

Supplement #6 Some Basic Theory Light

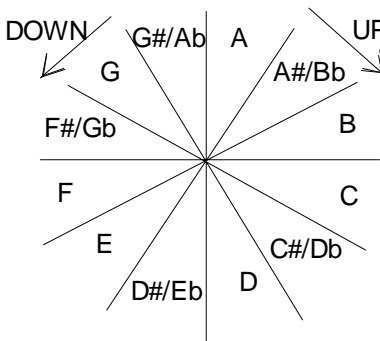
Just a little something for the curious here. Not necessary for the lessons.
Here is some basic fundamental theory to help you find notes on the guitar neck, understand the I, IV, and V chords and just help you put it together.

I will start out with what I call "The Musical Alphabet".

(The chromatic scale or semi-tone scale)

- 1) This is a 12 note system. All notes are equal.
- 2) These divisions are half steps-that's one fret on the guitar neck.
- 3) Some notes have two names, like A#/Bb that's A sharp or B flat.
These notes with two names are not more or less important than those with just one name. Remember all notes are equal. Which name you use depends on the context. (Usually which key you're in.) For our purposes, this will mean that if you are using the note or chord A#/Bb and D#/Eb in the same song, then call both by their sharp name or both by their flat name. Most important, just know that both names indicate the same note.
- 4) I have put these in a circle because this "alphabet" goes around and around, up or down forever. The term octave is the distance one time around.
(Although we can only physically hear it about ten times around.)

*(This is not the circle of 5th's)



Why is there a two note name between say A and B (A#/Bb) and not one between B and C -or- E and F? Are there musical divisions smaller than half-steps? Doesn't octave indicate something to do with eight?
Good questions! Some will be answered herein, otherwise, just accept it!

**If you know this "Musical Alphabet" and the note names of the open strings,
you then have a system to figure out every note on the neck!
You don't need them all memorized, but having a system is nice.**

Let's look at how this works out on the guitar neck.

Those notes on the neck

E	A				
0	0				
F	0	Bb/A#			
1	1				
Gb/F#	0	B			
2	2				
G	0	C			
3	3				
Ab/G#	0	Bb/C#			
4	4				
A	0	D			
5	5				
Bb/A#	0	Bb/D#			
6	6				
B	0	E			
7	7				
C	0	F			
8	8				
Db/C#	0	Bb/F#			
9	9				
D	0	G			
10	10				
Eb/D#	0	Bb/G#			
11	11				
E	0	A			
12	12				

If we look first at the big (6th) (E) string, we see the E note there when it is played open.

(Thus the name E string.)

Going around that "musical alphabet" from E to E we find out what the notes are on each fret, winding back up on the E note 12th fret. (Yes, the 13th fret is then F)

Then we can do it on the A-5th string, back to A on 12th.

These are the first two strings I would recommend getting to know. If you have "dots" on your guitar neck, you can use them to help you.

(Now you know why most guitars have those double dots on the 12th fret)

That A note 5th fret, 6th string is the same as that A note, 5th string open. This should make sense to those of you who use the "old" way of tuning.

Scales, (a little theory light) (not needed for the lessons)

There is this thing called The Major Scale (diatonic). What's that?

Well, if you have ever heard or sung any scale, this is the one!

I learned it from that movie. (You know-Doe a deer, a female deer...)

(In Spanish, or Italian)

Do-----Re-----Mi-----Fa-----So-----La-----Ti-----Do

(sounds like)

Doe-----Ray-----Me-----Fah-----So-----Lah-----Tee-----Doe

(Now we assign each degree of this scale a number)

One-----Two-----Three-----Four-----Five-----Six-----Seven-----Eight

Starting with the key of C. (These are the notes in the scale)

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

1-----2-----3-----4-----5-----6-----7-----8

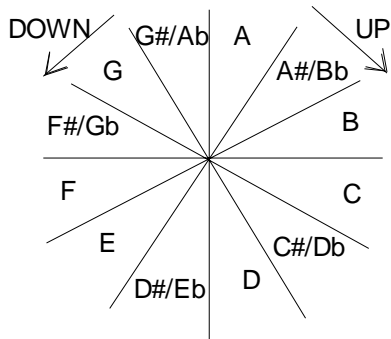
That first C note and that C note on the end are one OCTAVE apart.

Get it? octave= octopus=octagon=eight! That is the distance or interval between those two C notes. We use these numbers to define all the distances (intervals) between these notes in the scale. Therefore, D is the 2nd of C, --- E is the 3rd of C,--- A is the 6th of C, and so on.

In order to figure out what notes are in this scale (for any given key), we need to know the distance between each note. We already know that it is going to be 12 frets (half steps) from one to eight (octave).

But what about from 2 to 3 or 5 to 6 or whatever? Ok, Let's look at that.

From a couple of pages back, the "musical alphabet" again.



So if we look at that C major scale again. (The notes in the key of C)

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

Looks like we go two frets up (two half steps= one whole step) from C to D. Then looks like two more half steps=whole step from D to E. But only one fret, that's a half step from E to F. Etc...If we follow this all around, figuring out all the distances we come up with this formula.

Do	Re	Mi	Fa	So	La	Ti	Do
1	2	3	4	5	6	7	8
Whole Step	Whole Step	Half Step	Whole Step	Whole Step	Whole Step	Half Step	
C	D	E	F	G	A	B	C
E	F#	G#	A	B	C#	D#	E
A	B	C#	D	E	F#	G#	A

Half Step Equals One Fret!
Whole Step Equals two Frets!

E	A		
0	0		
F	0	Bb/A#	
Gb/F#	0	B	
G	0	C	
Ab/G#	0	Db/C#	
A	0	D	
Bb/A#	0	Eb/D#	
B	0	E	
C	0	F	
Db/C#	0	Gb/F#	
D	0	G	
Eb/D#	0	Ab/G#	
E	0	A	

We can check that out looking at this guitar neck also.

If we start with the open E string and go on up.

On the 2nd fret there (whole step) we find the F#/Gb note.

another whole step G#/Ab, a half step more A, and so on.

Then we can do the same on the A string.

You will notice I used F# (in the chart above) instead of the Gb; Why?

We know they are the same notes. But, to keep things straight (in the formal music world), the rule here:

Never skip or repeat a letter name. (ie. Keep scales in alphabetical order.)

*In this supplement,
my purpose is to let you know where those **I, IV and V** chords come from.
Here is that chart again with some of the more "popular" keys.*

Do 1	Re 2	Mi 3	Fa 4	So 5	La 6	Ti 7	Do 8
Whole Step	Whole Step	Half Step	Whole Step	Whole Step	Whole Step	Half Step	
C	D	E	F	G	A	B	C
E	F#	G#	A	B	C#	D#	E
A	B	C#	D	E	F#	G#	A
D	E	F#	G	A	B	C#	D
G	A	B	C	D	E	F#	G
F	G	A	Bb	C	D	E	F
B	C#	D#	E	F#	G#	A#	B

Chords**I**(II).....(III).....**IV**..... **V**(VI).... (VII)...

*(So in E, the **I** chord is E, the **IV** is A, and the **V** is B.)*

*Although we don't directly refer to them in this book,---
what about those **II, III, VI and VII** chords?*

*The **II, III** and **VI** are minor chords, while the **VII** is diminished.*

That means the basic chords (triads) in the key of C are-----

I-C, II-Dm, III-Em, IV-F, V-G, VI- Am, VII-B dim.

Stick them together in a "song" and you can't miss.

Again, this is by no means a complete explanation. (Not my purpose here.)