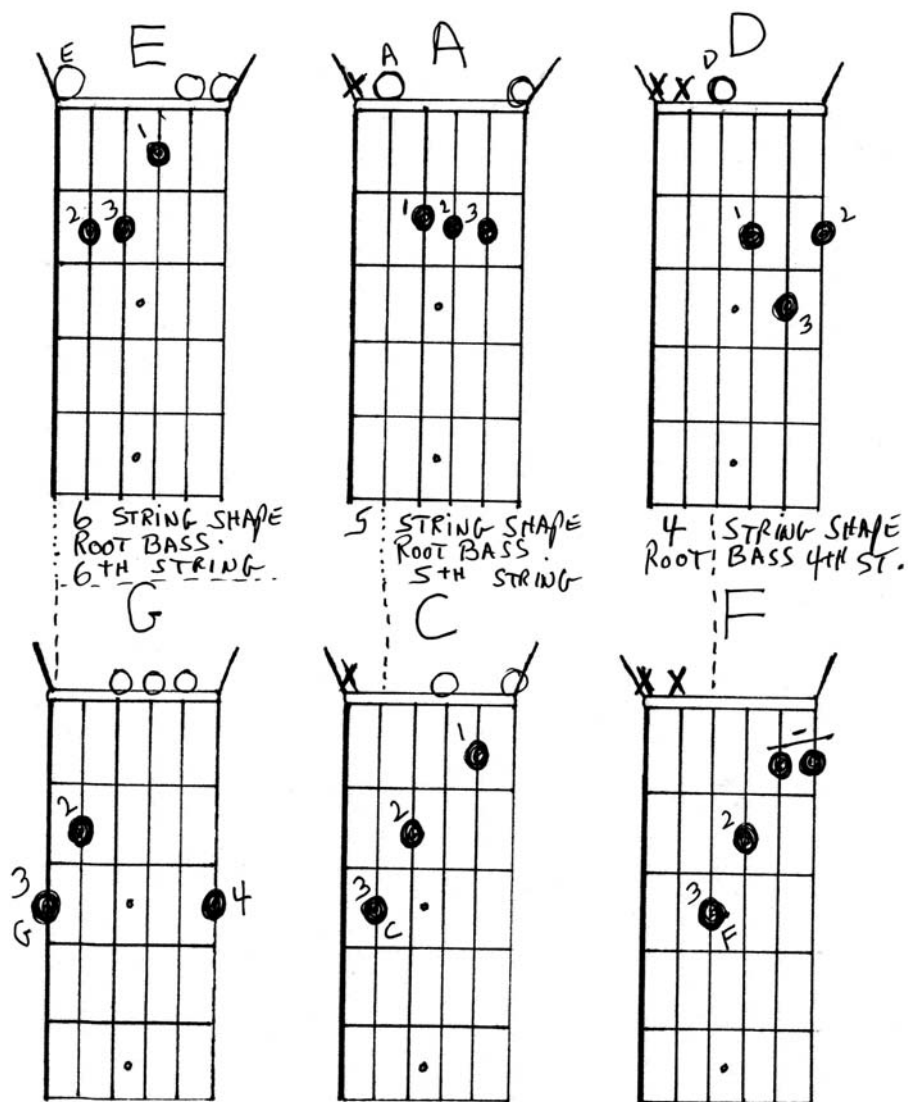


6th string/5th fret=5th string open
 5th string/5th fret=4th string open
 4th string/5th fret=3rd string open
 Pay attention- cause 3rd string/4th fret=2nd string open
 OK, then back to 2nd string/5th fret=1st string open

You do not need a tuning device to be in tune to yourself!

LESSON ONE:

There are only 6 guitar chord "shapes"
(forms, voicings)
used in virtually all guitar playing!
Thousands of chords! 6 SHAPES!



As you can see here:

Root bass note for the E and G shapes is on the 6th string.
Root bass note for the A and C shapes is on the 5th string.
Root bass note for the D and F shapes is on the 4th string.

LESSON TWO: Major to Minor

Those 6 chords from lesson one are all major chords

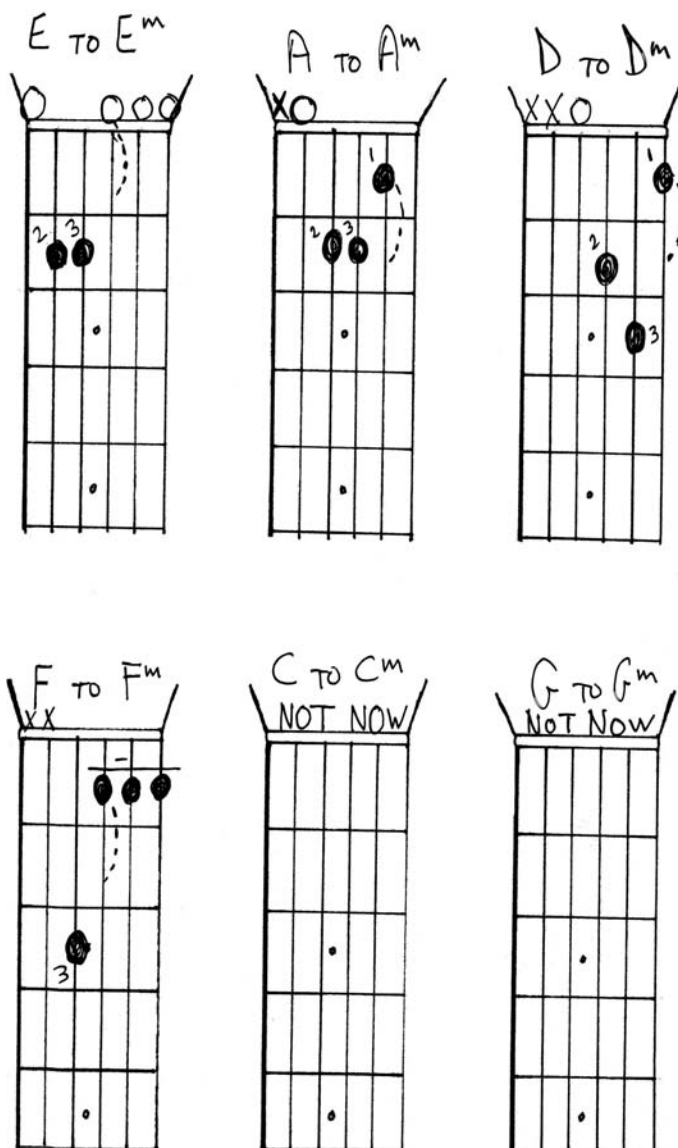
E A D G C F

(You do not need to indicate major in their name.)

Let's now turn those into Minor chords.

To do that we lower the one note in the chord that controls the Major/Minor identity. (1/2 step down - One fret lower.)

OK, How do you know what note that is? Most importantly for now, just know which string in each shape controls that major/minor identity!



Taking a test? It's the 3rd lowered down to the flat 3rd.

LESSON THREE: TIME

[Sorry, small detour- nothing to do with the guitar fretboard.?)
Here, and in most all music, you need to go from chord to chord in "unbroken" time.

First- The Clock tick tick tick tick tick (all even)

Divide the ticks into groups. Let's say groups of four.

|tick tick tick tick |tick tick tick tick| (on & on)

Let's call each tick a "beat" and number them, and count.

```
|tick tick tick tick |tick tick tick tick |
| / / / / | / / / / |
one two three four one two three four
```

Now we just decide which chords to play and how many beats each chord gets.
This is the basic underlying structure of most all "songs"

OK, So Make Music!

You've Got The Chords -Any chord(s) will do. Any order.
Just one chord over and over-two chords back and forth,
3 or 4 or more(The order is called the "chord Progression")

Playing "songs", eventually you will wind up using all of them in any order you can imagine. So, you must learn to go from any chord to any other chord in "UNBROKEN TIME".

Maybe start with playing a progression like this:
(The example given below is in "Four Time"- Try 3.)

```
|Am | C | Am | E |Am | E | C | Am |
//// //// //// //// //// //// //// ////
```

Just strum once (down) on each beat, BUT! Make sure you are going from beat to beat on the same chord and from chord to chord in "UNBROKEN" time. Do not "stall" between chord changes! If needed leave current chord early to make sure you get to that next chord right on the first beat!(But, keep "strumming/picking" hand moving, even if it just slightly sounds the open strings between changes.)

Why not try a new chord on each beat?) WOW!

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|Am E Am C|(eventually you will need to do it.)
/ / / /
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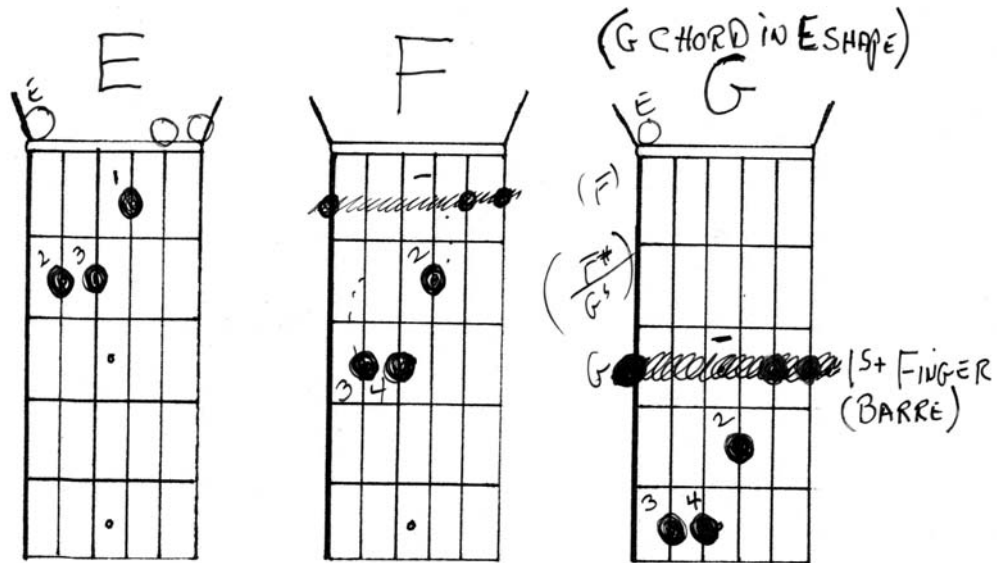

LESSON FOUR:
Barre Chords

Now, turn each one of these chords
(E, A, D, G, C, F, Em, Am, Dm, Fm,)
Into twelve chords!

Here is that "musical alphabet" again.

A | A#/Bb | B | C | C#/Db | D | D#/Eb | E | F | F#/Gb | G | G#/Ab | A

Referring to it--How far must I bring E to G?
E-F-F#(Gb)-G. Looks like three frets up. OK then,
Let's bring that E up to G. (G chord in E "shape".)



Since that E chord (in E shape) has three open strings as part of the chord, we must also bring those up!

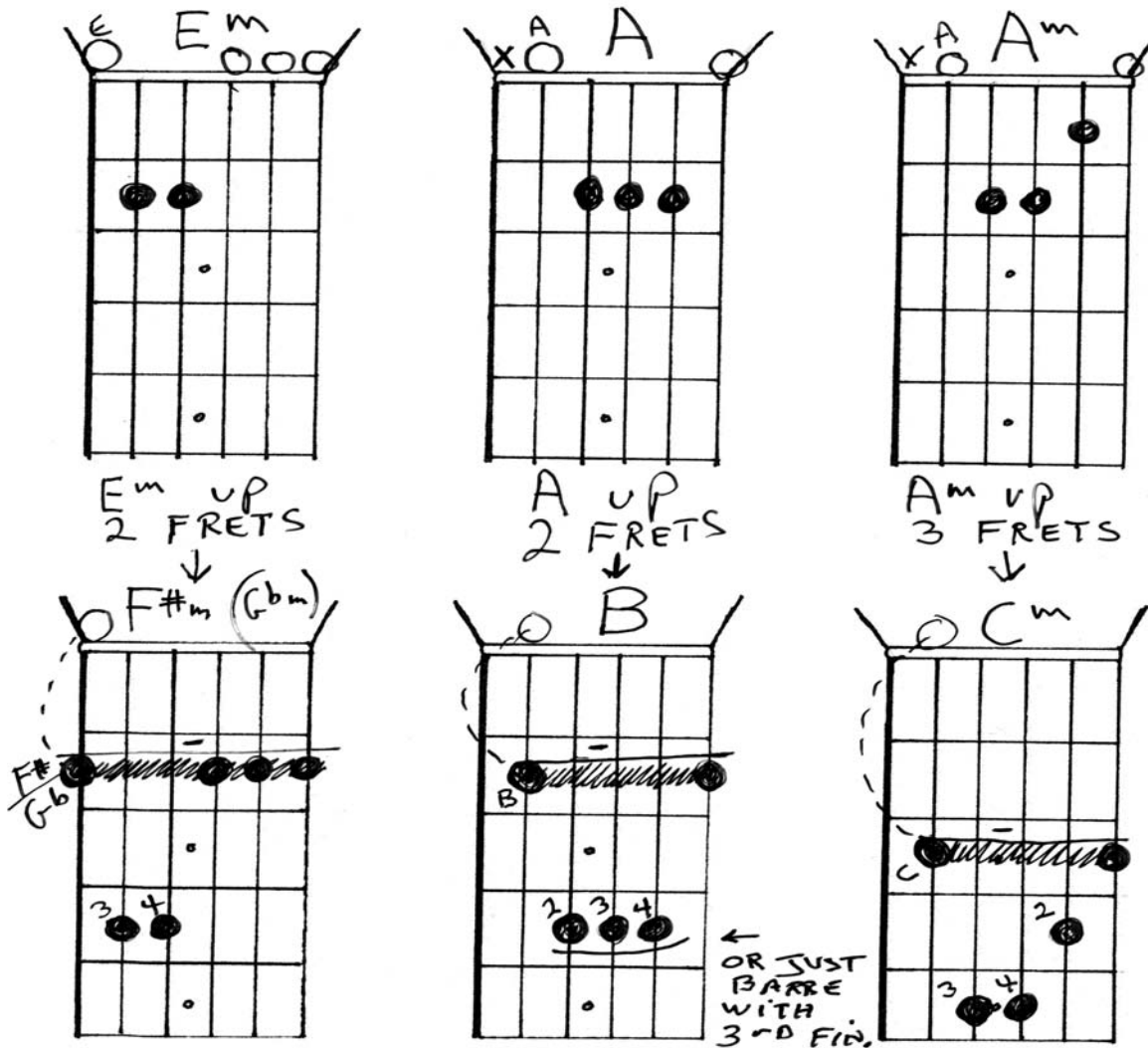
To accomplish that we must free our first finger to act as a "Barre" thus using our other 3 fingers to grab hold of that original "E shape" chord. Next page - OK, Let's try moving some more chords on up the neck!

Lesson four -con't

Bring Em up 2 frets (a whole step) Em-Fm-F#m(Gbm)

Bring A chord up 2 frets A-A#(Bb)-B

Bring Am chord up 3 frets (a step and a half)



That root bass note on the Em chord is on the 6th string because it is in E shape-

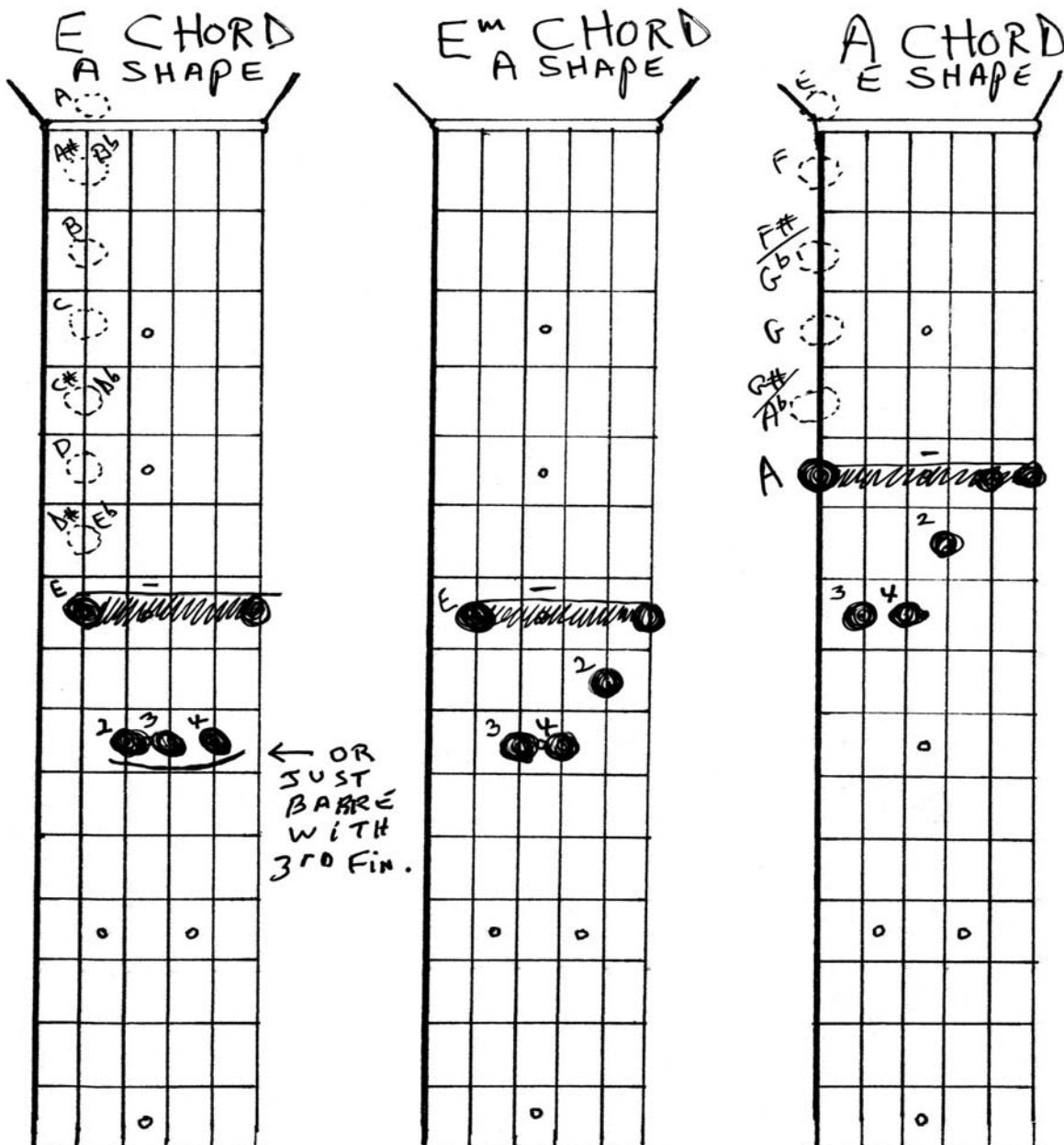
The A (Am) root bass note is on the 5th string because they are shown here in A shape.

But remember, we can play any chord in any shape!

And all chords in just one shape!

Let's try an E chord in A shape.

While we are at it--Em in A shape.
 What about an A chord in E shape.



So, remember, -The string that the root bass note is on is dictated by the "Chord Shape" you are moving up.

How far up you need to move that "shape", depends on the chord you are looking for.

Lesson four con't

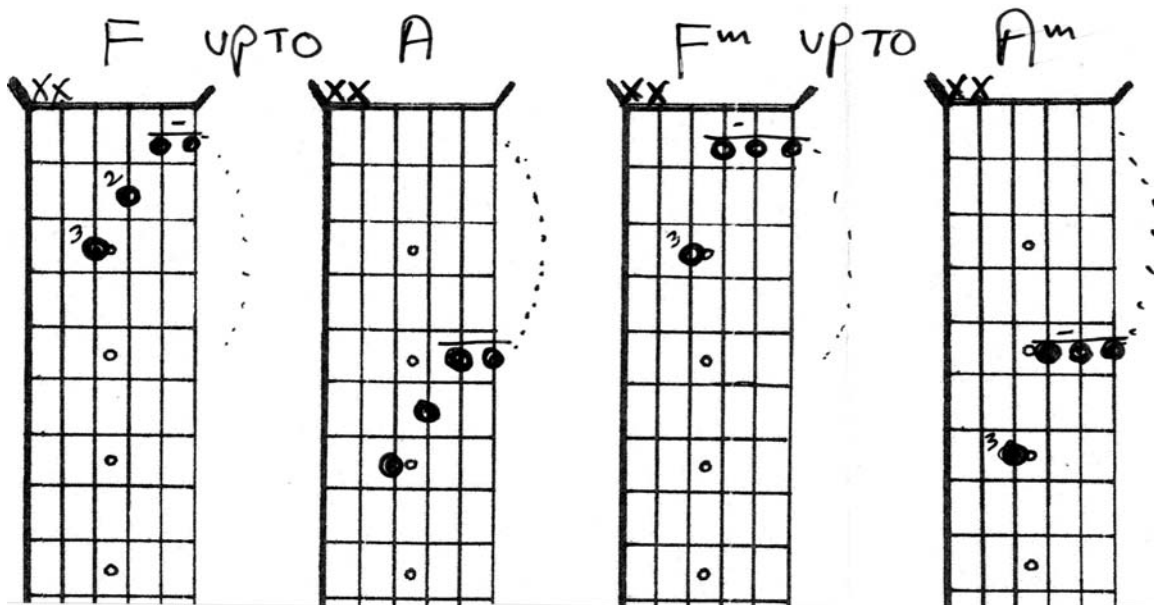
OK, so the thing is we can bring any of those 6 chord shapes up the neck. Just free our first finger to use as a barre--and---bring it on up.
 (On up the neck for 12 different chords!)

In other words: That E chord in "E SHAPE"
 ("1st. position" - "open position")
 is barred on these frets to form all these 12
 different chords, but, all in E Shape.

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

This works for any chord. Major or minor. The chord will keep it's major/minor identity, just the root note changes.

I really like just moving that 4 string F shape up!
 The cool thing is you don't need to change fingering. Also, you've got these cool little "lead guitar" high notes.

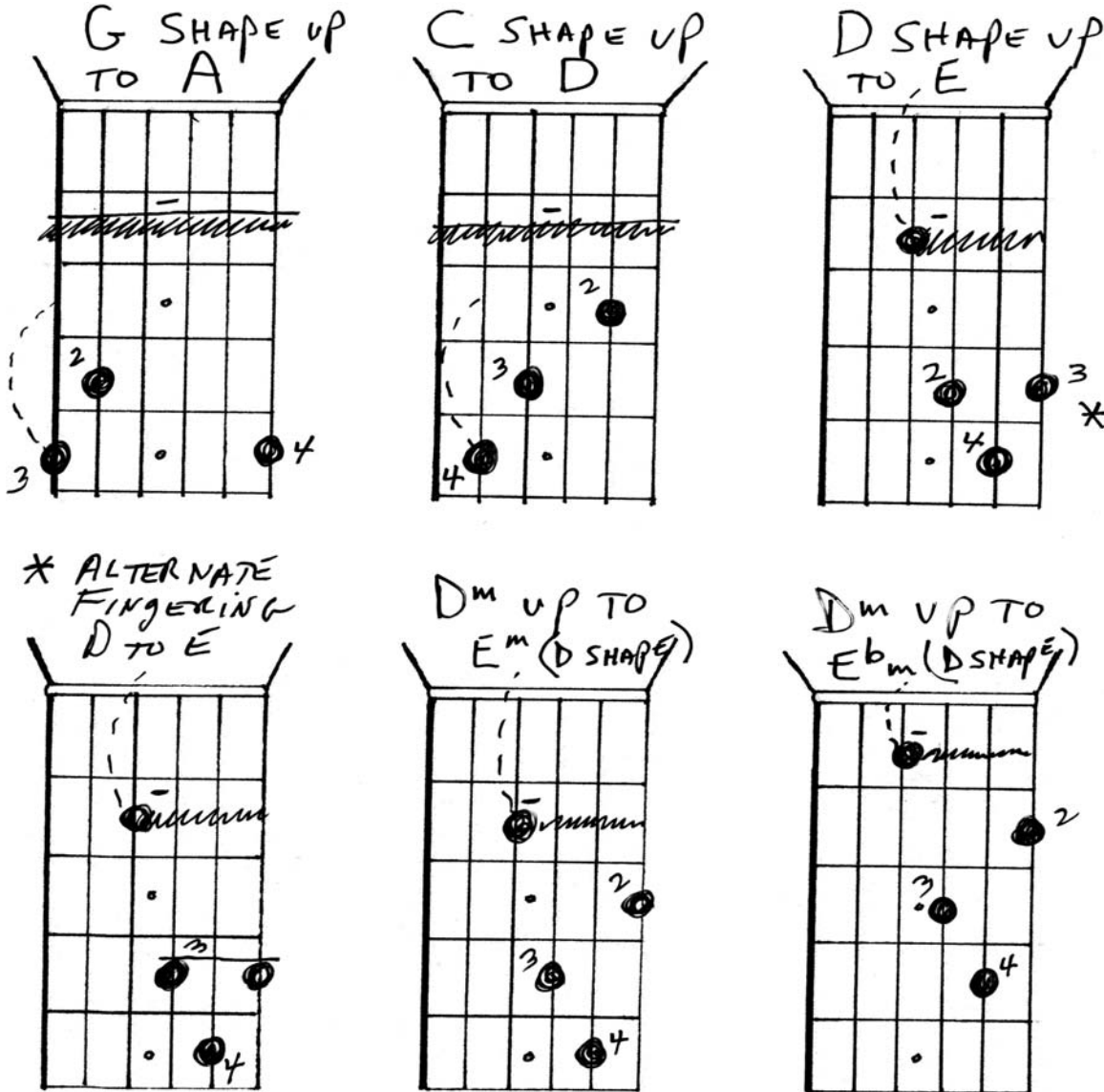


NOTE: Many players think of this "F shape" chord as just an abbreviated "E shape" Barre chord. In either case, the four small strings are the same.

LESSON FOUR con't

The E, A, and F shape chords are the most popular to bring up the neck, but, to add to your awareness let's just look at the G, C and D shapes "barred".

Bring the G shape up to A That's two frets (one whole step)
 Bring the C shape up to D That's two frets (one whole step)
 Bring the D shape up to E That's two frets (one whole step)
 What about Dm up two for Em in D shape!
 What about Dm up one fret (half step) for Ebm in D shape!



OK, So any chord in all shapes (all chords in any one shape).

LESSON FIVE

The "Strumming/Picking" Hand

[Another small detour- nothing to do with the guitar fretboard.?)

Since this book is a guide to the fretboard, it's focus is on the fretting hand. But all these chords are placed into the time frame created by the strong hand.

It is easy to think that the goal here is the fingers forming (fretting) the chords. And you would be correct in thinking that. But, the goal in music making is to organize all that into perfectly steady "unbroken" time.

This applies to single notes, multiple notes, chords, hand clapping, -Music making-sound organized by time.

The work needed to form (finger) all those chords may distract your attention away from that hand reserved for music making. (Right hand for right handed people, left hand for left handed people.)

That dominant hand is used for that most important job of plugging into and organizing that flow of time.

"Strumming/Picking" is just a very specialized refinement of the hand. (Much like holding a rattle or shaker and moving it up & down, back & forth.)(The sound of one hand clapping)

This book does not get into all the various strumming and picking patterns. Those using a flatpick or Thumb/finger or whatever. (there are plenty of instructional materials that cover that (including my own).

The only thing I suggest (Lesson three in this book), is to strum down those strings used in each chord, once on each beat (tick of that clock). Keeping it organized in the flow of time (any "speed" tempo). No stalling or retarding between beats, and no stalling between chord changes.

(To not stall between changes, you might just leave the chord currently being played a bit early, in order to get to the next chord right on the clock.)

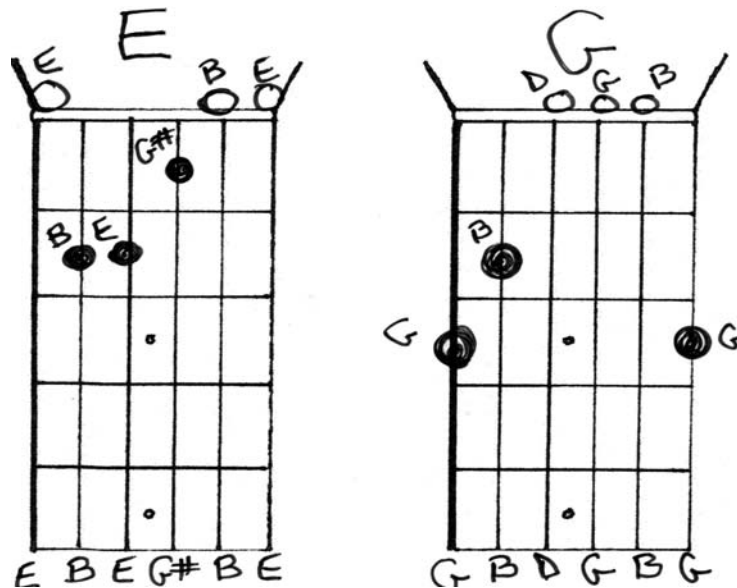
LESSON SIX:

Building upon those major and minor chords

OK, so you know the E, A, D, G, C, F, shapes. You know how to take four of those shapes and make them minor chords Em, Am, Dm, Fm. You know how to turn each one of these ten into twelve (up one fret at a time following that alphabet).

THAT SAID---(Now Triads)

All those major and minor chords are three note chords. (You may be playing 6, 5, and 4 strings, but that is just because many of the notes in the chord are played (voiced) on more than one string.)(You have the tools to see that!)



Ok, Let's now build upon these triads and form some of the most popular four note chords. Do not fear!

These chords have numbers attached to them.

Like--E7 Em7 A7 Am7 C7 G7 D7 F7

So, "7th" chords and "minor 7th" chords

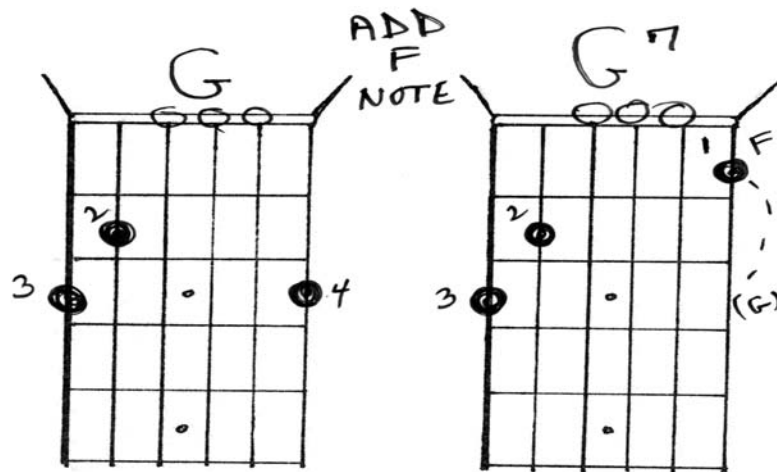
I will give a brief explanation (at the end of the lesson) concerning which note to add to the triad that makes it a "7th" chord. But, this book is giving you the tools to understand the fretboard, it is not a chord theory book. *Taking a test? The three notes in the major triad are Root, 3rd, 5th. In the minor triad - Root, flat(b)3rd, 5th.*

Lesson Six con't

Let's add one more note to our existing major and minor triads to form "7th" (dominant 7) chords and minor 7th chords. OK, What note?

That note is one whole step below the root note. That's two notes down the alphabet!

G chord then needs a F note---RIGHT! Now, that note can be played (voiced) on any string. In the examples below, I will voice it (put it) in it's most popular place, although you can put it any place.



On the next page we will add that note to the other shapes.

C note to D Chord.

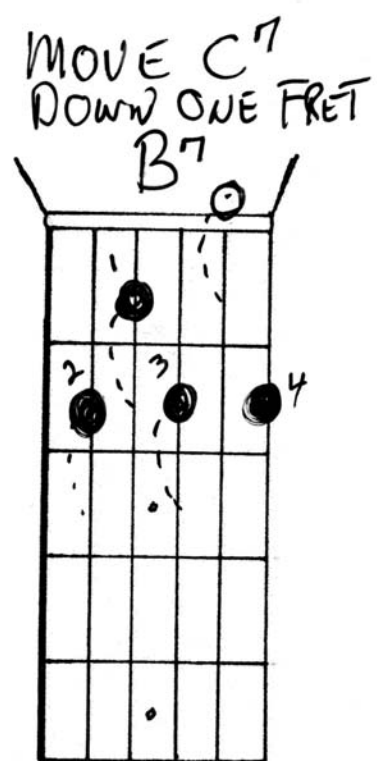
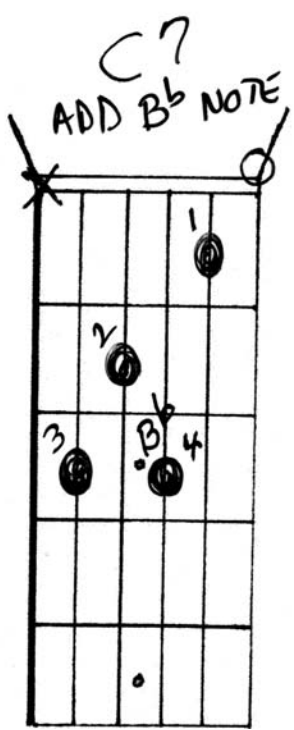
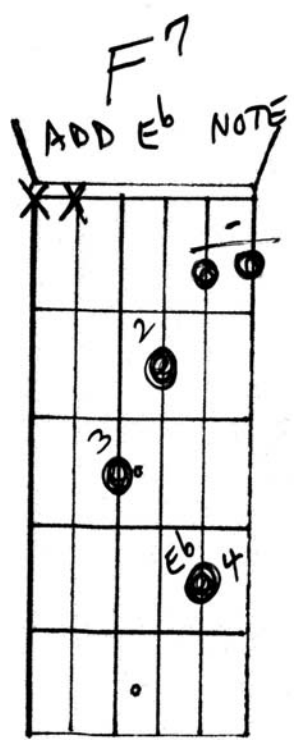
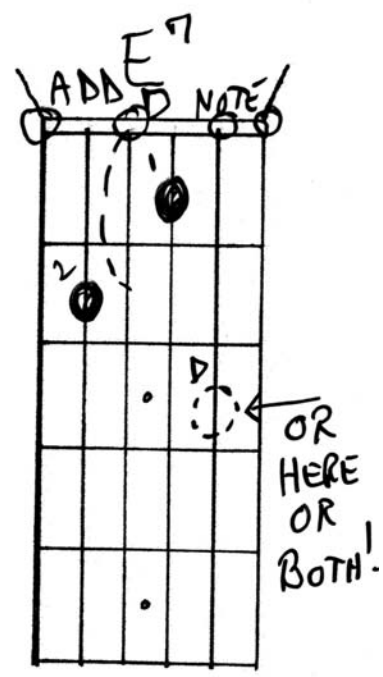
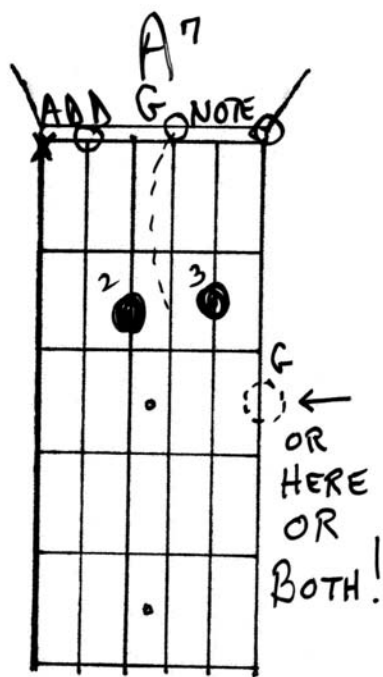
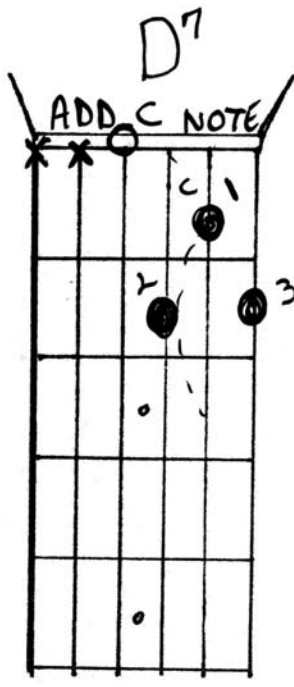
G note to A Chord.

D note to E Chord.

E_b note to F Chord.

B_b note to C Chord.

C7 down one fret (half step) to popular B7 Chord!

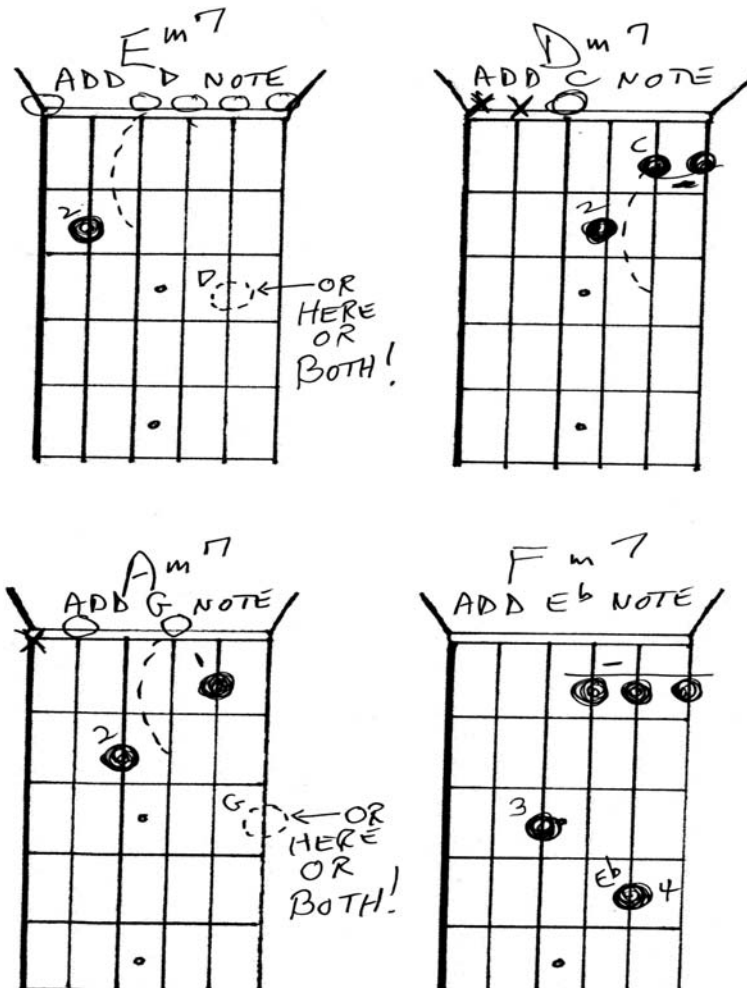


Lesson Six con't

Let's add that same note (a whole step below root), to the minor triads forming minor 7th chords.

So, by adding a note we've turned those four minor triads (from lesson two) into minor 7th chords.

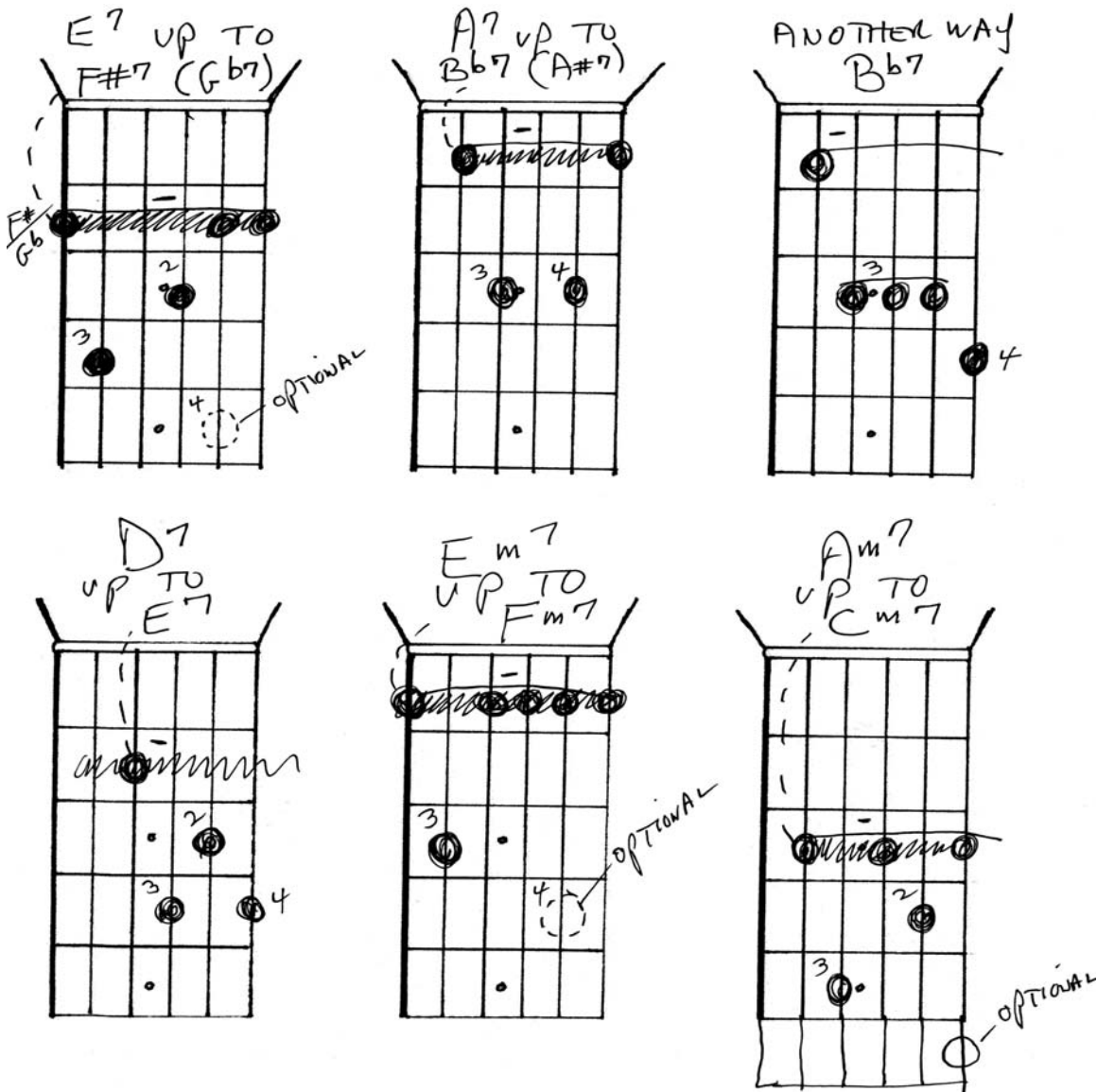
Those major triads that we turned into "7th" chords are actually called dominant 7th chords. Most folks just call them "7th" chords. But, be aware, there are other kinds like "Major 7th" chords. (maj7) (M7)



OK, let's bring the "7th" chords and minor 7th chords up the neck! ("Barre" chords)

Lesson Six con't

- E7 up two frets (a whole step) for F#7(Gb7)
- A7 up one fret (a half step) for Bb7(A#7)(2 ways)
- D7 up a whole step for E7
- Em7 up half step for Fm7
- Am7 up a step and a half (3 frets) for Cm7

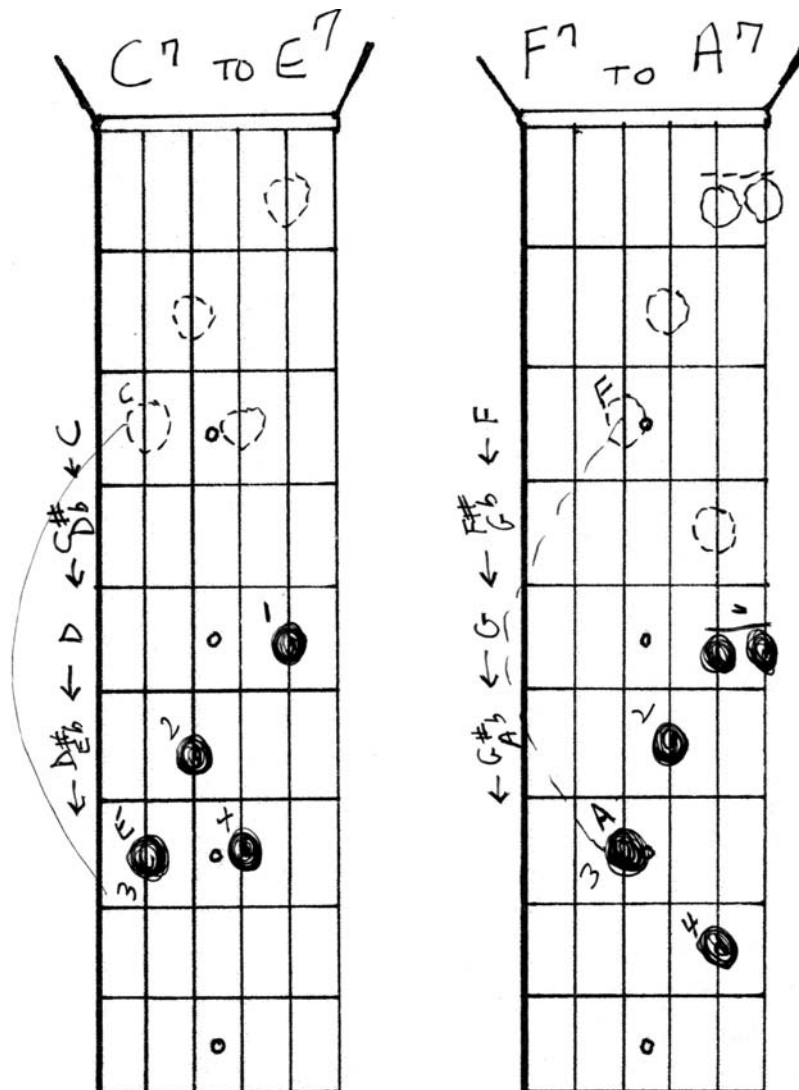


Now, let's try this with two of my favorites!
The C7 and F7 up the neck.

Try bringing that C7 up, it's an easy one, no first finger barre needed!

Try that F7 up, again no different fingering.

This F7 shape makes a great "lead guitar" way of following "rhythm" chords.



(OK, Now on to a little explanation. A little!)

Lesson Six (mini-theory supplement)

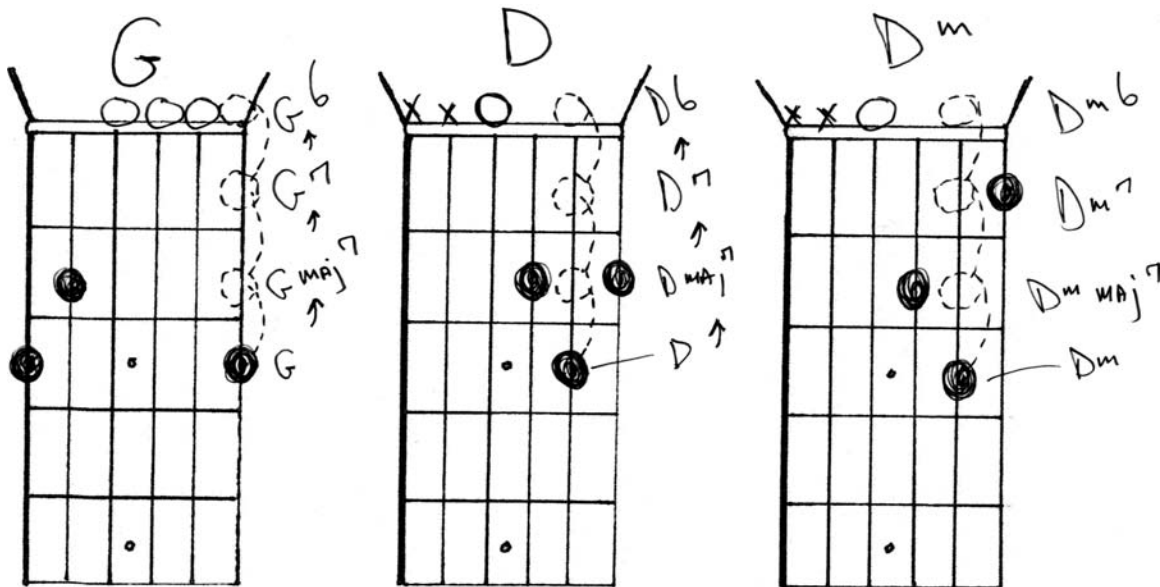
As I stated on the first page of lesson six, this is a guide book to help you get around and understand the fretboard, not a chord theory book. But I felt a bit more explanation might work here.

This is to first make clearer the notes we added to those two triad chords (Major/minor) that made them "7th" and minor 7th. What we did was add the note found two frets (a whole step) below the root. If we added it to the major triad chord it was then called a "7th" chord. (It is actually just one type of "7th" chord (dominant 7)).

If we added that note to a minor triad chord it is called a minor 7th chord. Cool, because that is the only name.

So, I'm gonna give it to you fast and easy here. Don't get hung up on it. But it might prove useful--especially if you are looking for a Maj7(M7) chord or a 6th chord or min6th.

This is in pictures, like a "Show & Tell" "garage" theory.



As you can see--that note added to the chord to make it a "7th" or minor 7th chord, (the one two frets below the root note) can be lowered one more fret for a 6th or minor 6th chord. It can be raised up one fret to form a major 7th (M7)(Maj7) chord. OK, enough of that kind of talk. Taking a test? That note is called the flattened 7th (b7).

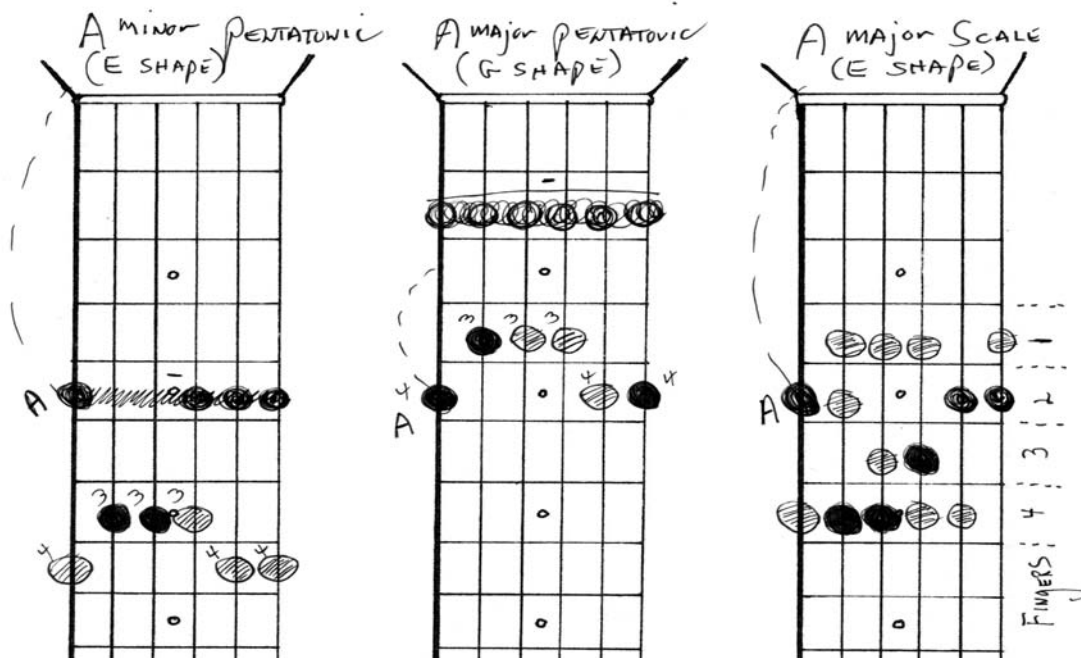
LESSON SEVEN

Scales

I am going to show you a few scales so you can "see" how they are also tied into chord shapes. This should go a long way in helping you to understand the fretboard. Most scale "patterns" have a lot to do with these chord "shapes".

Pentatonic (5 tone) Scales

Two pentatonic scales -Major and minor. You should see the scale in it's related chord and chord shape.



The Major Scale (Do, re, mi,)(diatonic)

There is only one THE major scale,(Well...?)

(maybe you saw the movie? "Do a deer, a female deer...")

Ok, first I put the minor pentatonic scale in E shape, You should see that Em up to 5th fret within the scale notes. Next, I brought up the G chord two frets and built the A major pentatonic around it.

Yes, the minor/major pentatonic scales look the same!

But the reference root note is in a different place.

You now have three scale types. I have shown you each one in a movable chord shape.

So, just like the moveable chords "shapes", these scale "shapes" ("patterns") are moveable.

Lesson Seven con't

This not being a scale or scale theory book, I will just write a few words pertaining to these three scales and their usage.

First off---YES, I have shown you 36 scales on that last page. Just like you can move the Em chord up the neck (barre), you can move that minor pentatonic scale pattern up the neck -one fret at a time--hittin' all 12 root notes! Same holds true for that G chord and it's related major pentatonic scale, and that E chord and major scale pattern.

OK, First-Make no mistake about it! Most any inter-adv. Guitarist/improviser can sound wonderful using only these three scales. Even in just these three patterns (shapes). Be it "Rock", "Blues", "Folk", "Country", "Pop", etc...

More patterns are nice, but they will not necessarily help you to express yourself better or sound better.

Some Basic Guidelines:

Most "songs" (chord progressions) have a "main" chord. This is usually the chord the progression starts on and or keeps going back to. The one it usually feels like ending on. (A lot of times that chord is the Key the song is in, but many times it is not.)

General Rules of Thumb:

If that chord is a minor chord--use the minor pentatonic!

If that chord is a major chord--use the major pentatonic. (Now, if that major pentatonic is working well for you there, you might want to try THE Major Scale(diatonic)(do-re-mi-) also. (This does not always work!)

The one place this whole minor/major thing might conflict is in the "Blues" sound. The chords may be major (E, E7, A, A7, etc....)but, the minor pentatonic might work very well! If it is a minor blues, then the minor will of course work. Usually the combo of min/maj pent. will work well in blues. (Really?-"Yes")

Anyway--I love that rules can be broken & the result is still amazing! New rules are a part of the creative process in action.

(In any field.)

IN CONCLUSION

Here is a brief rap-up

-Know open string note names & "musical alphabet"-
Find the note names on the guitar neck (fretboard).

-Know how to find the same note (same octave) in at least two different places. Understand then how to tune the guitar to itself (Relative tuning).

-Find same note in a different octave.

-Understand those 6 "open position" chord shapes!

E, A, D, G, C, F

-Know what string their "root" bass note is found.

-Know how to turn four of those chord "shapes" into minor chords. Em, Am, Dm, Fm.

-Be able to turn those major and minor chords into "7th"(dominant 7)chords and minor 7th chords.

E7, A7, D7, G7, C7, F7, Em7, Am7, Dm7, Fm7

Then, using the "musical alphabet" as your guide.

-Understand how you can "Barre" those chords up the neck and how far up to bring them in order to play any chord in any shape, (Otherwise you cannot easily find and understand chords like Gm,Gm7,F#, F#7,F#m,F#m7,Bm,Cm,Bb,Bb7,Bbm,Bbm7,C#m7,on and on.)

-Know those three scales in the "shape"/"pattern" shown for each.(& what string the root bass is on)

Again, using the "musical alphabet" as your guide.

-Understand how to move those up and down the neck to play each of the three scales with twelve different roots.(Just like with the barre chords.)

-Make Music-

Go from Chord to chord in steady "unbroken" time!