

Learning Every Note on the Guitar

a system for building your own mental map of the guitar fretboard

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INTRODUCTION

Knowing every note on the guitar (or Bass!) fretboard is a fundamental skill for the guitarist. It allows a beginning guitarist to discuss music in terms that other musicians understand, and lays a great foundation for learning to read music notation.

Many websites suggest pure memorization of all the notes. This is tedious, and does not encourage conscious thought. This method outlined in this book is one I use with my own students and one I'm sure that millions of other guitarists have figured out for themselves.

The goal is learn every note on the fretboard with a little pure memorization as possible. Some memorization work is unavoidable, but what you'll learn in this book is mostly how to relate strings to one another.

What this book will teach you:

- 1.) The musical alphabet and how it works
- 2.) How to relate each of the guitar's (or bass') strings to one another
- 3.) A method for learning every note on the guitar fretboard

The Musical Alphabet

The "note names" we use in music are the same as the first seven letters of the alphabet. These are the *natural* notes.

A B C D E F G A B C, etc.

There are no other note names; there are no notes named Z or Q. Once we get to G we just go back to A and start all over again.

Within the musical alphabet there are whole and half step distances between notes. A half step is one fret on the guitar. For instance, play the first fret on the sixth string, now play the second fret. Those two notes are a half step apart.

A whole step is two frets on the guitar. So if you play the first fret on the sixth string again then play the third fret, those two notes are a whole step apart.

The natural notes have naturally existing half and whole steps built in. Between A and B, for instance, there is always two frets--this is true anywhere on the fretboard.

We're mostly worried about where the half steps naturally occur. Between E and F, there is always a half step or one fret. Between B and C there is always a half step or one fret. This is true anywhere on the guitar neck. Between every other pair of adjoining notes there is a whole step.

This may seem confusing now, but we'll walk through it in the next section.

STEP 1: MEMORIZE

This is the only pure, sit down and try to memorize the notes section of this book. We are going to memorize the note names on the Fifth and Sixth strings of the guitar.

Let's start with the sixth string.

The open (nothing fretted with the left hand) note of the sixth string, as many of you know, is E. Let's reorder our musical alphabet to make this easier:

E F G A B C D E F G A etc.

As we go up the fret board, the pitches get higher, as such, we go up the alphabet.

Since our first note was E, the next note on the fretboard is F--it's the next in line. Remember from above that E and F always have a half step distance (one fret) between them. So F will be at the first fret on the sixth string.

You can begin to relate notes to one another building from the open string to the twelfth fret in this way.

- 1.) The open sixth string is E
- 2.) Between E and F there's a half step, the first fret on the sixth string is F
- 3.) Between F and G there's a whole step (two frets), the third fret on the sixth string is G
- 4.) Between G and A there's a whole step, the fifth fret on the sixth string is A
- 5.) Between A and B there's a whole step, the seventh fret on the sixth string is B
- 6.) Between B and C there's a half step, the eighth fret on the sixth string is C
- 7.) Between C and D there's a whole step, the tenth fret on the sixth string is D
- 8.) Between D and E there's a whole step, the twelfth fret on the sixth string is E

We're back to where we started: E. That's it. Notice that we've missed some frets, we'll come back to those later.

This same method can be used to figure out all the notes on the fifth string. The open fifth string is an A. Because A and B have two frets between them, a whole step, the next note on the fifth string, B, is at the second fret. I'll leave the rest of the fifth string to you.

Get stuck? Appendix A at the end of this book that lists the note names on all the strings. This is included ONLY to check answers or if you get stumped. Try not to look at it if you don't have to. I suggest checking your answers for the sixth string and fifth strings before moving on.

This part of the process sucks. Memorization sucks. The goal is to get your brain to the point where someone could call out a note name and you'd be able to find it immediately on the sixth or fifth string.

The best way to begin practice is to do just as we did in the list above. Take one string, go up it, stay the note names aloud to yourself as you play them. When you reach the twelfth fret, go down. No note name locations move. As we go up the sixth string, then, we'd have the notes in order:

Fret:	0	1	3	5	7	8	10	12
Note:	E	F	G	A	B	C	D	E

As we go back down, nothing changes, we just reverse the order:

Fret:	12	10	8	7	5	3	1	0
Note:	E	D	C	B	A	G	F	E

It's really important to say the note names aloud to yourself. It helps with the memorization process. Here a blank charts for the fifth string, since we know it starts on A, the notes will go in order from A to A. Fill in the fret numbers for each note name. Be sure to check your answers in the appendix to this book.

Fret:	_____	_____	_____	_____	_____	_____	_____	_____
Note:	A	B	C	D	E	F	G	A

After spending some time working up and down each string, grab some seven small sheets of paper or 3x5 note cards. On each write one of the seven natural note names. Shuffle them and work through the stack on each string. The goal of this exercise to see how you do when challenged with playing note names out of order. Keep in mind the notes on the fretboard stay constant, but the flash cards take away the security blanket of practicing them in order.

All of the exercises outlined here can also be done mentally. That is, just picture the fretboard in your mind. Work up and down the fifth and sixth strings visualizing where the left hand finger would be placed to play each of the notes. You can also do the flash card exercise mentally.

STEP 2: RELATE

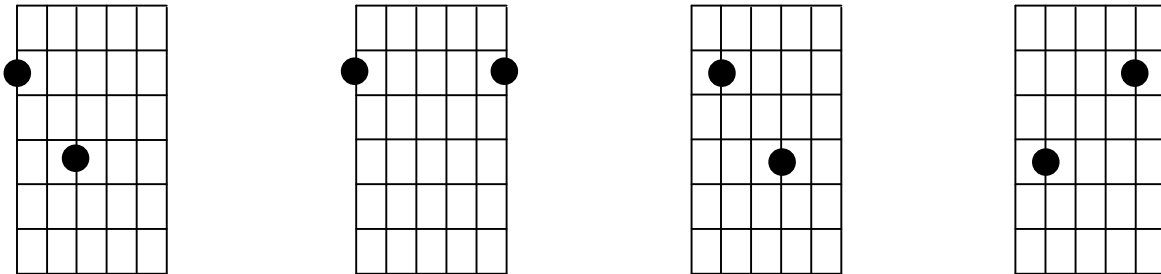
Because there's a limited number of note names available, many things repeat on the guitar fretboard. Now that you've memorized the fifth and sixth strings, we can relate those strings to the others through *octave shapes*.

An octave is...

"the interval between one musical pitch and another with half or double its frequency."

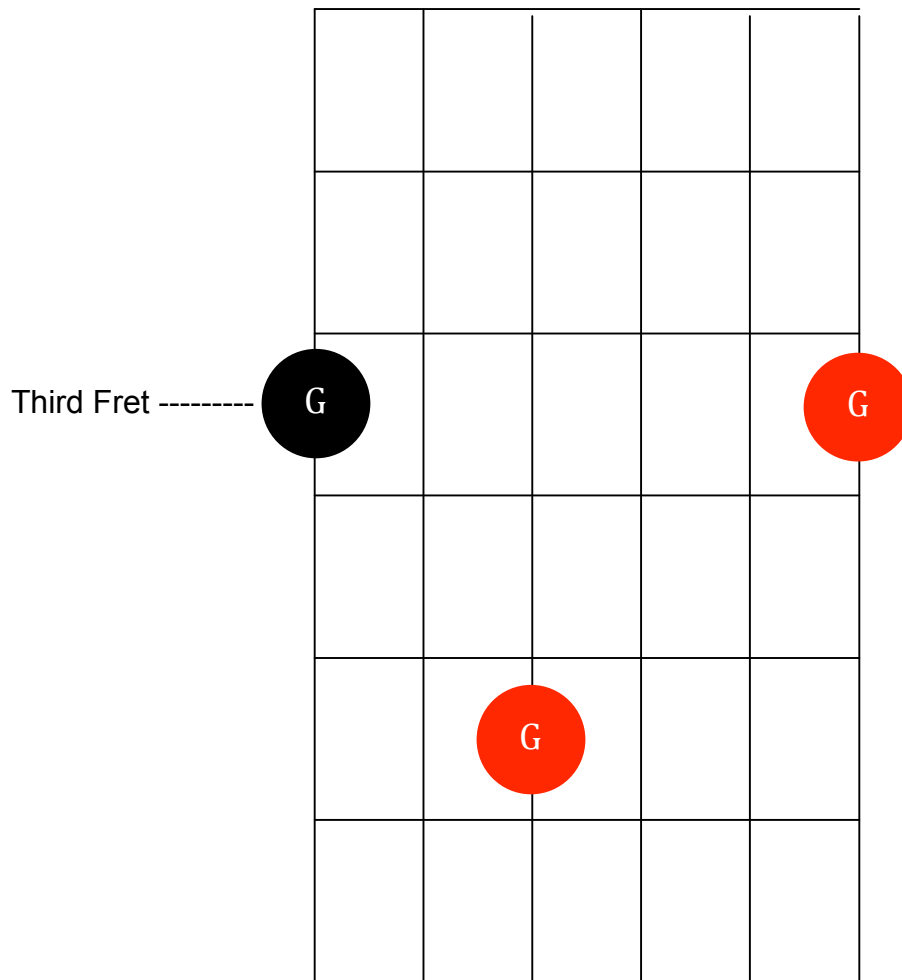
In short, an octave is an interval, a distance between two notes (or frets), in which both notes have the same name. In all the octave shapes that follow this discussion, if the note under one finger is an E, the note under the other is also an E. If a note under one finger is a G the note under the other is a G. All of the octave shapes will have one finger on the fifth or sixth strings--strings we know the note names on! The other finger will have the same note name.

Here are the octave shapes, write as chord windows/charts. I haven't included fingering, just do what works best. Don't know how to read these? See Appendix B

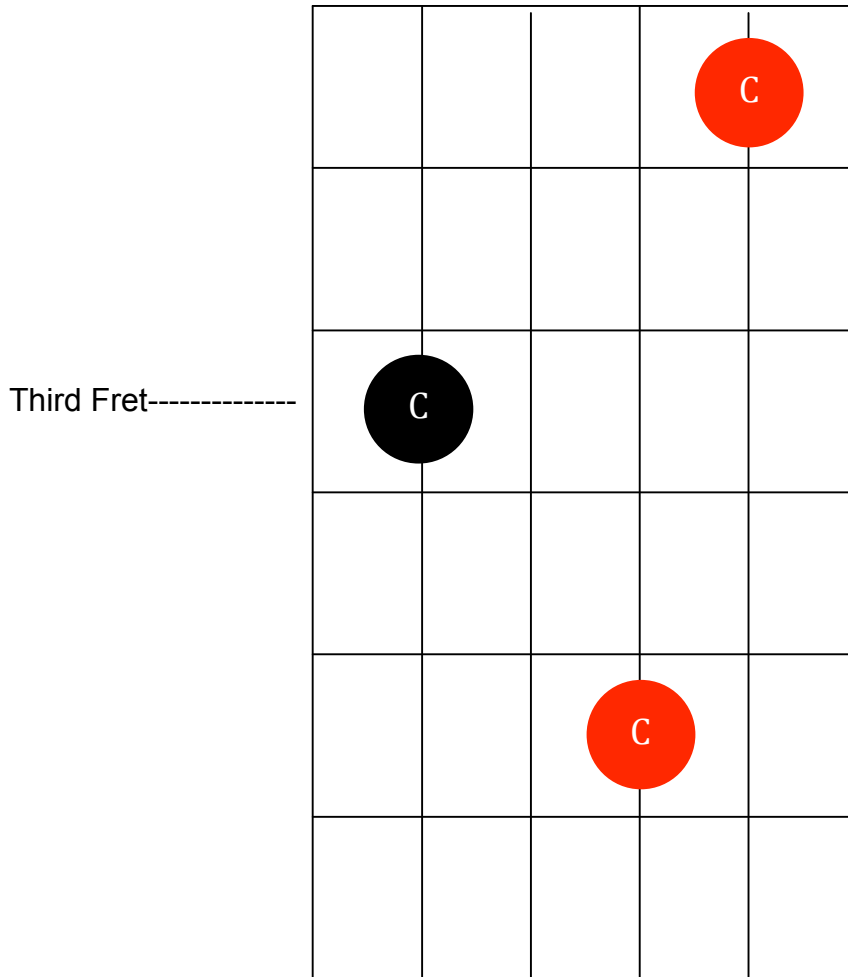


As you can see, the notes on the sixth and first strings, because they both start on E, are all in the same places. The fourth string can be related to the sixth. The third and second strings can be related to the fifth string. All of the shapes above are moveable. As long as you keep the distance (frets) between the fingers and the strings the same, they work.

Let's look at an example. The G on the sixth string is at the third fret. We can relate that G to two other G through octave shapes



Let's look at a C on the fifth string. It's also at the third fret, so we can use octave shapes to relate that C to two other notes on the second and third strings.



The goal is to do this with every other note we know. So here are some exercises to get in practice.

- 1.) Find one note everywhere it exists on the fretboard.
- 2.) Find all of one note in a given position (four fret span). Pick a four fret span anywhere on the fretboard. Draw a flash card. Find all of the flash card's note in that position.

Here's an example of the first game. You drew a G from your flash cards. You know that G is at the third fret on the sixth string. Through octave shapes from that note you now know that G is at the 5th fret on the fourth string and the 3rd fret on the first string. Now you go in search of a G on the fifth string, finding it at the 10th fret. Because you know that G you relate it, through octaves, to the second string, discovering the G on the second string is at the 8th fret. You also relate the G on the fifth string to the third string; you discover the G on the third string is at the 12th fret.

Finally, an example of the second game: you choose the 6th, 7th, 8th and 9th frets for your four-fret region. You draw the note A. So you find your A's on the fifth and sixth strings. And relate those two strings to the others with octave shapes. You find that A at the 7th fret on the fourth string fall within your four fret range and play it.

The goal of these games is move from having to actually play the octave shapes to being able to just see them. It's a process. But eventually you build a mental map of the fretboard so complete it unnoticeable. You'll just know the note names for each string. To that end, try forcing yourself to avoid playing the octave shapes after a while practicing them. Just see them in your minds eye.

Each of the exercises here can also be done mentally. I encourage this because it's a great way to use downtime at work or school and practice away from the guitar. Just picture the guitar fretboard in your mind and play the above games.

STEP 3: FILL IN THE BLANKS

So far we've avoided all other fret except for those that are natural notes. It's time to fill in the blanks.

To get the rest of the notes/frets we use sharps and flats:



These signs are called *accidentals*. A flat sign looks like a lowercase letter "b" and lowers a note by a half step or one fret.

So, to find an Ab note, you'd find an A (sixth string, 5th fret) and lower it (move it towards the headstock) by one fret. An Ab on the sixth string is at the 4th fret.

A sharp sign looks like a number symbol, and raises a note by a half step. So, to find an A#, you'd find the A on the sixth string again, this time raise it (move towards the bridge) by one fret. The A# on the sixth string is at the 6th fret.

Now find a Bb on the sixth string.

Wait! that's the same fret as A#! True. This fret can have two names depending on the context. You have to know and be familiar with both. When two notes, written different, have the same pitch or fret, they are called *enharmonic*. A# and Bb are enharmonic notes.

To practice this simply continue doing the games and exercises listed above, but add all the of the sharp and flat notes to your flash cards:

Sharps: A#, B#, C#, D#, E#, F#, G#

Flats: Ab, Bb, Cb, Db, Eb, Fb, Gb

Some Special Cases

We learned above that there are naturally occurring half steps between E and F and B and C. When you find an E#, you'll notice that's the same as F. This doesn't occur to often in guitar music, but it is worth knowing. E# and F are enharmonic notes. Other special case enharmonic notes: Fb/E, B#/C, Cb/B.

CONCLUSION

That's it! The goal of this book was to provide you with some tools for learning the notes all over the fretboard and understanding how the musical alphabet works. This method goes beyond memorization and begins to help you build a complete mental map of the fretboard.

I discovered this method when I was first starting guitar. I used it extensively to survive college music theory course by visualizing the fretboard. I've also passed this method along to many of my students.

When using this method is possible have the ability to figure out any note on the fretboard within a few weeks. Completely mastery comes after months or years.

I hope this helps you out! For more guitar tips, please visit my blog:
<http://www.classicalguitarblog.net>

About the Author

Christopher Davis began his musical studies at age ten with the clarinet. At fourteen, inspired by Black Sabbath and Metallica, Chris picked up the guitar.

Chris holds a Bachelor of Music degree in Guitar Performance and Music Business, and is currently pursuing a Master of Music Degree. His guitar instructors have included Scott Dalziel, Phil DeLong and Stanley Yates. In addition, he has performed in masterclasses for such world-renowned artists as Christopher Parkening and The Assad Brothers.

FAQ

Why the fifth and sixth strings?

Many moveable chord shapes use roots on the fifth or sixth strings. Learning them first and having them solidly memorized lays a great foundation for chord chart reading later.

Can I use this book with my students?

Absolutely. Go for it. Let me know how it works!

Did you steal this idea from somewhere?

Possible. I developed this system completely on my own, but that doesn't mean someone else hasn't written it down already. I just didn't read about it anywhere else.

This was such a crap/great book, where can I send hate/fan mail?

Please let me know what was wrong with it or what you liked. I'm always open to constructive criticism, and I'd love to hear from you. cd@classicalguitarblog.net is my email.

I'd like to post this PDF on my website, is that allowed?

No. Please just link to <http://www.classicalguitarblog.net/free> thanks!

Appendix A

Every Note on the Fretboard

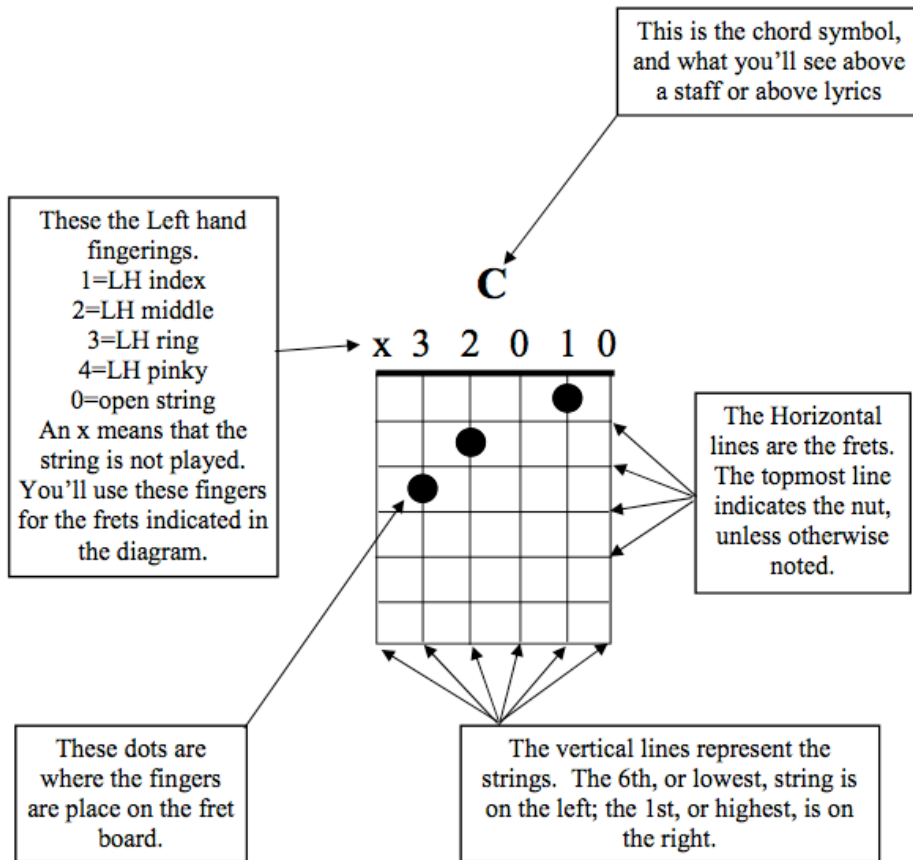
Did you do the entire book? This is for checking answers only!

After the 12th fret, the notes repeat. The same processes outlined above can be done to memorize the notes above the 12th fret, but I've found most students just got it after learning from frets 0-12.

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

APPENDIX B

READING CHORD WINDOWS



So, for this chord:

- The 6th string is not played (indicated by the "x")
- The 3rd finger is placed at the third fret on the 5th string
- The 2nd finger is place at the second fret on the 4th string
- The third string is played open (indicated by the "0")
- The 1st finger is placed at the first fret on the 2nd string.
- The 1st (top) string is played open (indicated by the "0")