

# Practice Rules

Good practicing is simply setting up good habits. Of course, setting up bad habits during practice will actually make you a worse musician! Here are some guidelines to avoid bad habits:



**1. Don't sound good**—once you can play a song (or part of a song) smoothly, it's time to move on and practice something else. Sounding good during practice time is a sign that you're probably "playing" instead of "practicing".

**2. Always count out loud**—if you don't count and you practice with the wrong timing, it's going to be nearly impossible to re-learn the right rhythm!



**3. Sing everything you play**—if there aren't words, sing "la la la", but this ear training is nearly as important as anything else you're going to practice.

**4. Always use proper technique**—Proper fingering on any instrument is all a matter of habit. If something else feels more natural, that's proof that you need to practice good technique MORE, not less!



**5. Play a song like a song**—it must sound like music! ...not just notes. Care about the song as if you are the one who wrote it. Give it feeling! From "*Mary Had a Little Lamb*" to "*We Are The Champions*", force yourself to care just for the time you're playing, and practice like a rock star every time!

**6. If you're unsure, write it in**—whether it's counting or note names or directions about how to play, no good musician leaves the sheet unmarked



**7. Call**—find a good music mentor, and ask them questions until they tell you to stop! If you're practicing your instrument, they will only become more excited with each question instead of more annoyed.

# Resource List

## **Great Sites:**

UltimateGuitar.com  
MetronomeOnline.com  
PracticeSightreading.com  
Good-Ear.com  
MusicTheory.net  
Teoria.com  
All-Guitar-Chords.com



## **Killer Apple Apps:**

Ultimate Guitar  
Ludwig Metronome  
Tuner Tool  
Zen Piano

## **Killer Android Apps:**

Ultimate Guitar  
Muisca Lite  
Guitar Chordz  
Rock Out



# Assignments

Keep track of your lesson assignments here. After a few months, you should be able to look back and see how much progress you've made!



Date	Assignment

# Countdown to a Rockstar (Practice Time)

They say "Practice makes perfect." Track your progress toward perfect here. Each week, write how many minutes you hope to practice. Fill in the names of the days after your lesson and then record how many minutes you practice each day. At the end of the week, total your time and adjust your goals for the next week.



Goal	Lesson Day	___ day	___ day	___ day	___ day	___ day	___ day	Total

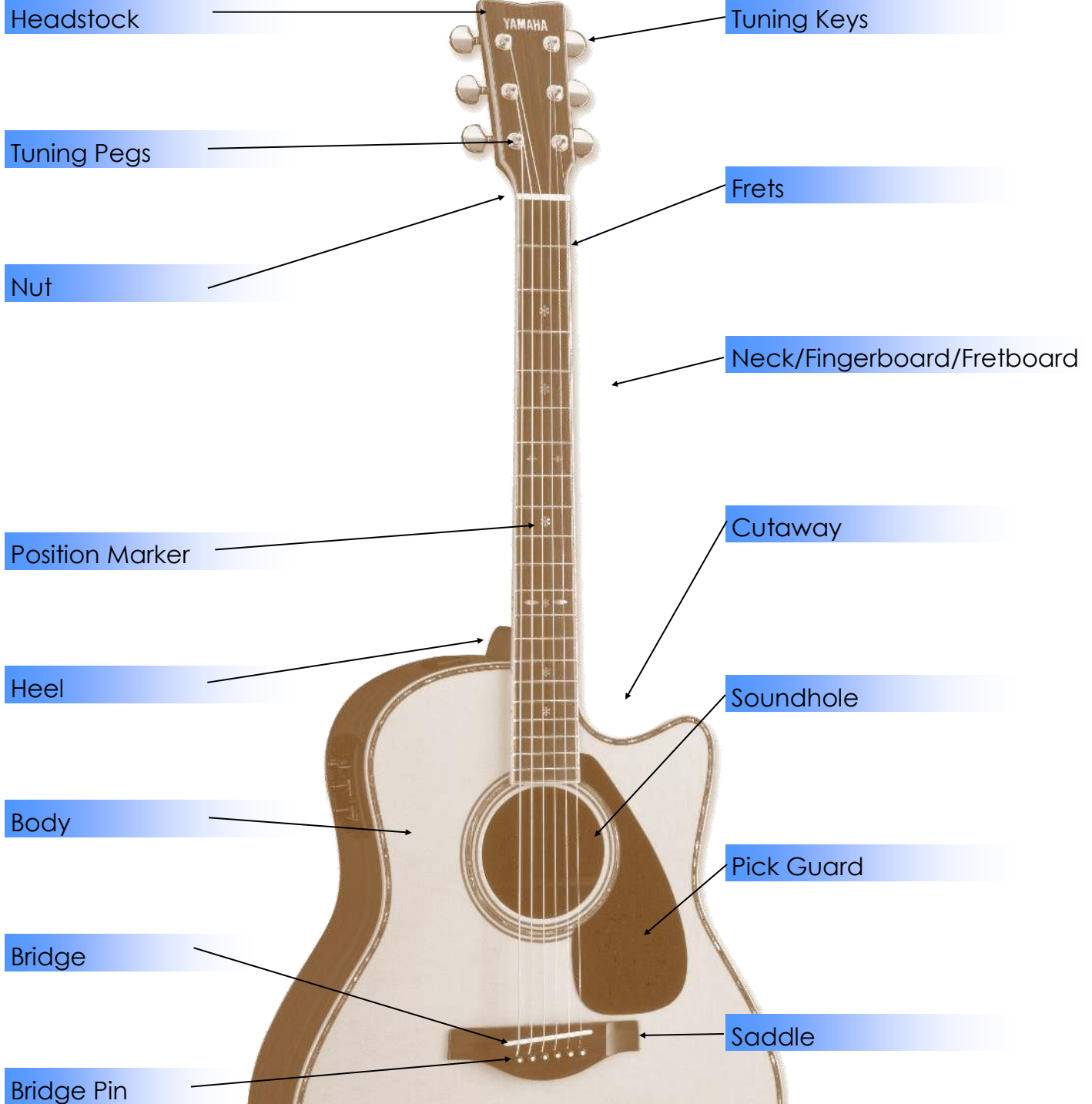
# Map to Your First Album (Repertoire)



As you progress, it will usually be important for you to perform—first for small groups, then for larger audiences. As you learn new pieces you're proud of, keep track of them here. Write the dates you perform for different sized groups. Once you've performed them several times, it will be time for you to get help from your teacher to record them. Slowly, over time, you'll be able to record your first album!

Title	Memorized	Under 5	10-20	Over 20	Recorded

# Guitar Parts

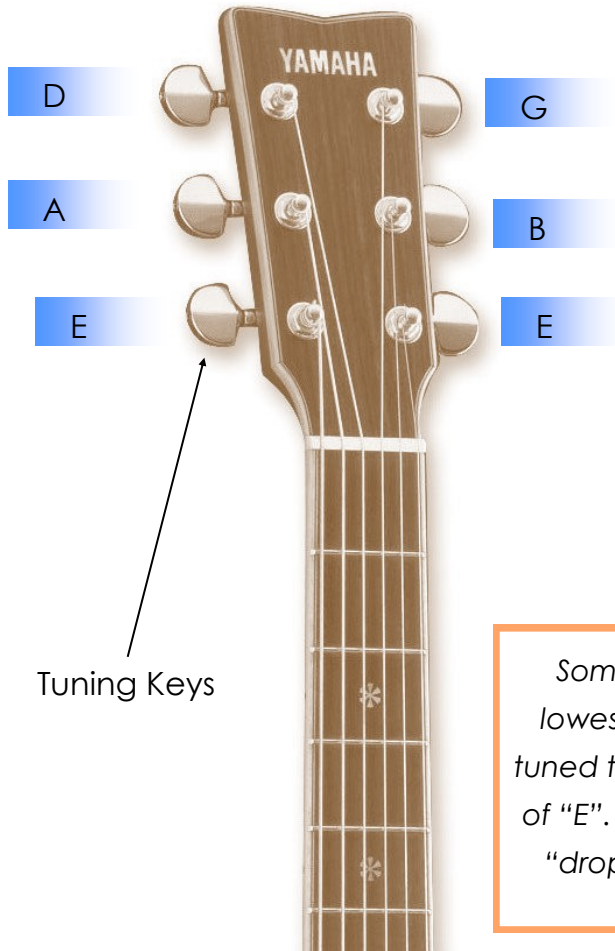


\*Some acoustic guitars have a "pickup", an electronic device that allows the guitar to be plugged into a sound system. They can be mounted under the bridge or sometimes across the soundhole.

\*Guitars with pickups have an "output jack", a metal hole on the side of the body (usually toward the back) where a cable can be plugged in.



# Tuning

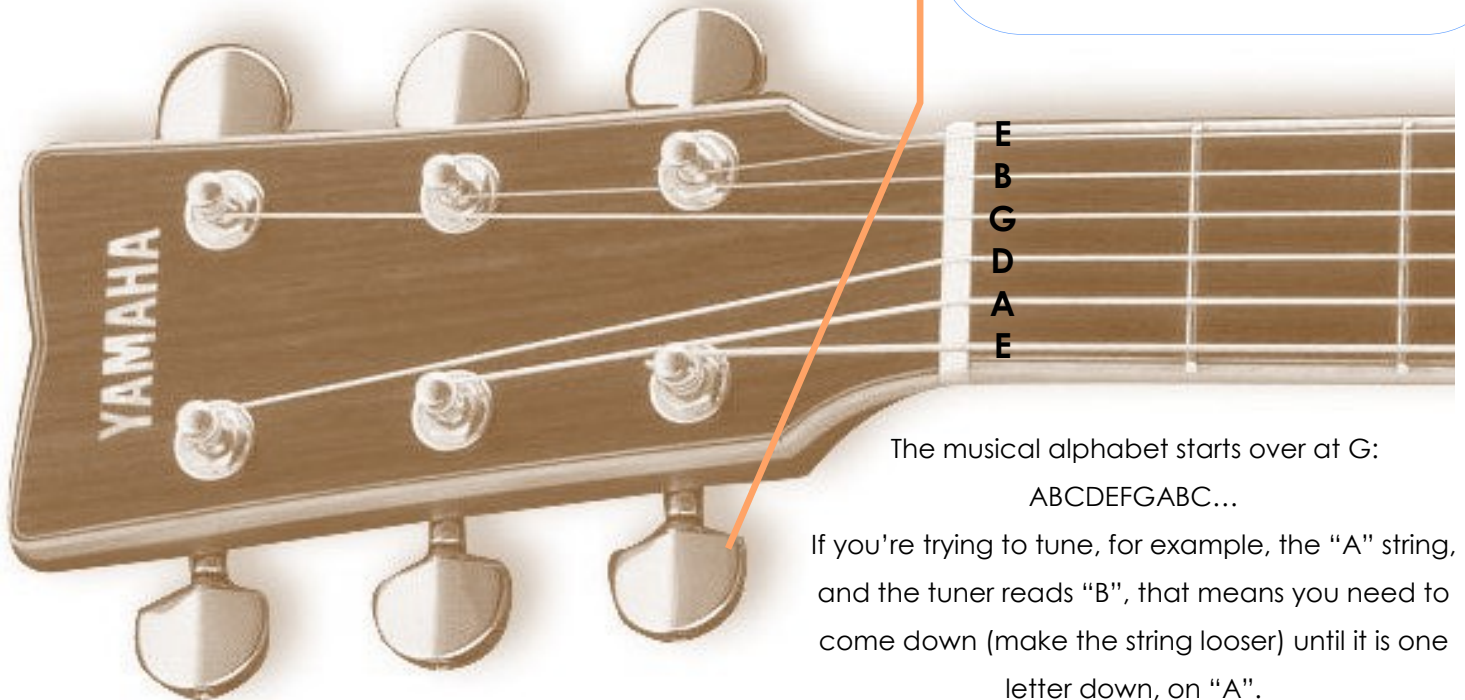


Tuning Keys

The strings of the guitar should be tuned to the letters indicated. A guitar tuner will tell you if you're tuned to the right note or not. Use the tuning keys to make the strings tighter (making the note higher) or looser (making the note lower).

*Sometimes the lowest string gets tuned to "D" instead of "E". This is called "drop D" tuning.*

If you're tuning the "E" string, for example, and the tuner reads "E<sup>b</sup>", that means that the note is not a regular "E" yet. The string needs to be higher (tighter) until the tuner reads just "E".



The musical alphabet starts over at G:

ABCDEF GABC...

If you're trying to tune, for example, the "A" string, and the tuner reads "B", that means you need to come down (make the string looser) until it is one letter down, on "A".

# Changing Strings

Changing strings is really better taught in person than in a book. Find a friend who knows how, check with your local music shop, or even just search the internet for a good video. Here are some tips to keep in mind, though (just in case your friend forgets to mention these common pitfalls):

## Preparation:

You'll need wire snips, pliers, guitar polish or Windex and a rag, and a string winder

## 1—Remove Old Strings

Loosen the strings until you can pull them out instead of clipping them off or the strings will slash your arms up. Then take out the bridge pins.

## 2—Clean The Neck

This is your one shot at cleaning off all the dust and dead skin cells you've been grinding into the fret board for months or years! Of course there are guitar cleaning products at music stores, but you can also use a slightly damp cloth, a toothbrush, and some people even carefully use very fine steel wool.

## 3—Install New Strings

\*Start with the biggest string and move to the smallest

\*Be sure there is enough slack in the string for it to wrap the string around the tuning peg at least 3-4 times when you tighten it

\*Be sure the string wraps around the inside of the tuning peg

\*Keep your eye on the bridge pin...it may want to keep popping out as you're first tightening up the string

\*Don't clip the excess of the strings on the tuning pegs until after all the strings are tuned and you're all finished. If something goes wrong during tuning, you don't want to have to start over with a string you've already clipped too short!

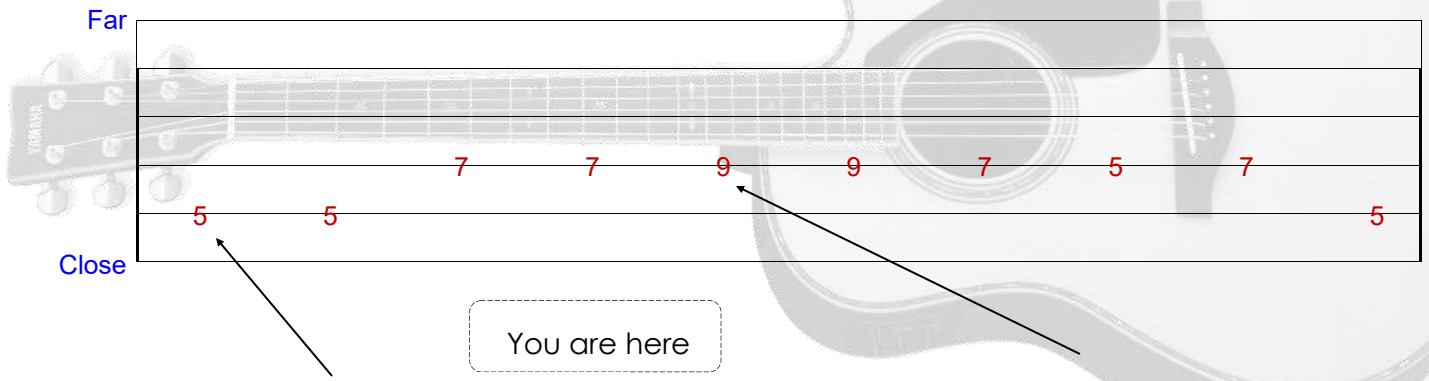
## 4—Tune Repeatedly

Your new strings will need to be tuned several times during installation, and pretty frequently over the next 5-10 days as they get used to being stretched out.



# Reading Note Tabs

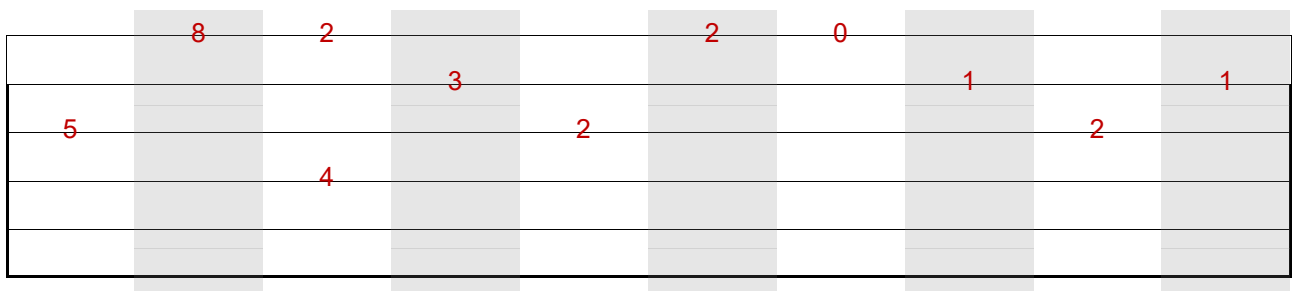
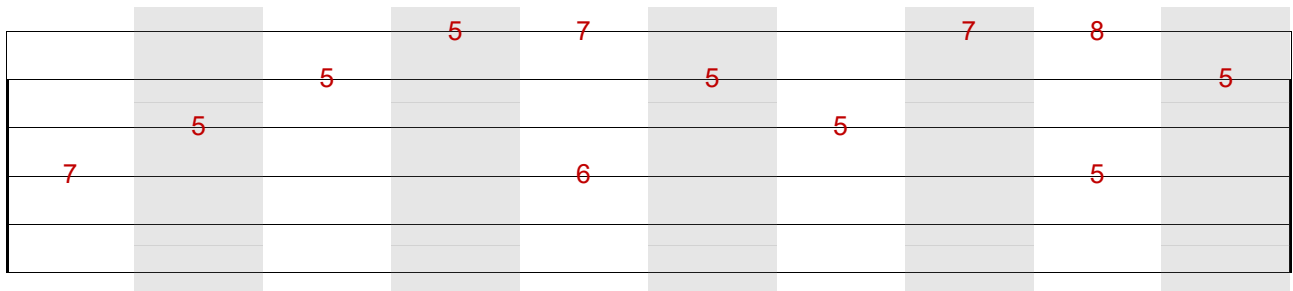
The numbers on the tabs just tell you which fret to play. "0" means to play the string without "open", or without pressing down anywhere on the string. A "5", for example, means to play the string while pressing down on it 5 frets away from the nut. The number is placed on the string that is supposed to be played. **The bottom line of the tab represents the string closest to you.** There is no good way to tell when to play the notes in traditional tabs. You have to already know the song well enough to know when to play the notes.



The first note should be the second string over (the A string), on the 5th fret

The fifth note should be the third string over (the D string), on the 9th fret

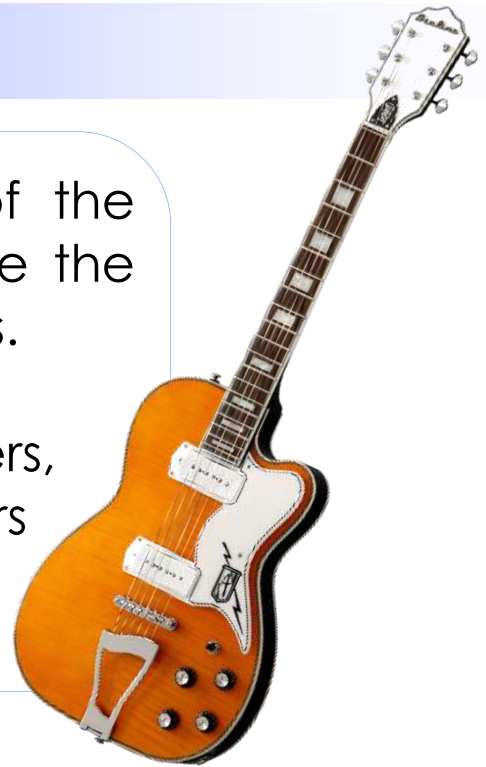
This example is the beginning of "Stairway to Heaven". Tabs can easily be found for free on the internet, but most of them are at least slightly off.



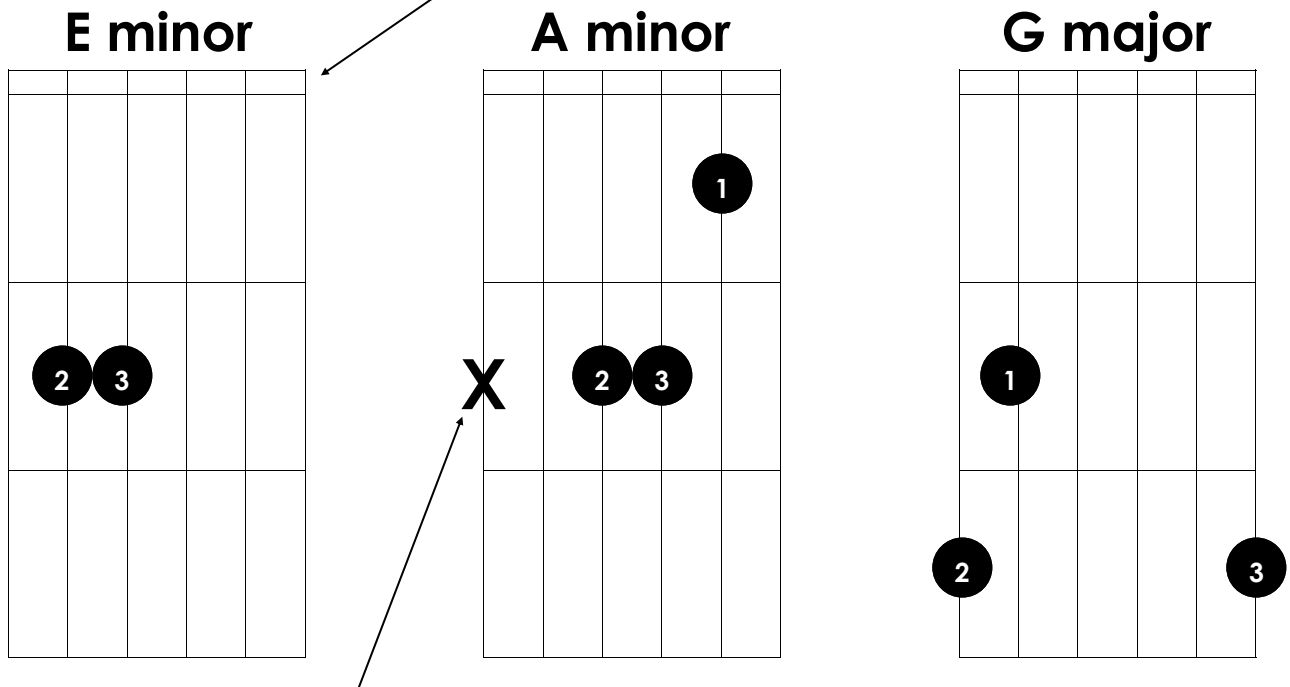
# Reading Chord Tabs

These are basically a graph of the guitar. Place your fingers where the dots are, then strum all the strings.

Sometimes the dots have numbers, representing the finger numbers you should use for those notes.

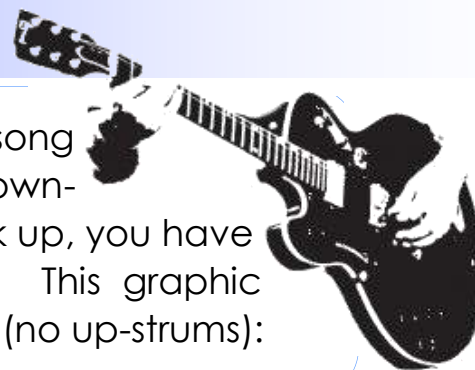


The double lines on the top represent the nut of the guitar



When there is an "X" on the string, don't play that string. Sometimes you can lightly touch that string with a free finger so it doesn't vibrate (this is called "muting" the string).

# Strumming In 4



Most songs have 4 beats that repeat until the song ends. Guitarists usually strum downward (down-strum) on each of those beats. On the way back up, you have the option of strumming again (an up-strum). This graphic shows a strumming pattern with just down-strums (no up-strums):

1	&	2	&	3	&	4	&

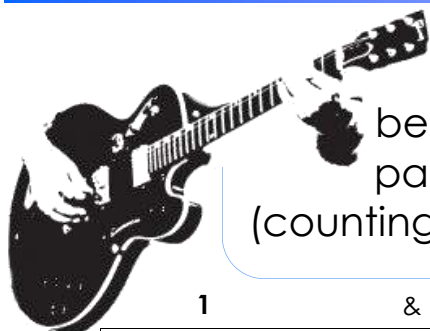
These are some of the most popular strumming patterns:

1	&	2	&	3	&	4	&

Now try creating your own by filling in the arrows and practicing them:

1	&	2	&	3	&	4	&

# Strumming In 3 & 6



Songs that don't use 4 beats will usually use 3 beats or 6 beats. With 3 beats, the only important part is that you strum on beat 1. Try some of these (counting out loud while you play will probably help.)

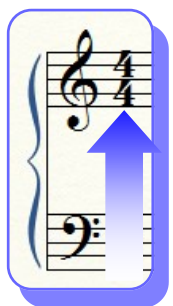
1	&	2	&	3	&
↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑

When counting with 6 beats, be sure to play on beats "1" & "4", and the second half shouldn't be exactly the same as the first half

1	&	2	&	3	&	4	&	5	&	6	&
↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑
↓	↑	↓	↑	↓	↑	↓	↑	↓	↑	↓	↑

# Time Signatures

The most significant part of the way a song “feels” is the time signature. It tells every musician how they are supposed to count.



The time signature is found at the beginning of the song. It always has two numbers, one on top of the other.



How many

The top number is what you're supposed to count to before starting over (or how many beats are in each measure). When it's a 4, you count "1 2 3 4, 1 2 3 4, 1..."

What kind

The bottom number tells what kind of note you're counting (or what kind of note gets 1 beat). When it's a 4, a 1/4 (quarter) note gets one beat; when it's a 2, a 1/2 (half) note gets one beat, etc.

It always makes more sense with more examples:



This is “4, 4 time” and we can fit 4 (*top number*) quarter notes (*bottom number*) in each measure.

4-4 time is the most common time signature. In fact, it's so common that sometimes, instead of writing two 4's, they just put a big “C” that stands for “common time.”



This is “3, 4 time” and we can fit 3 (*top number*) quarter notes (*bottom number*) in each measure.

3-4 time is the time signature for all waltzes. It always feels like “oom-pah-pah, oom-pah-pah”, where beat one is very ‘heavy’, and beats 2 and 3 just feel like light ‘decorations’.



This is “6, 8 time” and we can fit 6 (*top number*) eighth notes (*bottom number*) in each measure.

6-8 time can fit the same types of notes as 3-4 time, but 6-8 has a strong emphasis half way through the measure (on beat 4), so the measure feels like it definitely has two distinct halves.



This is “2, 2 time” and we can fit 2 (*top number*) half notes (*bottom number*) in each measure.

2-2 time, also called “cut time”, is usually pretty fast (not because of the time signature, it's just most people's preference). This is frequently used in marches (like a marching band would play).



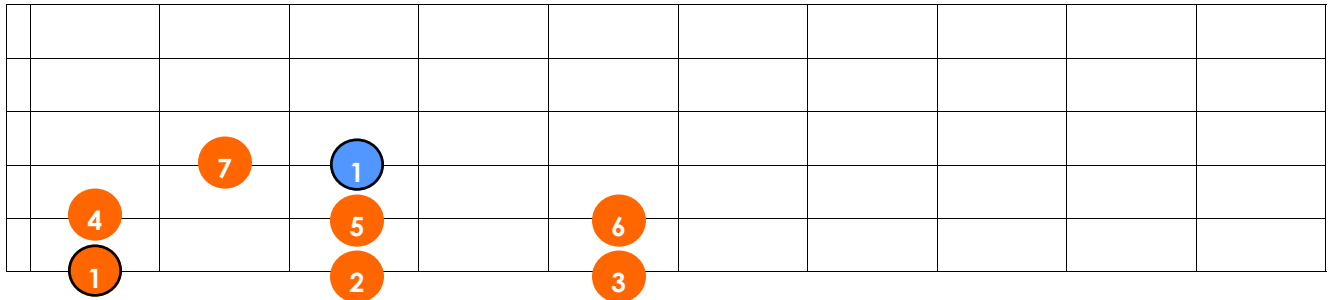
## Here are some hints to make your strings ring out loud and clear:

- Keep the fleshy part of your left thumb directly behind the neck
- Don't press too hard. (*Press the strings down just hard enough to make the note play clearly with no buzzing.*)
- Press the strings as close as you can to the fret without going over.
- When practicing chords, play each string individually to see which string is really making the buzz. This will also insure that none of the strings is accidentally getting silenced, or "muted".
- Keep your strumming hand (usually the right hand) moving
- Check your frets for wear. Sometimes a tiny rut will be worn into the fret for a particular string, causing it to buzz easily.
- Pick up your fingers between chords. Then put it back down for the new chord. That way your brain pushes that muscle with the same effort as the other fingers instead of one, long push that slowly, imperceptibly weakens.
- Practice for calluses. Calluses will make the pressing surface of your fingers harder & less fleshy, requiring less muscle to push the string down.
- Practice for muscle. Weak or tired finger muscles won't press down hard enough to prevent the string from buzzing. The ring finger is the only finger with ligaments attached to every other finger. That makes it the least independent & least mobile. More effort is required to move it, meaning that it fatigues more quickly than the other fingers.

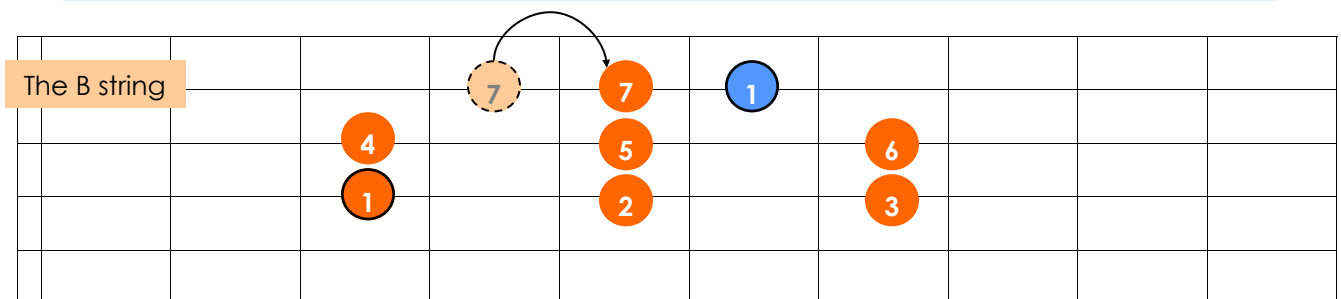


# Major Scales

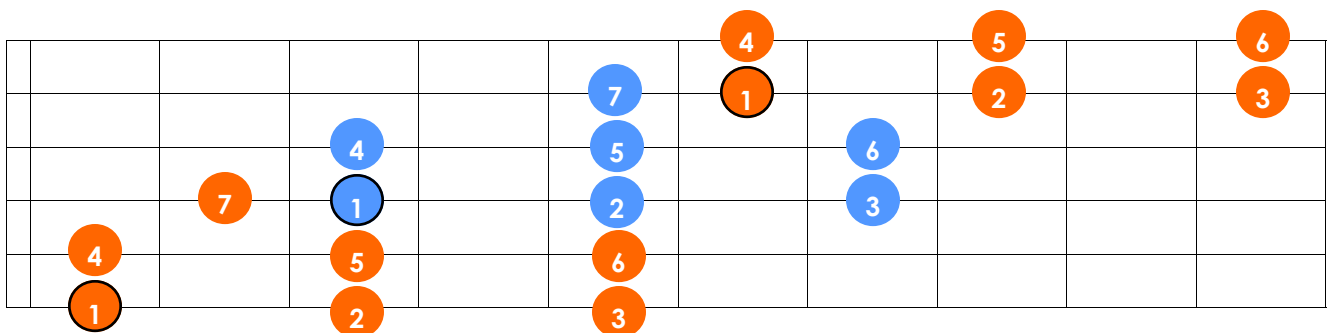
There are 7 notes in a major scale. Beginning on any fret, follow this pattern to find all 7 notes in the major scale.



Because of the way the strings are tuned, when you get to the "B" string, you'll need to adjust the pattern to the right by 1 fret.

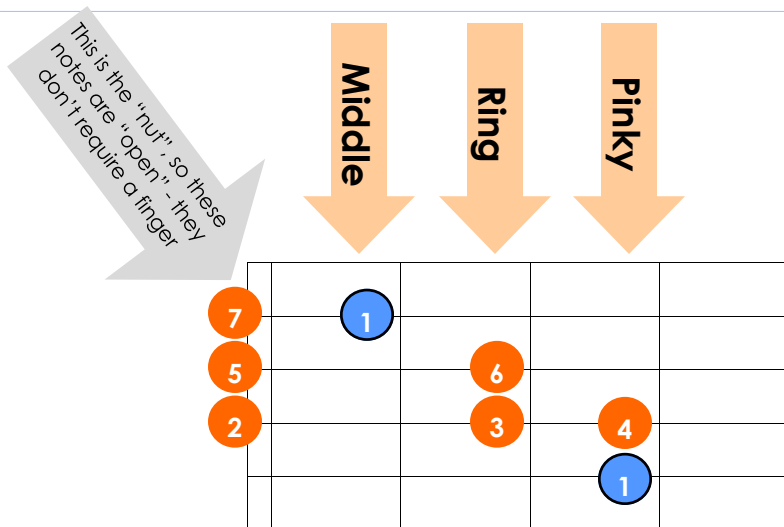


Here's the pattern repeated over all the strings:

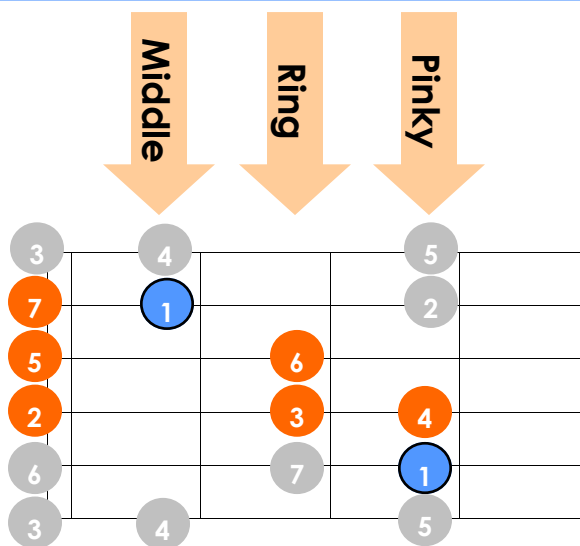


# 3-Finger Position (Root on 5th String)

With just 3 fingers you can play all the notes of a major scale, which is just about all the notes you'll need for any popular song you want to play. Use your pinky for the 3rd fret, ring finger for the 2nd fret and middle finger for the first fret.

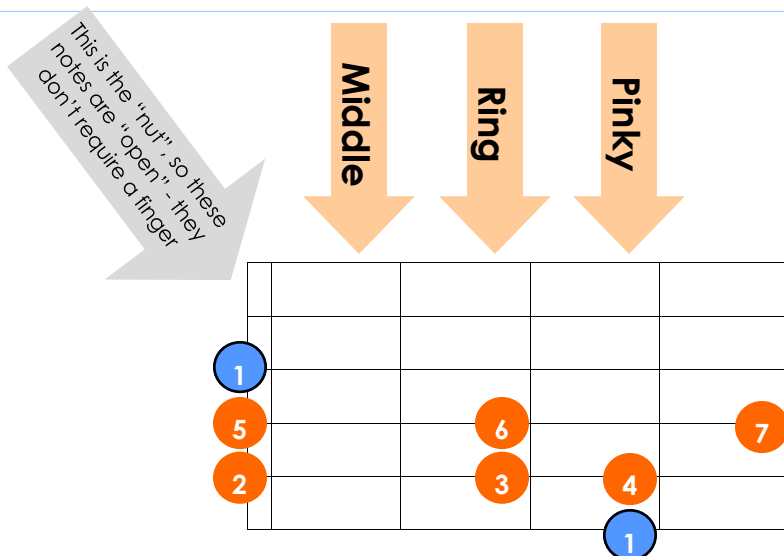


Sometimes you'll need notes that are higher or lower versions of those same numbers. You can use the same fingers and frets to reach those notes (the gray ones below)

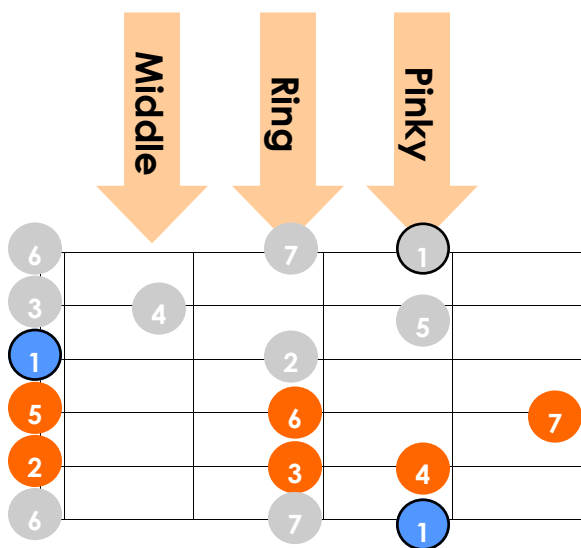


# 3-Finger Position (Root on 6th String)

With just 3 fingers you can play all the notes of a major scale, which is just about all the notes you'll need for any popular song you want to play. Use your pinky for the 3rd fret, ring finger for the 2nd fret and middle finger for the first fret.

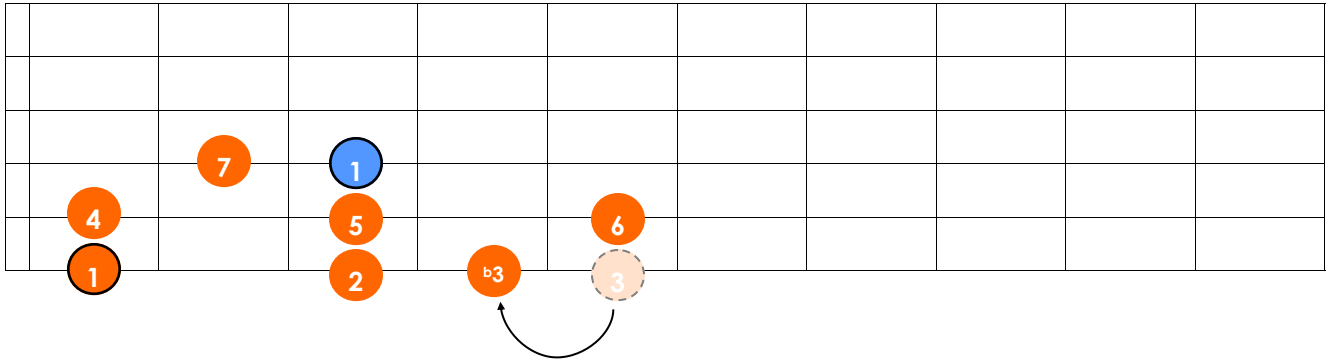


Sometimes you'll need notes that are higher or lower versions of those same numbers. You can use the same fingers and frets to reach those notes (the gray ones below)

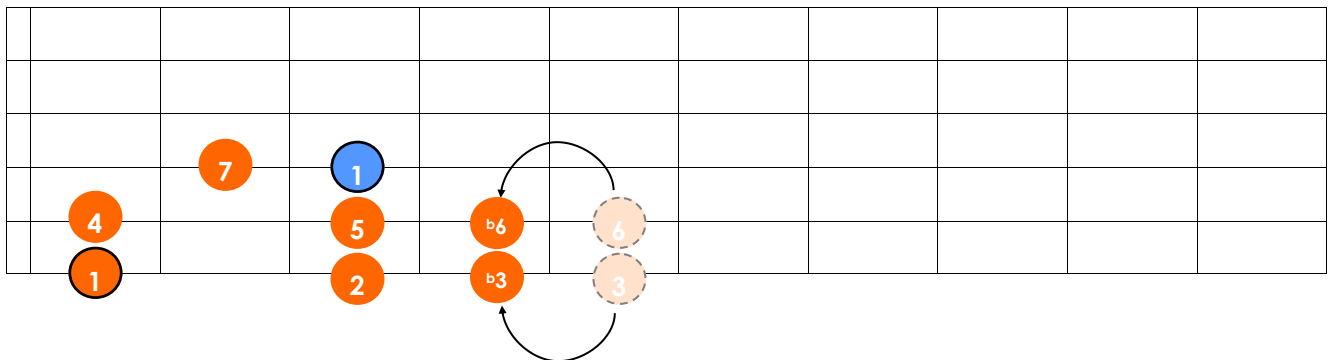


# Minor Scales

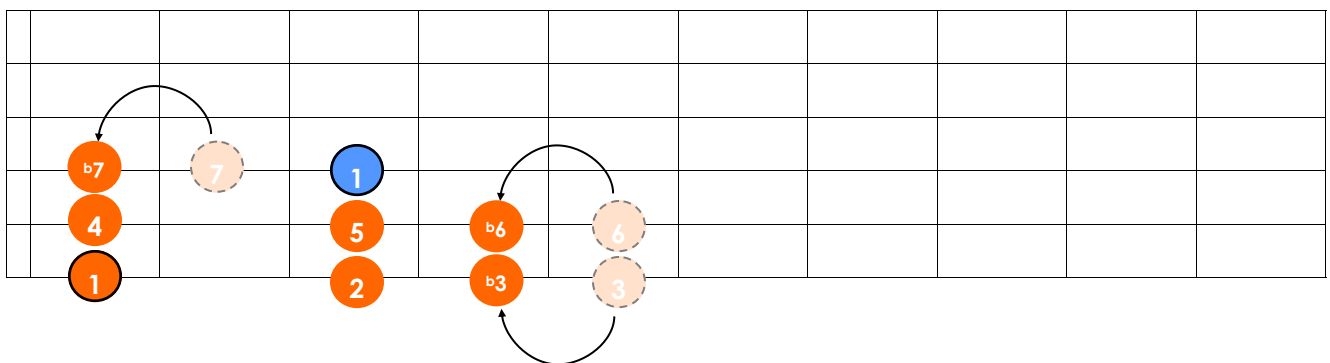
For the **melodic minor** scale, simply make the “3” of a major scale a half step lower by moving it 1 fret to the left.



For the **harmonic minor** scale, lower the “3” and the “6” of the major scale by moving them 1 fret to the left.

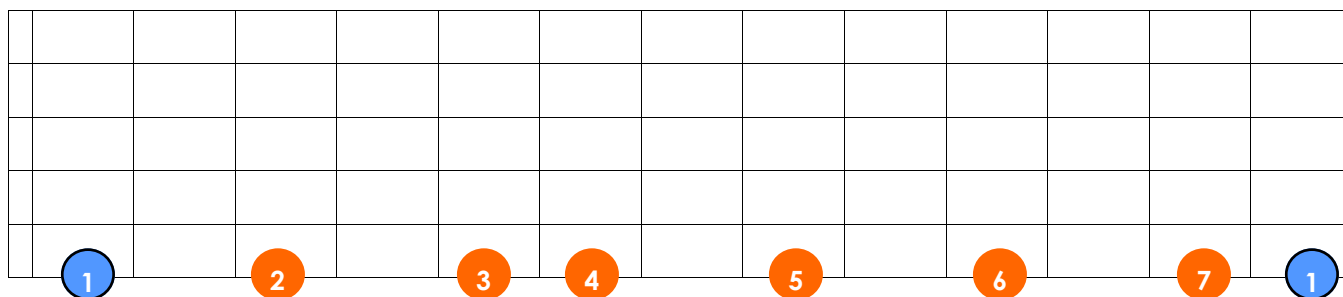


For the **natural minor** scale, lower the “3”, “6” and the “7” of the major scale by moving them 1 fret to the left.

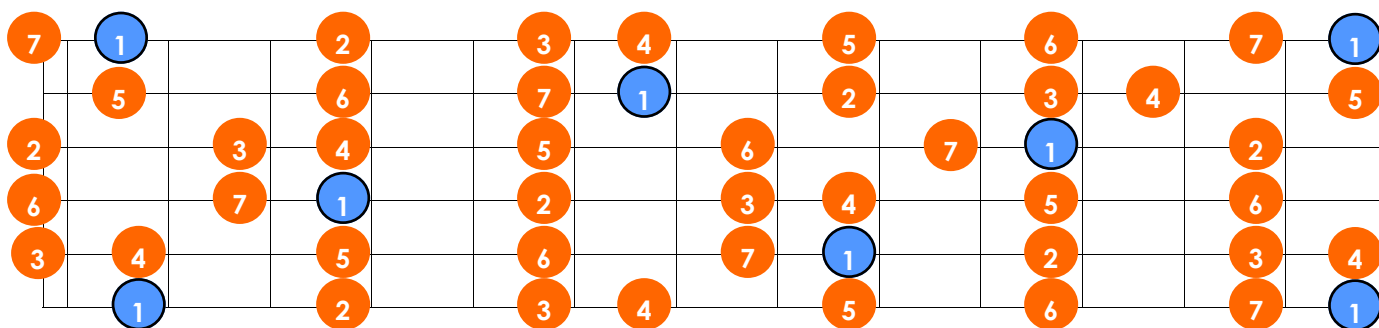


# Major Scale Modes (1 of 3)

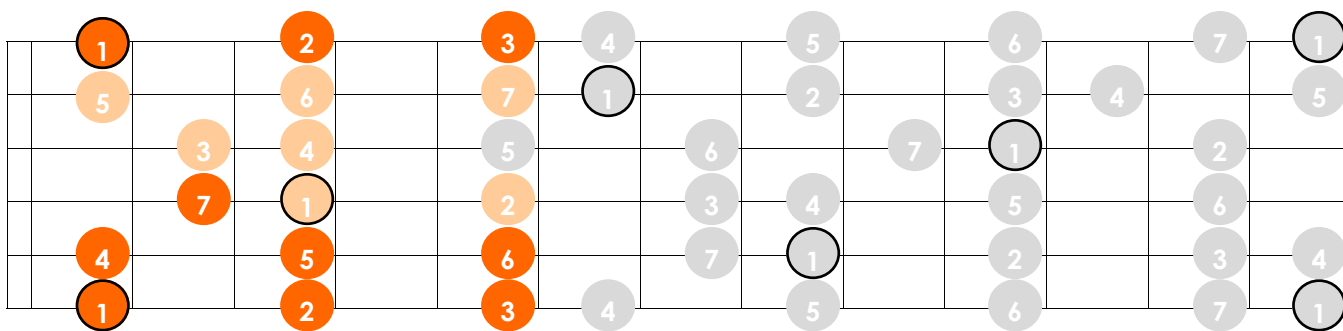
Usually a scale is played from the "1" of the scale (the name of the scale), to the "1" that is eight notes away. Here is an "F major" scale beginning and ending on "F", the "1" played on only one string:



...but you don't have to use just 1 string because there are notes from the F scale everywhere! Here are all the notes of the F scale, on all the strings:



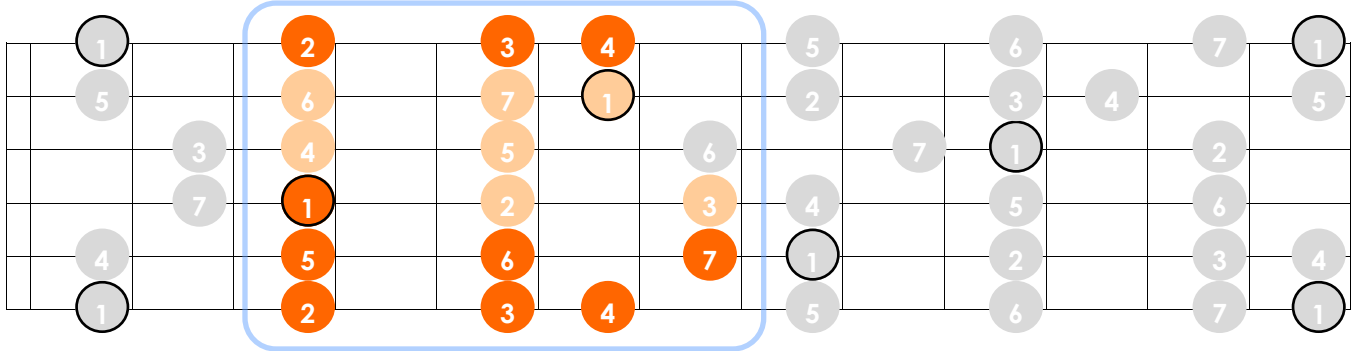
A "mode" is played when you begin and end the scale on the same note. For example, playing from 1 up to 1 is called the "Ionian" mode. Here are the notes of the first mode of the F scale, using only a few frets:



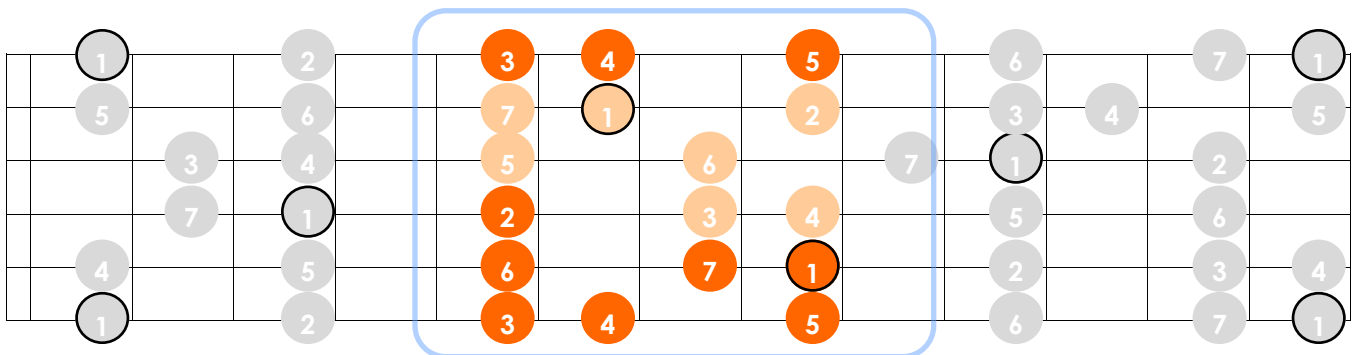
# Major Scale Modes (2 of 3)

## 2nd mode: "Dorian"

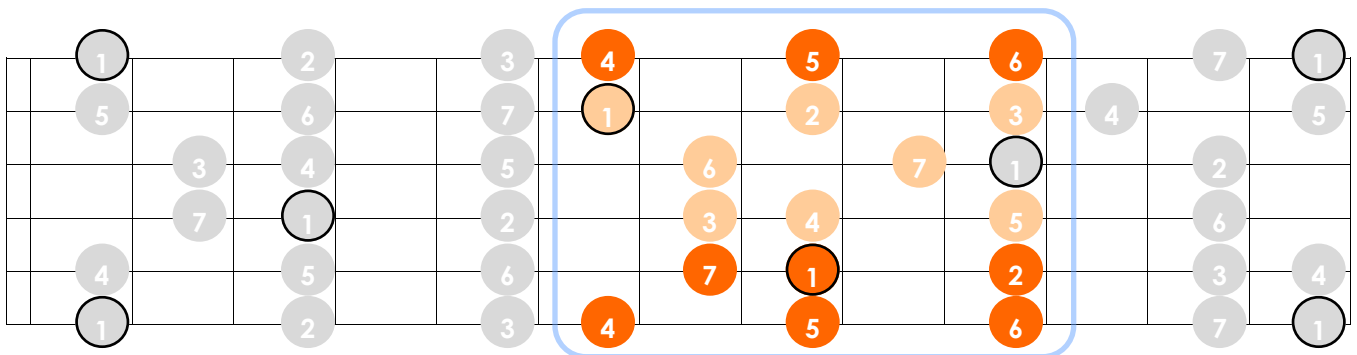
Instead of playing from 1 up to 1, the Dorian mode is played from 2 up to 2:



## 3rd mode: "Phrygian"



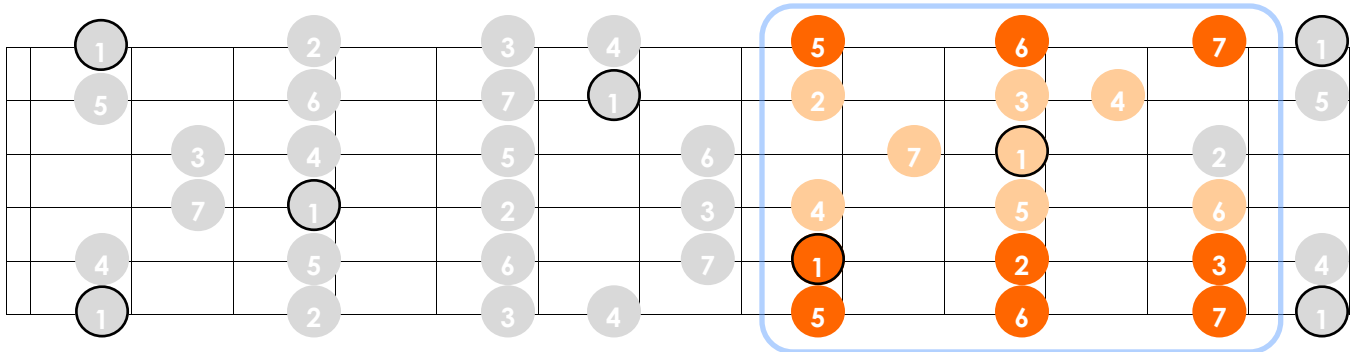
## 4th mode: "Lydian"



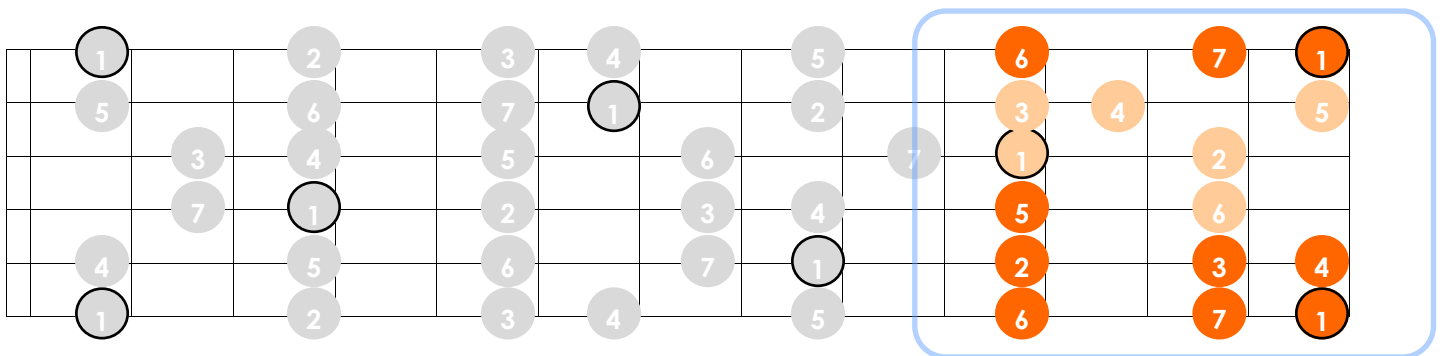


# Major Scale Modes (3 of 3)

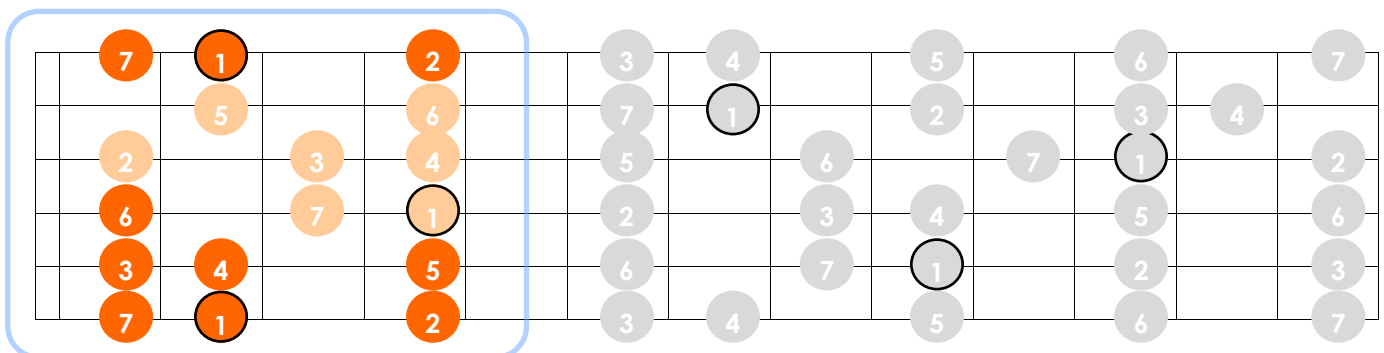
## 5th mode: "Mixolydian"



## 6th mode: "Aeolian"

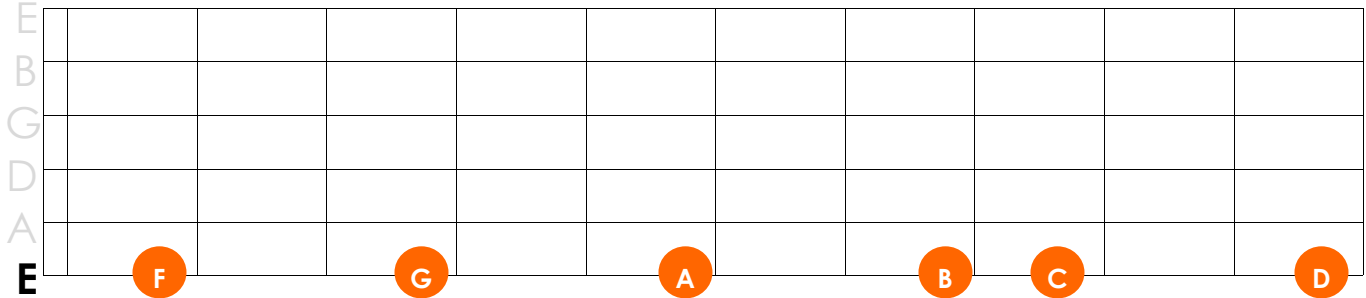


## 7th mode: "Locrian"

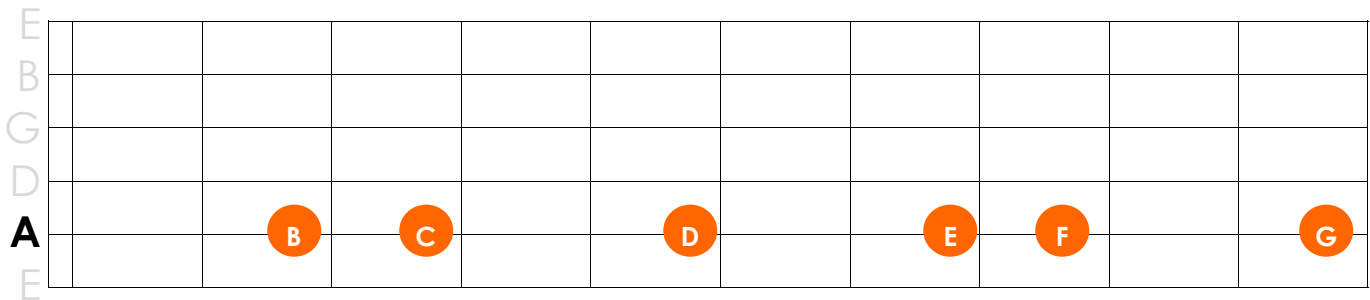


# Letter Names on the Fretboard

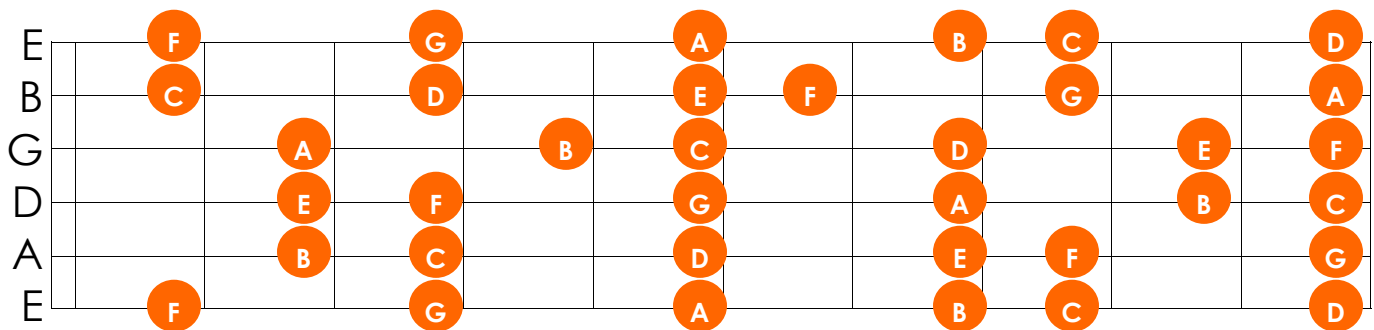
The musical alphabet uses the letters A through G and then repeats. There are 2 frets between each letter except: E-F and B-C.



Here are the letters on the "A" string:



Here are the letters on all the strings:



# Harmony on the E string

Lower harmony on E string

	1		2		3	4		5		6		7	1
	5		6		7	1		2		3	4		5

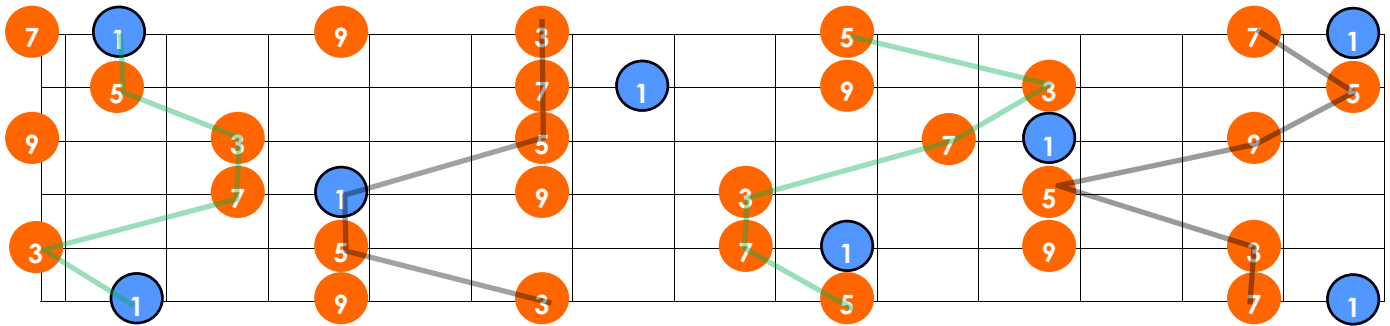
Higher harmony on B string

	3	4		5		6		7	1		2		3		1
		1		2		3	4		5		6		7		1

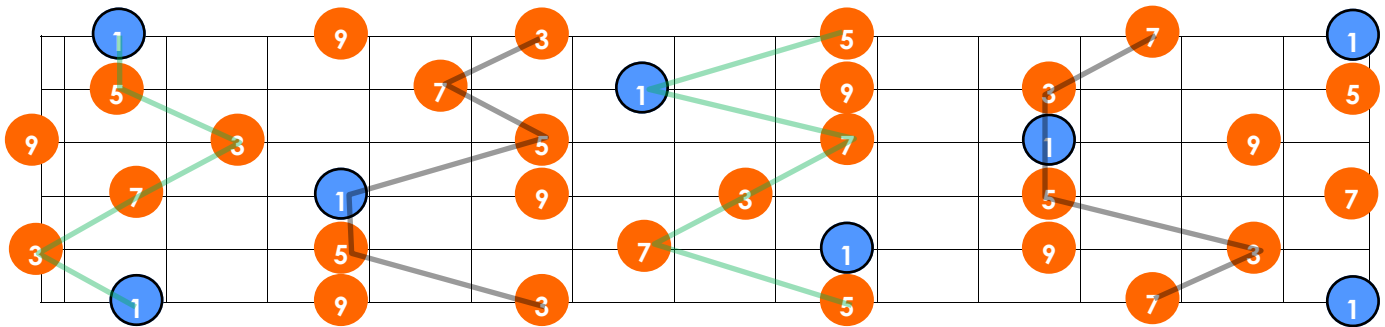
"D" shape harmonics


# Jazz Chord Inversions

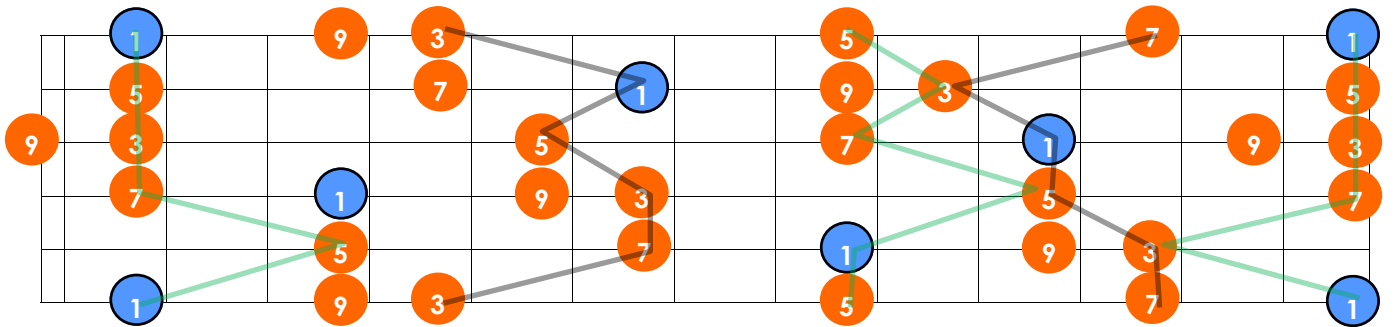
## Major 7



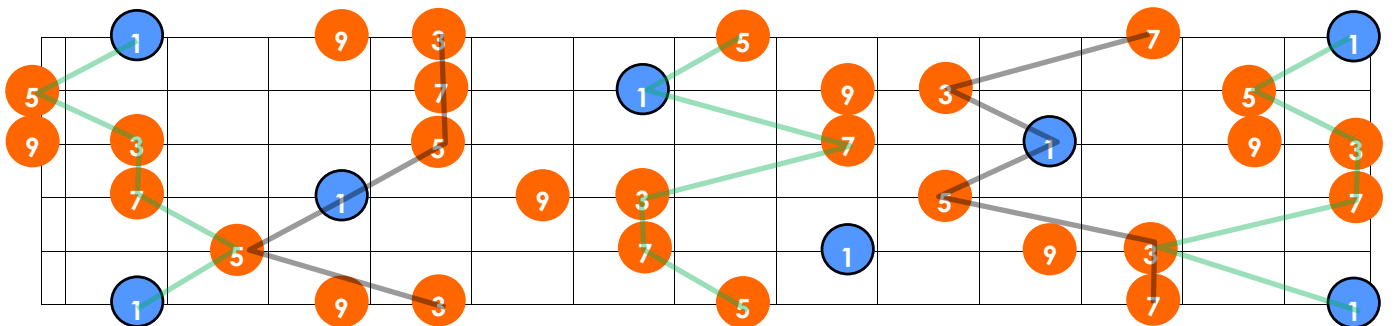
## Dominant



## Minor 7

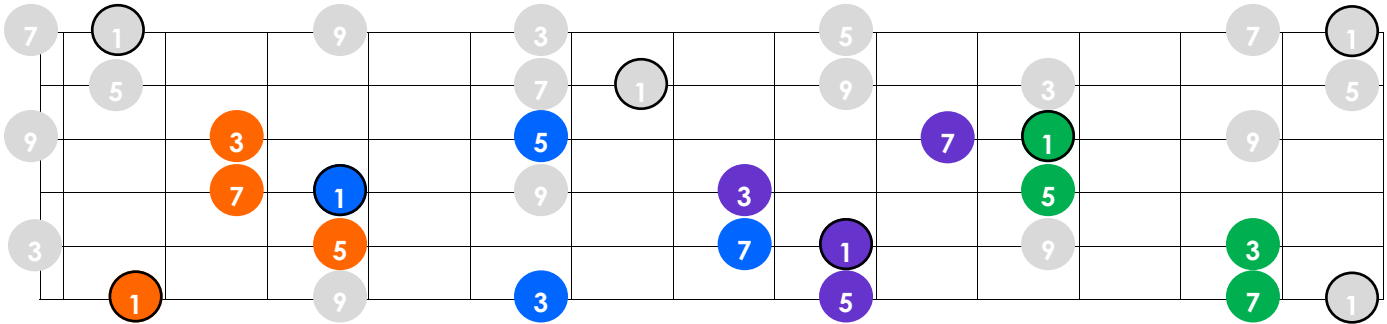


## Half Diminished

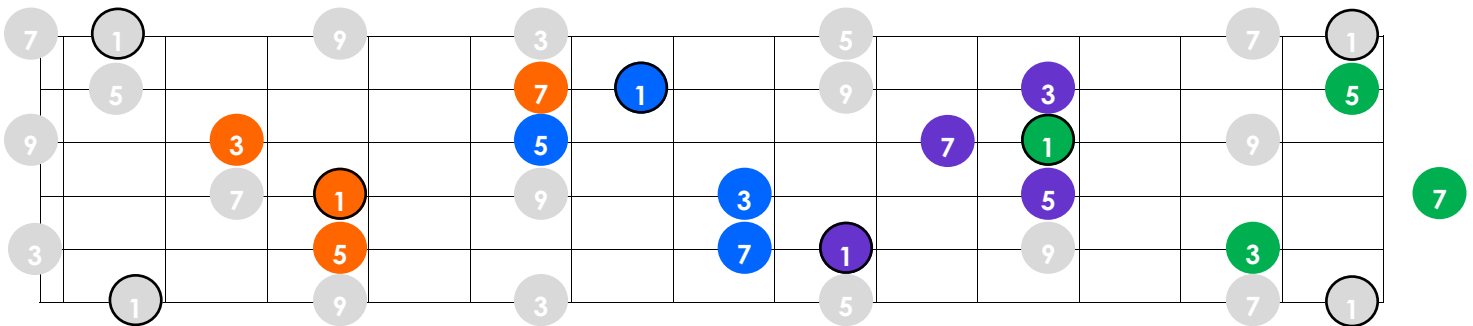


# Jazz Chord Drop 2's for Major 7

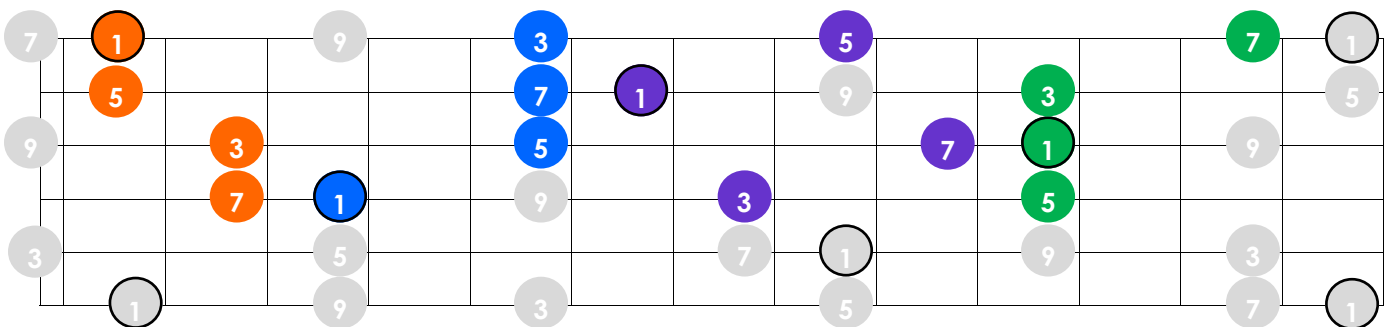
## LOWEST STRINGS



## MIDDLE STRINGS

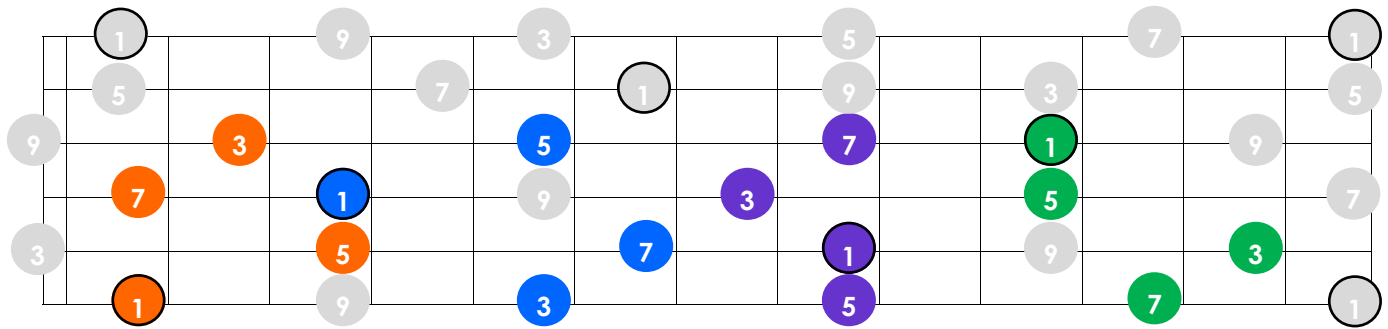


## HIGHEST STRINGS

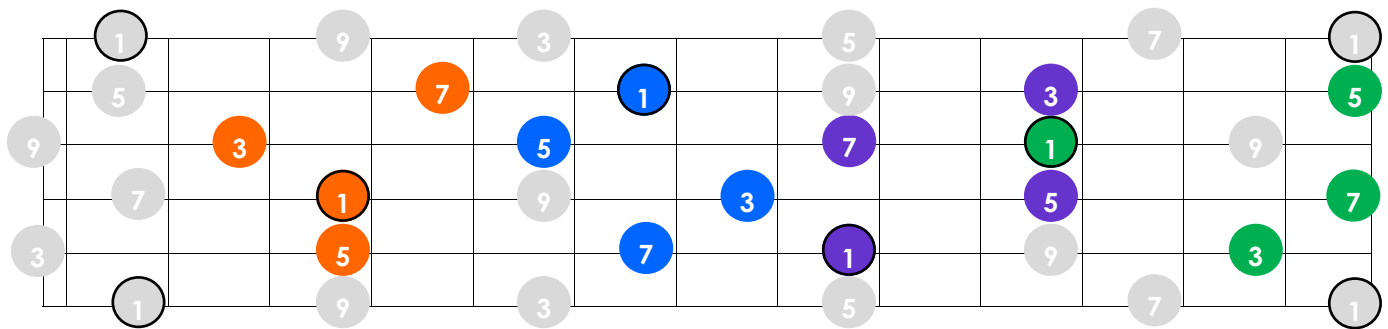


# Jazz Chord Drop 2's for Dominant

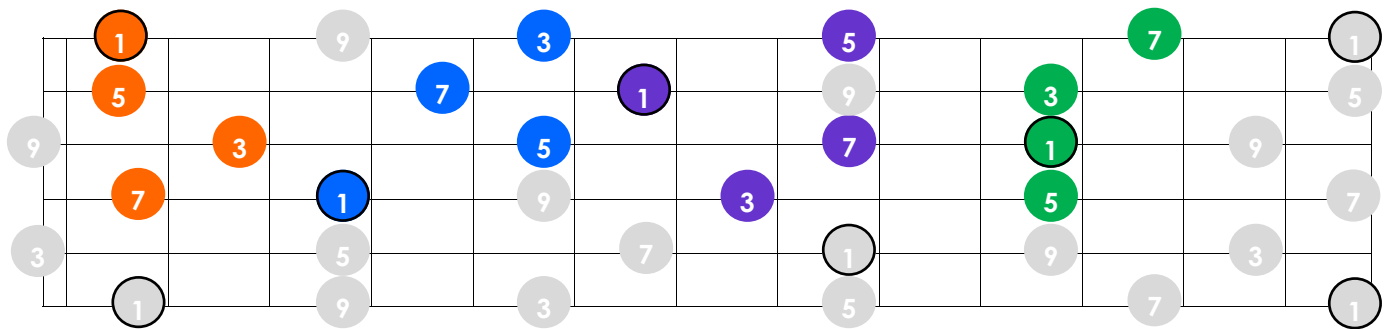
## LOWEST STRINGS



## MIDDLE STRINGS



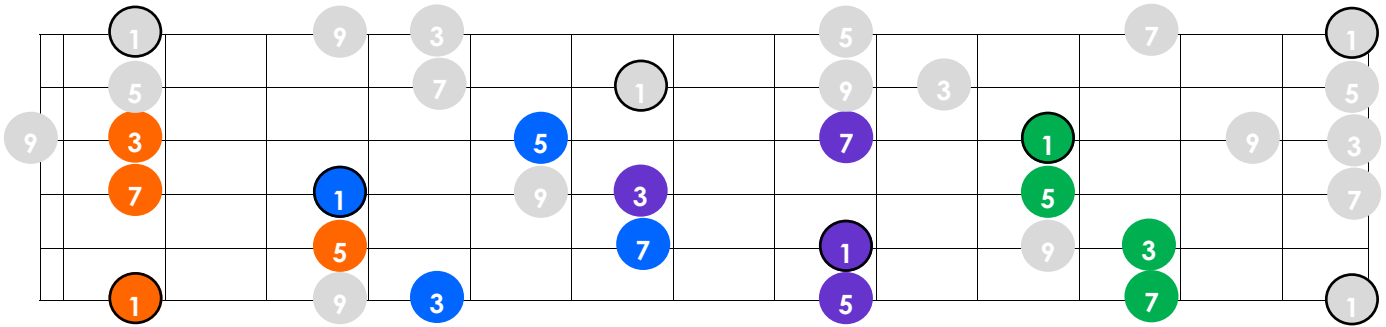
## HIGHEST STRINGS



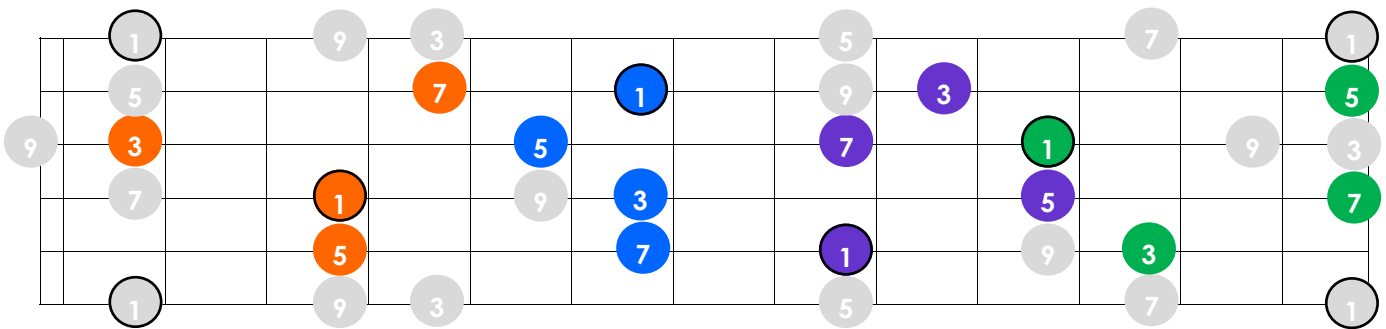


# Jazz Chord Drop 2's for Minor 7

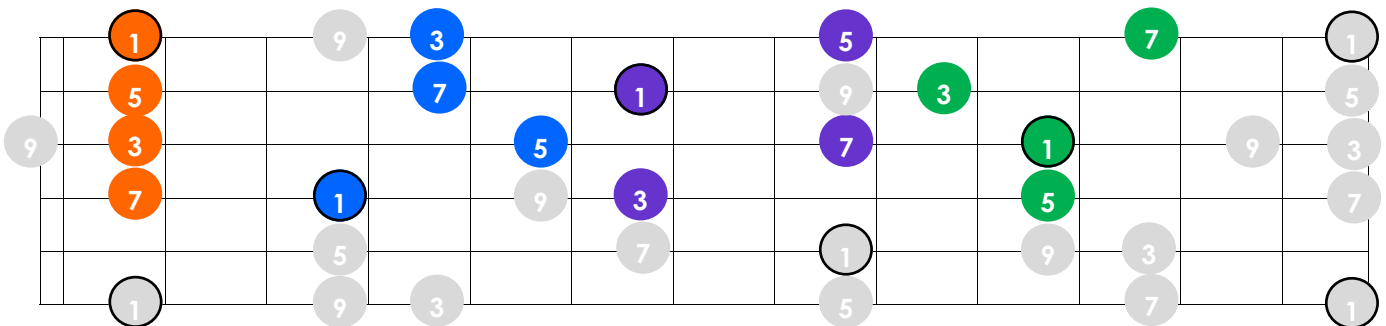
## LOWEST STRINGS



## MIDDLE STRINGS

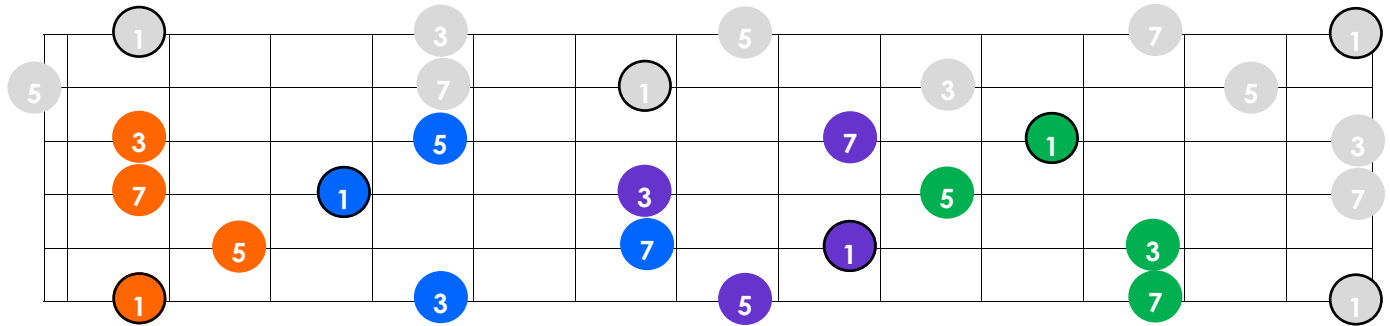


## HIGHEST STRINGS

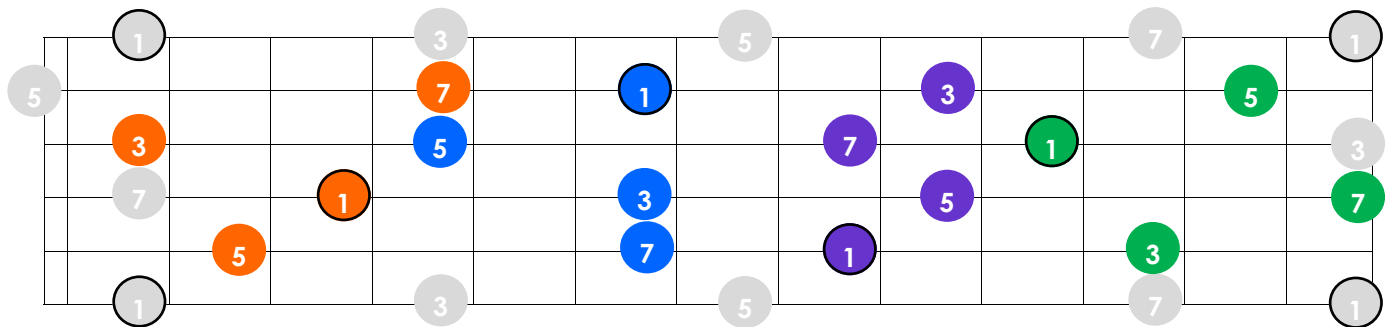


# Jazz Chord Drop 2's for Half Diminished

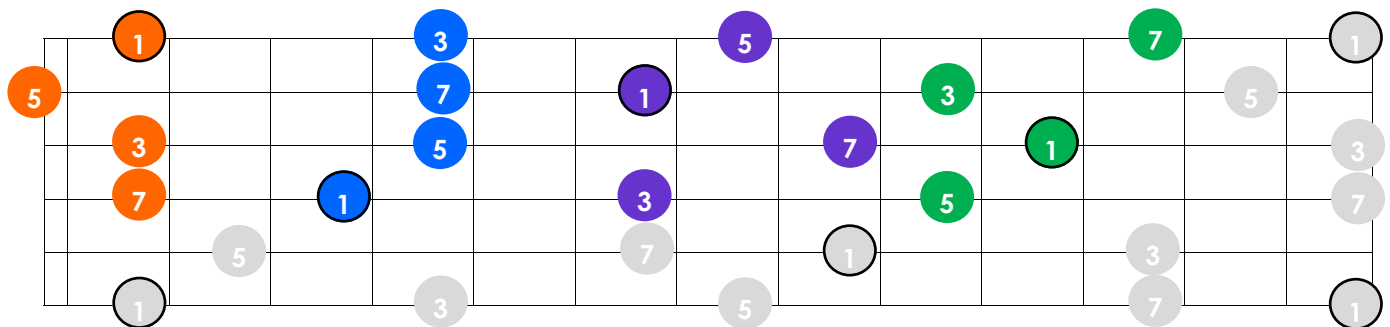
## LOWEST STRINGS



## MIDDLE STRINGS

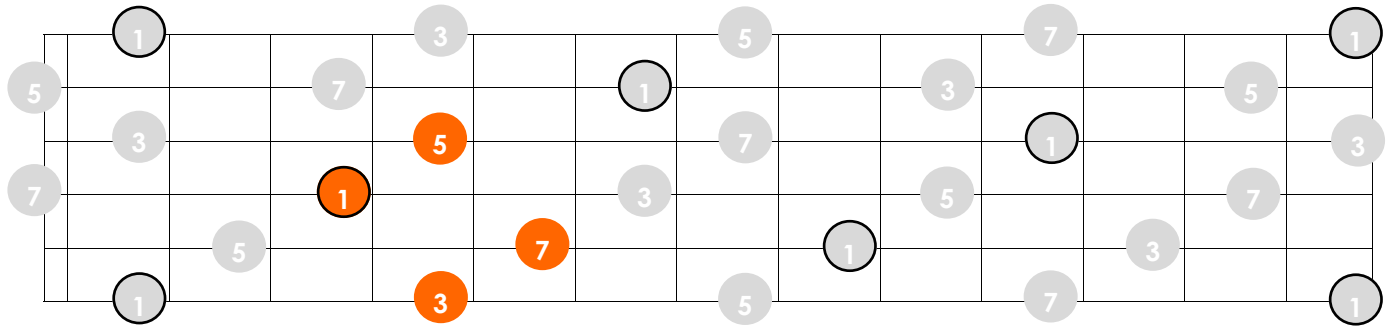


## HIGHEST STRINGS

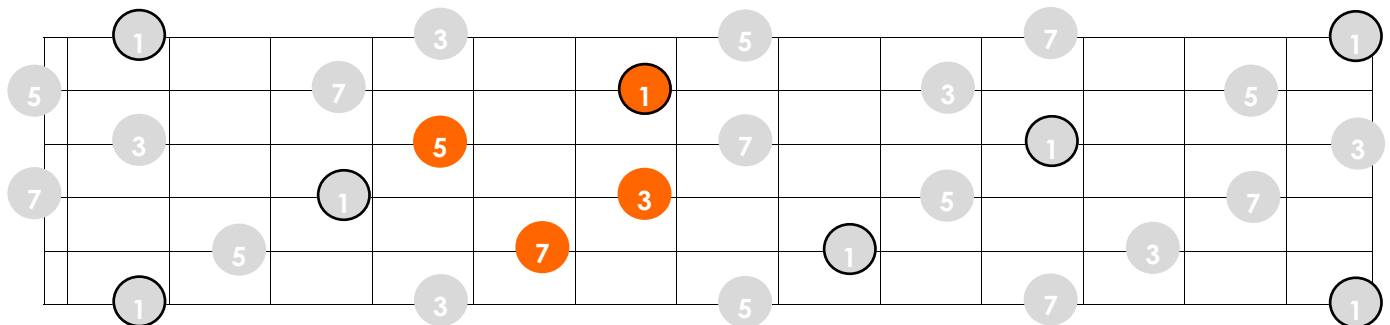


# Jazz Chord Drop 2's for Fully Diminished

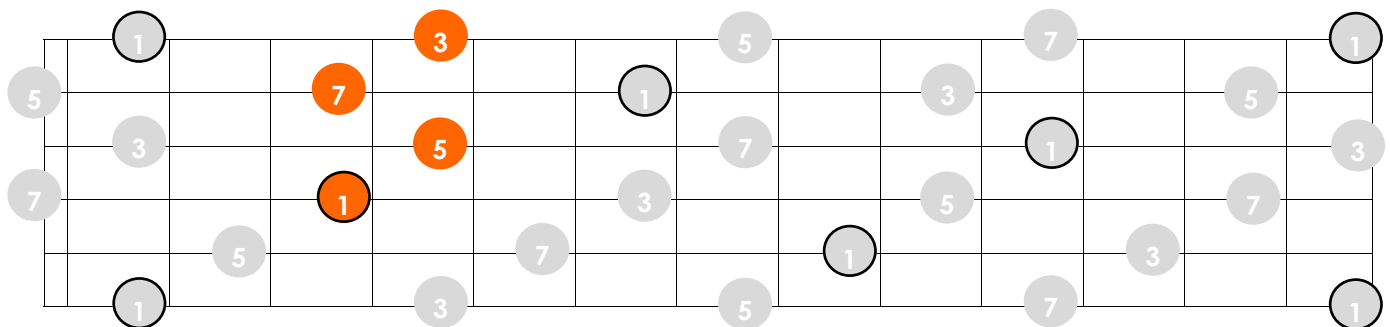
## LOWEST STRINGS



## MIDDLE STRINGS

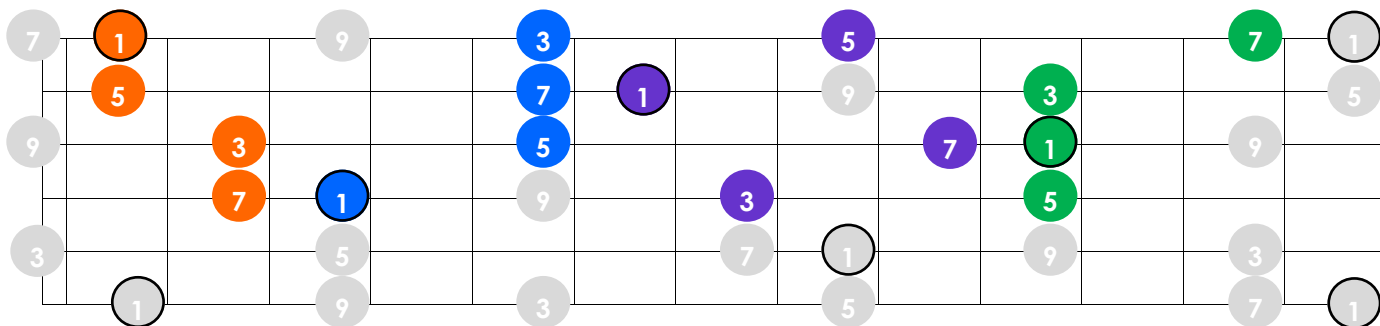


## HIGHEST STRINGS

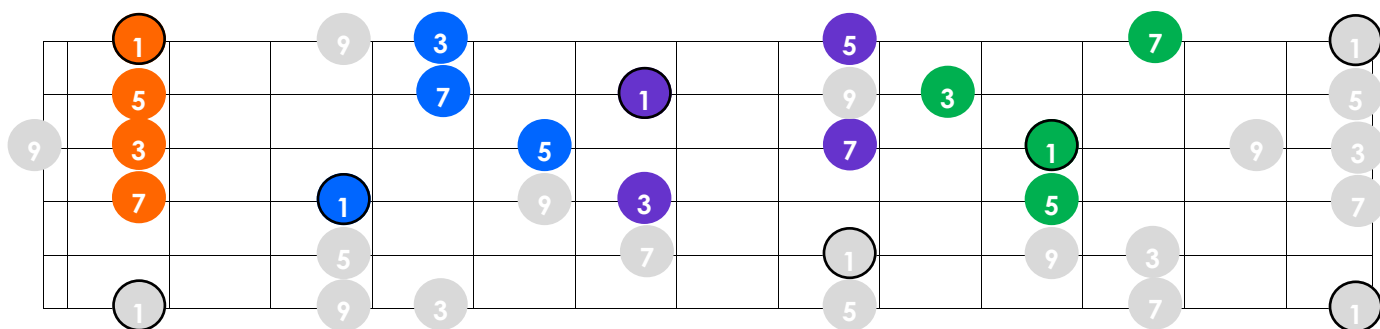


# Jazz Chords grouped on the high strings

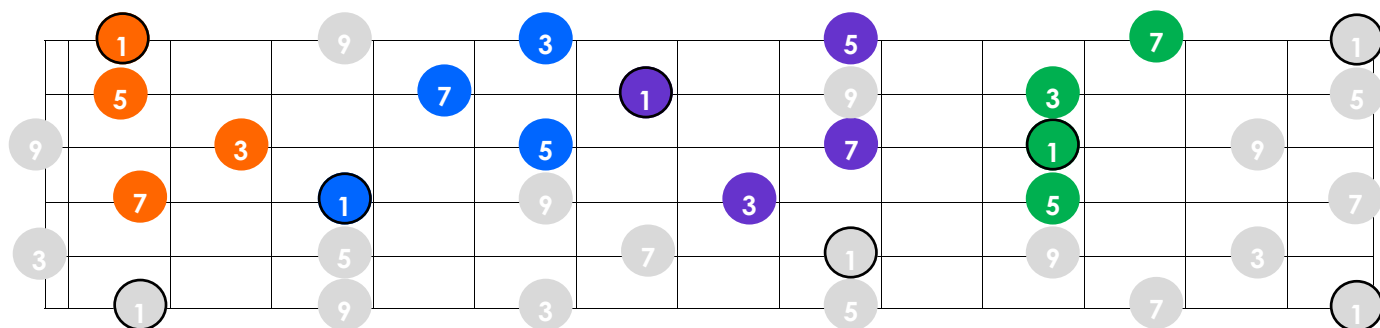
## MAJOR 7



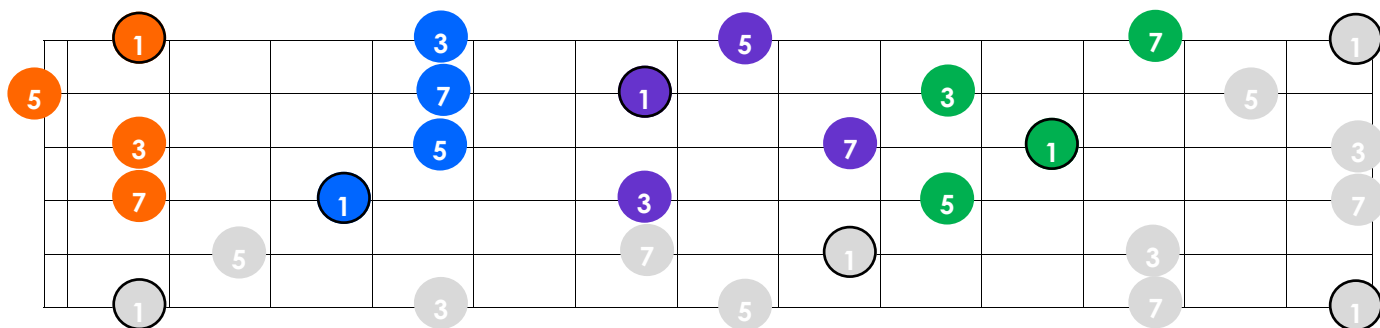
## MINOR 7



## DOMINANT

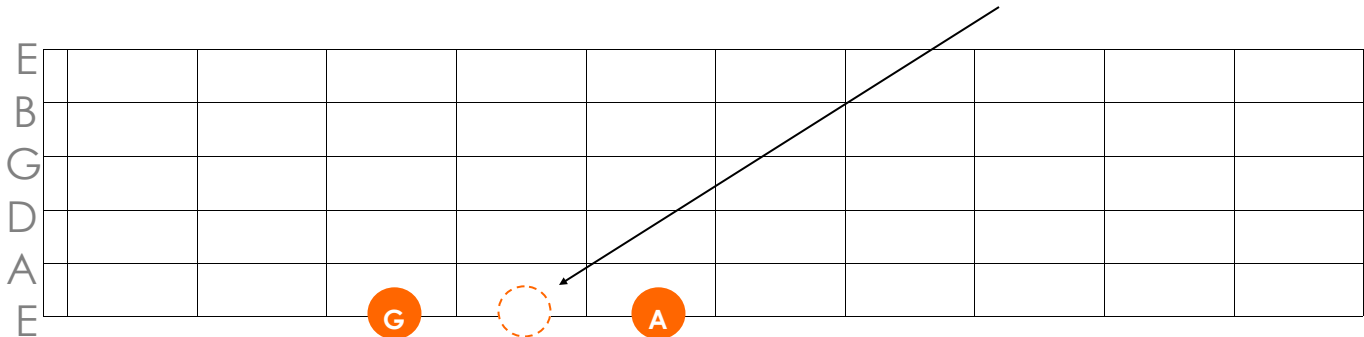


## HALF DIMINISHED



# Sharps and Flats on the Fretboard

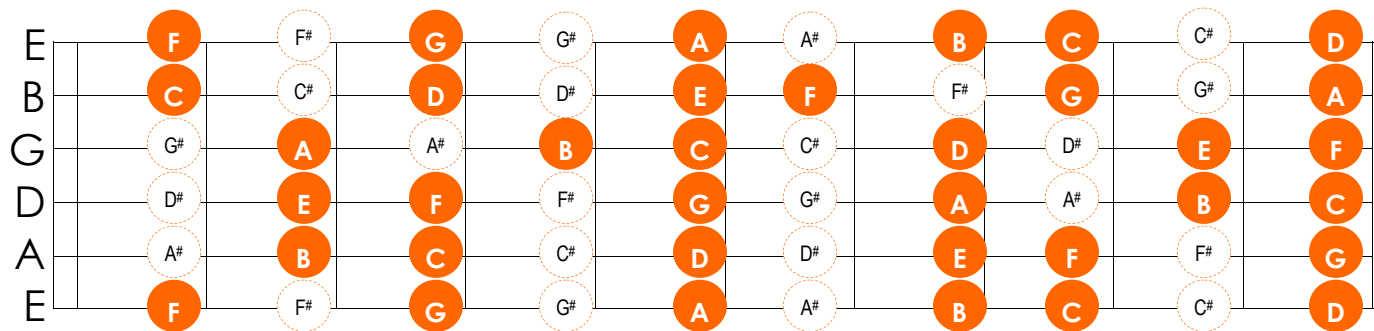
The note in between two letters is a sharp (#) or a flat (b)



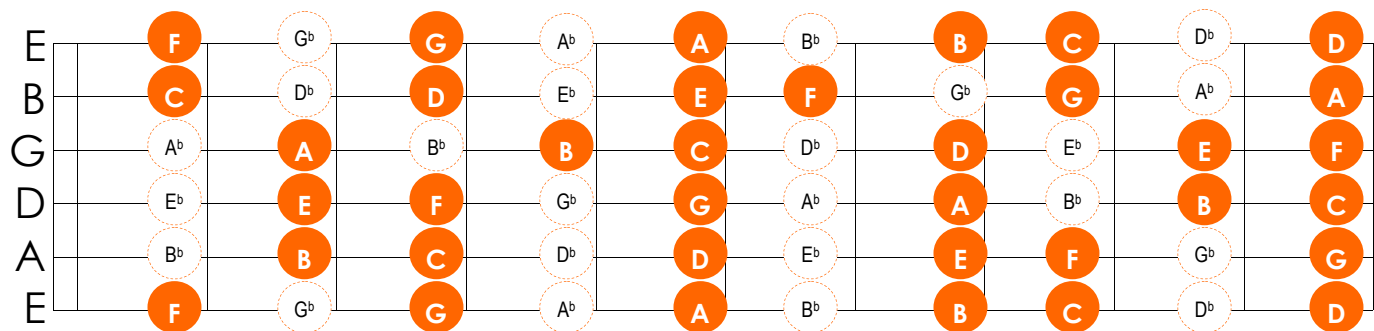
This one could be called either **G sharp** or **A flat**. Both are names for the same note.

*(When two note names have the same sound, they are called "enharmonic equivalents")*

Here are all the notes labeled as sharps (#)



Here are all the notes labeled as flats (b)



# Chords On Guitar (1 of 2)



Chords are just groups of notes played at the same time. The “**C Major**” chord, for example, is just the sound of C, E, and G being played at the same time (see the top example on the left on the chart below).

There can be duplicates of any of the notes in a chord, but the “1” should usually be the lowest sounding note.

	Major			Minor			Augmented			Diminished		
	“1”	“3”	“5”	“1”	“3”	“5”	“1”	“3”	“5”	“1”	“3”	“5”
C	C	E	G	C	E <sup>b</sup>	G	C	E	G <sup>#</sup>	C	E <sup>b</sup>	G <sup>b</sup>
D <sup>b</sup> (C <sup>#</sup> )	D <sup>b</sup>	F	A <sup>b</sup>	D <sup>b</sup>	F <sup>b</sup> (E)	A <sup>b</sup>	D <sup>b</sup>	F	A	D <sup>b</sup>	F <sup>b</sup> (E)	A <sup>bb</sup> (G)
D	D	F <sup>#</sup>	A	D	F	A	D	F <sup>#</sup>	A <sup>#</sup>	D	F	A <sup>b</sup>
E <sup>b</sup>	E <sup>b</sup>	G	B <sup>b</sup>	E <sup>b</sup>	G <sup>b</sup>	B <sup>b</sup>	E <sup>b</sup>	G	B	E <sup>b</sup>	G <sup>b</sup>	B <sup>bb</sup> (A)
E	E	G <sup>#</sup>	B	E	G	B	E	G <sup>#</sup>	B <sup>#</sup> ©	E	G	B <sup>b</sup>
F	F	A	C	F	A <sup>b</sup>	C	F	A	C <sup>#</sup>	F	A <sup>b</sup>	C <sup>b</sup> (B)
G <sup>b</sup> (F <sup>#</sup> )	G <sup>b</sup>	B <sup>b</sup>	D <sup>b</sup>	G <sup>b</sup>	B <sup>bb</sup> (A)	D <sup>b</sup>	G <sup>b</sup>	B <sup>b</sup>	D	G <sup>b</sup>	B <sup>bb</sup> (A)	D <sup>bb</sup> (C)
G	G	B	D	G	B <sup>b</sup>	D	G	B	D <sup>#</sup>	G	B <sup>b</sup>	D <sup>b</sup>
A <sup>b</sup> (G <sup>#</sup> )	A <sup>b</sup>	C	E <sup>b</sup>	A <sup>b</sup>	C <sup>b</sup> (B)	E <sup>b</sup>	A <sup>b</sup>	C	E	A <sup>b</sup>	C <sup>b</sup> (B)	E <sup>bb</sup> (D)
A	A	C <sup>#</sup>	E	A	C	E	A	C <sup>#</sup>	E <sup>#</sup> (F)	A	C	E <sup>b</sup>
B <sup>b</sup>	B <sup>b</sup>	D	F	B <sup>b</sup>	D <sup>b</sup>	F	B <sup>b</sup>	D	F <sup>#</sup>	B <sup>b</sup>	D <sup>b</sup>	F <sup>b</sup> (E)
B	B	D <sup>#</sup>	F <sup>#</sup>	B	D	F <sup>#</sup>	B	D <sup>#</sup>	F <sup>x</sup> (G)	B	D	F

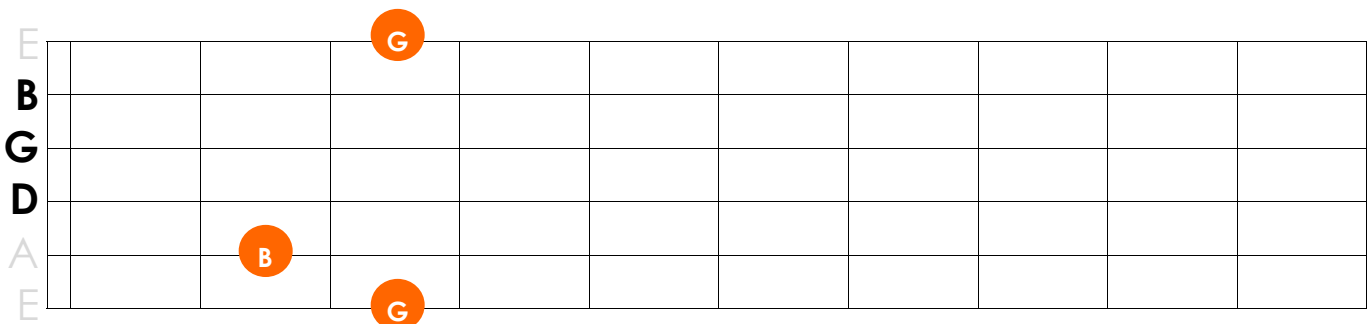
## Chords On Guitar (2 of 2)

All we do on the guitar to create chords is put our fingers on frets so that each of the strings makes the sound of one of the notes in the chord. Let's look at a "G" chord:



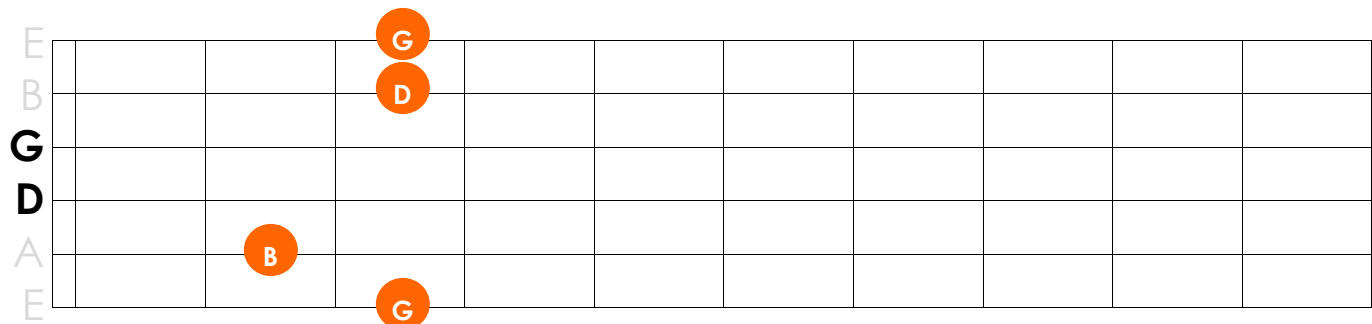
A "G" chord has: G B D

So we must place our fingers so that only G's, B's and D's are sounding:



In the above example, all the strings were ringing with either G, B, or D.

However, below is another fingering for the G chord that is also perfectly acceptable since each string is still playing one of the notes from the G chord:



# Important Chords For Popular Songs

Most popular songs mainly use just four chords:

*the 1, the 4, the 5, and the 6*

To pick chords that will quickly make a great song, just pick which key you want to play in (on the left) and use the 1, 4, 5, & 6 chords listed for that key.

Put the chords in any order you want. Make sure you land on the “1” at the end, and PRESTO—you’ve got yourself a hit!



	1	2	3	4	5	6*	7
Key of C	<b>C</b>	D-	E-	<b>F</b>	<b>G</b>	<b>A-</b>	B <sup>0</sup>
Key of D <sup>b</sup>	<b>D<sup>b</sup></b>	E <sup>b</sup> -	F-	<b>G<sup>b</sup></b>	<b>A<sup>b</sup></b>	<b>B<sup>b</sup>-</b>	C <sup>0</sup>
Key of D	<b>D</b>	E-	F#-	<b>G</b>	<b>A</b>	<b>B-</b>	C# <sup>0</sup>
Key of E <sup>b</sup>	<b>E<sup>b</sup></b>	F-	G-	<b>A<sup>b</sup></b>	<b>B<sup>b</sup></b>	<b>C-</b>	D <sup>0</sup>
Key of E	<b>E</b>	F#-	G#-	<b>A</b>	<b>B</b>	<b>C#-</b>	D# <sup>0</sup>
Key of F	<b>F</b>	G-	A-	<b>B<sup>b</sup></b>	<b>C</b>	<b>D-</b>	E <sup>0</sup>
Key of G <sup>b</sup>	<b>G<sup>b</sup></b>	A <sup>b</sup> -	B <sup>b</sup> -	<b>C<sup>b</sup></b>	<b>D<sup>b</sup></b>	<b>E<sup>b</sup>-</b>	F <sup>0</sup>
Key of G	<b>G</b>	A-	B-	<b>C</b>	<b>D</b>	<b>E-</b>	F# <sup>0</sup>
Key of A <sup>b</sup>	<b>A<sup>b</sup></b>	B <sup>b</sup> -	C-	<b>D<sup>b</sup></b>	<b>E<sup>b</sup></b>	<b>F-</b>	G <sup>0</sup>
Key of A	<b>A</b>	B-	C#-	<b>D</b>	<b>E</b>	<b>F#-</b>	G# <sup>0</sup>
Key of B <sup>b</sup>	<b>B<sup>b</sup></b>	C-	D-	<b>E<sup>b</sup></b>	<b>F</b>	<b>G-</b>	A <sup>0</sup>
Key of B	<b>B</b>	C#-	D#-	<b>E</b>	<b>F#</b>	<b>G#-</b>	A# <sup>0</sup>

\*The “-” means “minor”, so a G-, for example would be a G minor chord.



# Important Chords For Guitarists



Most guitarists just play in one of 4 keys: D, E, G, or A. Since most songs only use the 1, 4, 5, and maybe 6 chord from a key, **you can get by playing many guitar songs if you just learn the chords: C A G E & D.** (Learning B will help in the key of E, but many guitarists try to find a way around it because it is kind of difficult to finger.)

	1	2	3	4	5	6	7
Key of C	C	D-	E-	F	G	A-	B <sup>0</sup>
Key of D <sup>b</sup>	D <sup>b</sup>	E <sup>b</sup>	F-	G <sup>b</sup>	A <sup>b</sup>	B <sup>b</sup>	C <sup>0</sup>
<b>Key of D</b>	<b>D</b>	E-	F#-	<b>G</b>	<b>A</b>	<b>B-</b>	C# <sup>0</sup>
Key of E <sup>b</sup>	E <sup>b</sup>	F-	G-	A <sup>b</sup>	B <sup>b</sup>	C-	D <sup>0</sup>
<b>Key of E</b>	<b>E</b>	F#-	G#-	<b>A</b>	<b>B</b>	<b>C#-</b>	D# <sup>0</sup>
Key of F	F	G-	A-	B <sup>b</sup>	C	D-	E <sup>0</sup>
Key of G <sup>b</sup>	G <sup>b</sup>	A <sup>b</sup>	B <sup>b</sup>	C <sup>b</sup>	D <sup>b</sup>	E <sup>b</sup>	F <sup>0</sup>
<b>Key of G</b>	<b>G</b>	A-	B-	<b>C</b>	<b>D</b>	<b>E-</b>	F# <sup>0</sup>
Key of A <sup>b</sup>	A <sup>b</sup>	B <sup>b</sup>	C-	D <sup>b</sup>	E <sup>b</sup>	F-	G <sup>0</sup>
<b>Key of A</b>	<b>A</b>	B-	C#-	<b>D</b>	<b>E</b>	<b>F#-</b>	G# <sup>0</sup>
Key of B <sup>b</sup>	B <sup>b</sup>	C-	D-	E <sup>b</sup>	F	G-	A <sup>0</sup>
Key of B	B	C#-	D#-	E	F#	G#-	A# <sup>0</sup>

Other common chords for guitarists to use are "A minor", "E minor", and "D minor"

# Common Chords (Diatonic Triads)

Here is a list of all the common chords in every major and minor key. After each given key (on the left), each of the chords listed is “diatonic” to that key, meaning that the notes in all the chords are found inside that key. That means that you can use any of the chords listed without sounding out of place or going outside the key.

	Major							Natural Minor (Major with lowered 3, 6, & 7)						
Chord Number*	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Key of C	C	D-	E-	F	G	A-	B <sup>∅</sup>	C-	D <sup>∅</sup>	E <sup>b</sup>	F-	G	A <sup>b</sup>	B <sup>b</sup>
Key of D <sup>b</sup>	D <sup>b</sup>	E <sup>b-</sup>	F-	G <sup>b</sup>	A <sup>b</sup>	B <sup>b-</sup>	C <sup>∅</sup>	D <sup>b-</sup>	E <sup>b∅</sup>	F <sup>b</sup>	G <sup>b-</sup>	A <sup>b</sup>	B <sup>bb</sup>	C <sup>b</sup>
Key of D	D	E-	F#-	G	A	B-	C# <sup>∅</sup>	D-	E <sup>∅</sup>	F	G-	A	B <sup>b</sup>	C
Key of E <sup>b</sup>	E <sup>b</sup>	F-	G-	A <sup>b</sup>	B <sup>b</sup>	C-	D <sup>∅</sup>	E <sup>b-</sup>	F <sup>∅</sup>	G <sup>b</sup>	A <sup>b-</sup>	B <sup>b</sup>	C <sup>b</sup>	D <sup>b</sup>
Key of E	E	F#-	G#-	A	B	C#-	D# <sup>∅</sup>	E-	F# <sup>∅</sup>	G	A-	B	C	D
Key of F	F	G-	A-	B <sup>b</sup>	C	D-	E <sup>∅</sup>	F-	G <sup>∅</sup>	A <sup>b</sup>	B <sup>b-</sup>	C	D <sup>b</sup>	E <sup>b</sup>
Key of G <sup>b</sup>	G <sup>b</sup>	A <sup>b-</sup>	B <sup>b-</sup>	C <sup>b</sup>	D <sup>b</sup>	E <sup>b-</sup>	F <sup>∅</sup>	G <sup>b-</sup>	A <sup>b∅</sup>	B <sup>bb</sup>	C <sup>b-</sup>	D <sup>b</sup>	E <sup>bb</sup>	F <sup>b</sup>
Key of G	G	A-	B-	C	D	E-	F# <sup>∅</sup>	G-	A <sup>∅</sup>	B <sup>b</sup>	C-	D	E <sup>b</sup>	F
Key of A <sup>b</sup>	A <sup>b</sup>	B <sup>b-</sup>	C-	D <sup>b</sup>	E <sup>b</sup>	F-	G <sup>∅</sup>	A <sup>b-</sup>	B <sup>b∅</sup>	C <sup>b</sup>	D <sup>b-</sup>	E <sup>b</sup>	F <sup>b</sup>	G <sup>b</sup>
Key of A	A	B-	C#-	D	E	F#-	G# <sup>∅</sup>	A-	B <sup>∅</sup>	C	D-	E	F	G
Key of B <sup>b</sup>	B <sup>b</sup>	C-	D-	E <sup>b</sup>	F	G-	A <sup>∅</sup>	B <sup>b-</sup>	C <sup>∅</sup>	D <sup>b</sup>	E <sup>b-</sup>	F	G <sup>b</sup>	A <sup>b</sup>
Key of B	B	C#-	D#-	E	F#	G#-	A# <sup>∅</sup>	B-	C# <sup>∅</sup>	D	E-	F#	G	A

\*Nashville musicians have to change keys so frequently that most of them just think of chords as numbers in a key, and don't even bother with chord letter names. This has become known as the “Nashville numbers” system.

\*\* “-” means “minor”. In a major key, chord numbers 2, 3, and 6 are minor. In a major key, chord numbers 1, 4, and 5 are major. “∅” means diminished. In a major key, only chord number 7 is diminished.

# "Open" Chord Chart

C	C <sup>6</sup>	C <sup>7</sup>	Cmaj <sup>7</sup>	Cm	Cm <sup>6</sup>	Cm <sup>7</sup>	Caug	Cdim	Csus <sup>4</sup>	C <sup>9</sup>
C <sup>#</sup> /D <sup>b</sup>	C <sup>#</sup> 6	C <sup>#</sup> 7	C <sup>#</sup> maj <sup>7</sup>	C <sup>#</sup> m	C <sup>#</sup> m <sup>6</sup>	C <sup>#</sup> m <sup>7</sup>	C <sup>#</sup> aug	C <sup>#</sup> dim	C <sup>#</sup> sus <sup>4</sup>	C <sup>#</sup> 9
D	D <sup>6</sup>	D <sup>7</sup>	Dmaj <sup>7</sup>	Dm	Dm <sup>6</sup>	Dm <sup>7</sup>	Daug	Ddim	Dsus <sup>4</sup>	D <sup>9</sup>
D <sup>#</sup> /E <sup>b</sup>	D <sup>#</sup> 6	D <sup>#</sup> 7	D <sup>#</sup> maj <sup>7</sup>	D <sup>#</sup> m	D <sup>#</sup> m <sup>6</sup>	D <sup>#</sup> m <sup>7</sup>	D <sup>#</sup> aug	D <sup>#</sup> dim	D <sup>#</sup> sus <sup>4</sup>	D <sup>#</sup> 9
E	E <sup>6</sup>	E <sup>7</sup>	E <sup>+</sup> maj <sup>7</sup>	Em	Em <sup>6</sup>	Em <sup>7</sup>	Eaug	Edim	Esus <sup>4</sup>	E <sup>9</sup>
F	F <sup>6</sup>	F <sup>7</sup>	Fmaj <sup>7</sup>	Fm	Fm <sup>6</sup>	Fm <sup>7</sup>	Faug	Fdim	Fsus <sup>4</sup>	F <sup>9</sup>
F <sup>#</sup> /G <sup>b</sup>	F <sup>#</sup> 6	F <sup>#</sup> 7	F <sup>#</sup> maj <sup>7</sup>	F <sup>#</sup> m	F <sup>#</sup> m <sup>6</sup>	F <sup>#</sup> m <sup>7</sup>	F <sup>#</sup> aug	F <sup>#</sup> dim	F <sup>#</sup> sus <sup>4</sup>	F <sup>#</sup> 9
G	G <sup>6</sup>	G <sup>7</sup>	Gmaj <sup>7</sup>	Gm	Gm <sup>6</sup>	Gm <sup>7</sup>	Gaug	Gdim	Gsus <sup>4</sup>	G <sup>9</sup>
G <sup>#</sup> /A <sup>b</sup>	G <sup>#</sup> 6	G <sup>#</sup> 7	G <sup>#</sup> maj <sup>7</sup>	G <sup>#</sup> m	G <sup>#</sup> m <sup>6</sup>	G <sup>#</sup> m <sup>7</sup>	G <sup>#</sup> aug	G <sup>#</sup> dim	G <sup>#</sup> sus <sup>4</sup>	G <sup>#</sup> 9
A	A <sup>6</sup>	A <sup>7</sup>	A <sup>+</sup> maj <sup>7</sup>	Am	Am <sup>6</sup>	Am <sup>7</sup>	Aaug	Adim	Asus <sup>4</sup>	A <sup>9</sup>
A <sup>#</sup> /B <sup>b</sup>	A <sup>#</sup> 6	A <sup>#</sup> 7	A <sup>#</sup> maj <sup>7</sup>	A <sup>#</sup> m	A <sup>#</sup> m <sup>6</sup>	A <sup>#</sup> m <sup>7</sup>	A <sup>#</sup> aug	A <sup>#</sup> dim	A <sup>#</sup> sus <sup>4</sup>	A <sup>#</sup> 9
B	B <sup>6</sup>	B <sup>7</sup>	Bmaj <sup>7</sup>	Bm	Bm <sup>6</sup>	Bm <sup>7</sup>	Baug	Bdim	Bsus <sup>4</sup>	B <sup>9</sup>

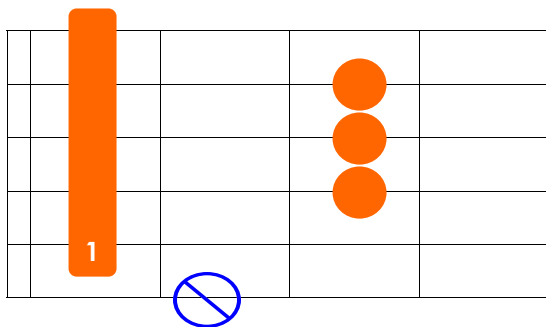
# “Bar” Chords (1 of 2)

“Bar” chords are chords where a finger must be placed on every string that gets played (although not every chord uses all the strings). Bar chords get their name from the “bar” that your index finger often has to make across all the strings.

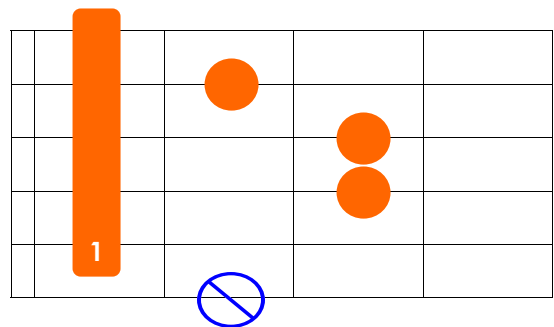


There are 4 basic bar chord shapes:

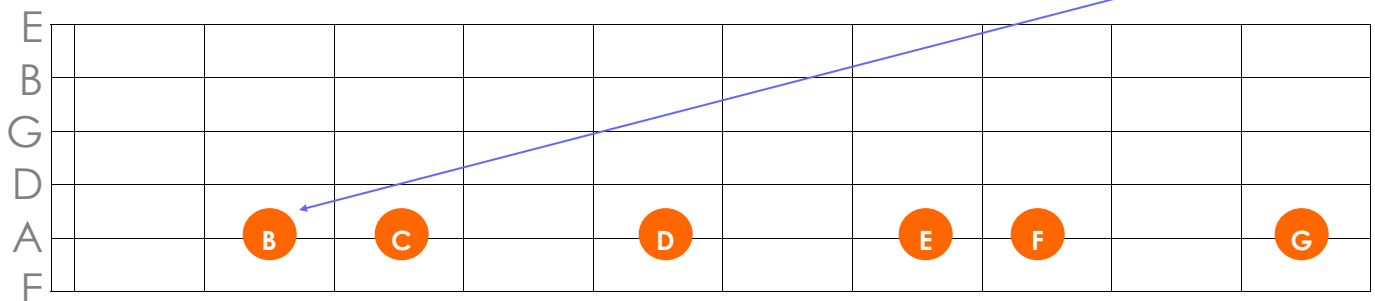
**Major** (not using the lowest string)



**Minor** (not using the lowest string)

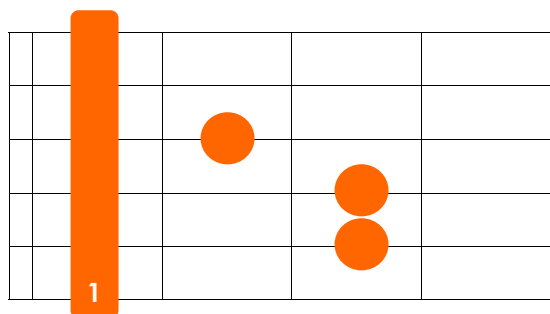


To use these shapes, just place the “1” of the shape on the letter name of the chord you want to play. If you wanted to play a “B minor”, for example, you would use the minor shape on the 2nd fret, because that would place the “1” of the shape on the letter “B”.

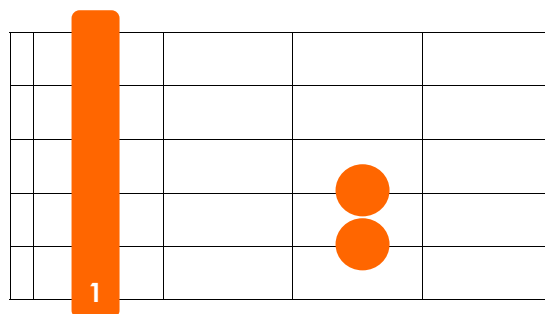


# “Bar” Chords (2 of 2)

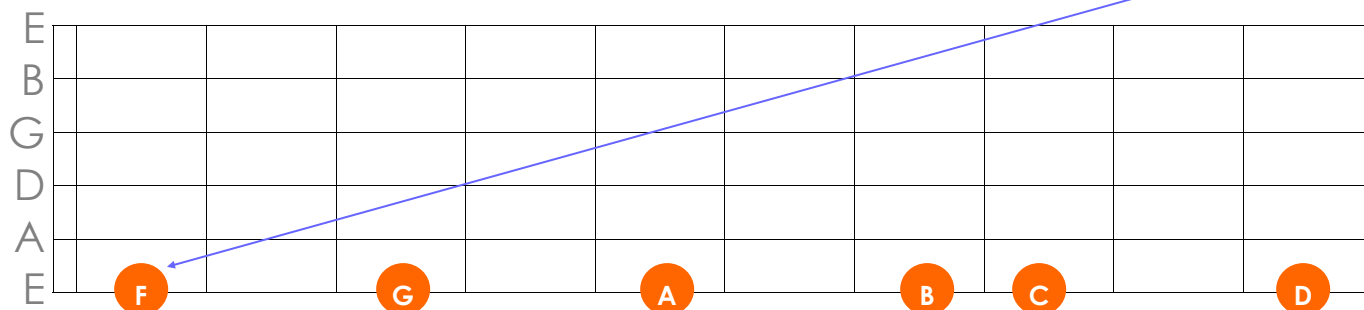
**Major** (using the lowest string)



**Minor** (using the lowest string)



To use these shapes, just place the “1” of the shape on the letter name of the chord you want to play. If you wanted to play a “F major”, for example, you would use the major shape on the 1st fret, because that would place the “1” of the shape on the letter “F”.



Once you become familiar with these 4 shapes and the placement of the letters on the lowest 2 strings, you can make your way through almost any song without having to know any other chords.

# Hearing and Recognizing Intervals

A good musician can hear any two notes and know exactly how far apart they are. (The distance is called an "interval".) One method of developing this skill involves hearing the interval as the beginning of a familiar song. For example, "Amazing Grace" starts with a perfect 4th, so if you hear two notes that sound like "Amazing Grace", you know it's a perfect 4th. With some practice, you can do it too. Here are just a few popular examples:



Name	Half-steps	Going up	Going down
Minor 2nd	1	C up to C# "Jaws" "Pink Panther Theme"	C down to B "Fur Elise" "Joy To The World"
Major 2nd	2	C up to D "Frere Jacques" "Rudolph the Red-Nosed..."	C down to B <sup>b</sup> "Mary Had A Little Lamb" "Deck the Halls"
Minor 3rd	3	C up to E <sup>b</sup> "Greensleeves" "Axel F" Theme Song	C down to A "This Old Man" National Anthem
Major 3rd	4	C up to E "Kumbaya" "Oh When The Saints"	C down to A <sup>b</sup> "Summertime" "Swing Low, Sweet Chariot"
Perfect 4th	5	C up to F "Here Comes The Bride" "Amazing Grace"	C down to G "George of the Jungle" Theme "I've Been Workin' on the Railroad"
Tritone (diminished 5th) (augmented 4th)	6	C up to F# "Simpsons" Theme "Maria" West Side Story	C down to F# "Black Sabbath" "YYZ" (by Rush)
Perfect 5th	7	C up to G "Star Wars" "Raindrops on Roses And.."	C down to F "Oompa Loompa" "Flinstones"
Minor 6th	8	C up to A <sup>b</sup> "In My Life" Intro (Beatles) Valse Op. 64 No. 2 (Chopin)	C down to E "Love Story" "You're Everything" (Chick Corea)
Major 6th	9	C up to A "My Bonnie Lies Over..." "Dashing Through The Snow"	C down to E <sup>b</sup> "Nobody Knows the Trouble I've Seen" "Music of the Night" Phantom of the Opera
Minor 7th	10	C up to B <sup>b</sup> "Somewhere" West Side Story "Star Trek" (Original)	C down to D "Watermelon Man" "Lady Jane" (Rolling Stones)
Major 7th	11	C up to B "There's a Place For Us" West Side Story "Don't Know Why" (Norah Jones)	C down to C# "I Love You" (Cole Porter)
Perfect 8th (Or octave)	12	C up to C "Somewhere Over The Rainbow" "I'm Singin' in the Rain"	C down to C "Willow Weep For Me"

# Diatonic Triads (2 of 2)

Here is a list of all the diatonic triads in every major and minor key. First, find what key you're in on the left side. Each of the chords listed after that is diatonic to that key, meaning that the notes in all the chords are found inside that scale. That means that when you're in any given key, you can use any of the chords listed after it without sounding out of place by going outside the key.

	Major							Natural Minor (Major with lowered 3, 6, & 7)						
Chord Number*	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Classical Notation	I	ii	iii	IV	V	vi	vii <sup>o</sup>	i	ii <sup>o</sup>	III	iv	V	VI	VII
Chord Quality**	M	m (-)	m (-)	M	M	m (-)	o	m (-)	o	M	m (-)	M	M	M
7th Quality***	$\Delta 7$	-7	-7	$\Delta 7$	7	-7	$\emptyset$	-7	$\emptyset$	$\Delta 7$	-7	7	$\Delta 7$	7
Key of C	C	D-	E-	F	G	A-	B <sup>o</sup>	C-	D <sup>o</sup>	E <sup>b</sup>	F-	G	A <sup>b</sup>	B <sup>b</sup>
Key of D <sup>b</sup>	D <sup>b</sup>	E <sup>b-</sup>	F-	G <sup>b</sup>	A <sup>b</sup>	B <sup>b-</sup>	C <sup>o</sup>	D <sup>b-</sup>	E <sup>b<sup>o</sup></sup>	F <sup>b</sup>	G <sup>b-</sup>	A <sup>b</sup>	B <sup>bb</sup>	C <sup>b</sup>
Key of D	D	E-	F#-	G	A	B-	C# <sup>o</sup>	D-	E <sup>o</sup>	F	G-	A	B <sup>b</sup>	C
Key of E <sup>b</sup>	E <sup>b</sup>	F-	G-	A <sup>b</sup>	B <sup>b</sup>	C-	D <sup>o</sup>	E <sup>b-</sup>	F <sup>o</sup>	G <sup>b</sup>	A <sup>b-</sup>	B <sup>b</sup>	C <sup>b</sup>	D <sup>b</sup>
Key of E	E	F#-	G#-	A	B	C#-	D# <sup>o</sup>	E-	F# <sup>o</sup>	G	A-	B	C	D
Key of F	F	G-	A-	B <sup>b</sup>	C	D-	E <sup>o</sup>	F-	G <sup>o</sup>	A <sup>b</sup>	B <sup>b-</sup>	C	D <sup>b</sup>	E <sup>b</sup>
Key of G <sup>b</sup>	G <sup>b</sup>	A <sup>b-</sup>	B <sup>b-</sup>	C <sup>b</sup>	D <sup>b</sup>	E <sup>b-</sup>	F <sup>o</sup>	G <sup>b-</sup>	A <sup>b<sup>o</sup></sup>	B <sup>bb</sup>	C <sup>b-</sup>	D <sup>b</sup>	E <sup>bb</sup>	F <sup>b</sup>
Key of G	G	A-	B-	C	D	E-	F# <sup>o</sup>	G-	A <sup>o</sup>	B <sup>b</sup>	C-	D	E <sup>b</sup>	F
Key of A <sup>b</sup>	A <sup>b</sup>	B <sup>b-</sup>	C-	D <sup>b</sup>	E <sup>b</sup>	F-	G <sup>o</sup>	A <sup>b-</sup>	B <sup>b<sup>o</sup></sup>	C <sup>b</sup>	D <sup>b-</sup>	E <sup>b</sup>	F <sup>b</sup>	G <sup>b</sup>
Key of A	A	B-	C#-	D	E	F#-	G# <sup>o</sup>	A-	B <sup>o</sup>	C	D-	E	F	G
Key of B <sup>b</sup>	B <sup>b</sup>	C-	D-	E <sup>b</sup>	F	G-	A <sup>o</sup>	B <sup>b-</sup>	C <sup>o</sup>	D <sup>b</sup>	E <sup>b-</sup>	F	G <sup>b</sup>	A <sup>b</sup>
Key of B	B	C#-	D#-	E	F#	G#-	A# <sup>o</sup>	B-	C# <sup>o</sup>	D	E-	F#	G	A

\*Nashville musicians have to change keys so frequently that most of them just play chords as numbers, and don't even bother chord letter names. This has become known as the "Nashville numbers" system.

\*\* "m" or "-" means "minor". In a major key, chord numbers 2, 3, and 6 are minor. "M" means "major". In a major key, chord numbers 1, 4, and 5 are major. "O" means diminished. In a major key, only chord number 7 is diminished. For more help with these chord types, see the triads section.

\*\*\* 7th chords are the same as triads, but they have a fourth note on them. For example, a "G" chord would use notes G, B, and D. A "G7" chord would have G, B, D, and F. The " $\Delta$ " symbol means "major 7" and the symbol " $\emptyset$ " means half diminished. For more help with 7th chords, see the



# Playing the Blues (Blues Format)

The most common blues format is called a "12-bar blues." It's 12 measures long and uses all dominant chords (a type of 7 chord) You can play it in any key, using just the 1 chord, the 4 chord, and the 5 chord (all dominant, of course).

The example below is in the key of "C", where the C7 is the 1 chord, the F7, is the 4 chord, and the G7 is the 5 chord.

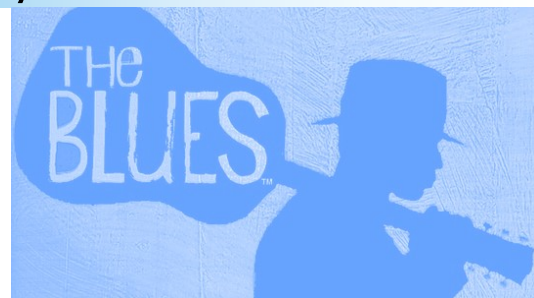


2: The Blues is a format...

There have been hundreds of variations on the blues form, but they all boil down to that basic one above. Probably the most common variation is the one below (the added chords are underlined.)



# Playing the Blues (Blues Scale)



Here's a set of notes that will instantly improve your blues solos—it's called the blues scale:

The blues scale can be found using the major scale. Here are the steps:

- \*Take out the 2nd note and the 6th note.*
- \*Lower the 3 by a half step.*
- \*Add the notes that are a half step above the 4, and a half step below the 7.*

The result is a major scale where you play :

*1, lowered 3, 4, raised 4, 5, lowered 7, and 7*

*OR...you can just cheat off of the chart on the right.*

3: The Blues is a scale...

Major Scale							Blues Scale						
1	2	3	4	5	6	7	1	$\flat 3$	4	$\sharp 4$	5	$\flat 7$	7
C	D	E	F	G	A	B	C	$E^{\flat}$	F	$F^{\sharp}$	G	$B^{\flat}$	B
$D^{\flat}$	$E^{\flat}$	F	$G^{\flat}$	$A^{\flat}$	$B^{\flat}$	C	$D^{\flat}$	$F^{\flat}$ (E)	$G^{\flat}$	G	$A^{\flat}$	$C^{\flat}$ (B)	C
D	E	$F^{\sharp}$	G	A	B	$C^{\sharp}$	D	F	G	$G^{\sharp}$	A	C	$C^{\sharp}$
$E^{\flat}$	F	G	$A^{\flat}$	$B^{\flat}$	C	D	$E^{\flat}$	$G^{\flat}$	$A^{\flat}$	A	$B^{\flat}$	$D^{\flat}$	D
E	$F^{\sharp}$	$G^{\sharp}$	A	B	$C^{\sharp}$	$D^{\sharp}$	E	G	A	$A^{\sharp}$	B	D	$D^{\sharp}$
F	G	A	$B^{\flat}$	C	D	E	F	$A^{\flat}$	$B^{\flat}$	B	C	$E^{\flat}$	E
$G^{\flat}$	$A^{\flat}$	$B^{\flat}$	$C^{\flat}$ (B)	$D^{\flat}$	$E^{\flat}$	F	$G^{\flat}$	$B^{\flat\flat}$ (A)	$C^{\flat}$	C	$D^{\flat}$	$F^{\flat}$ $\epsilon$	F
G	A	B	C	D	E	$F^{\sharp}$	G	$B^{\flat}$	C	$C^{\sharp}$	D	F	$F^{\sharp}$
$A^{\flat}$	$B^{\flat}$	C	$D^{\flat}$	$E^{\flat}$	F	G	$A^{\flat}$	$C^{\flat}$ (B)	$D^{\flat}$	D	$E^{\flat}$	$G^{\flat}$	G
A	B	$C^{\sharp}$	D	E	$F^{\sharp}$	$G^{\sharp}$	A	C	D	$D^{\sharp}$	E	G	$G^{\sharp}$
$B^{\flat}$	C	D	$E^{\flat}$	F	G	A	$B^{\flat}$	$D^{\flat}$	$E^{\flat}$	E	F	$A^{\flat}$	A
B	$C^{\sharp}$	$D^{\sharp}$	E	$F^{\sharp}$	$G^{\sharp}$	$A^{\sharp}$	B	D	E	$E^{\sharp}$ (F)	$F^{\sharp}$	A	$A^{\sharp}$

# Pop Songs Explored (The 4-Chord Song)

Pop songs usually only have a few chords in them. In fact, they all use almost the exact same chords: 1, 4, 5, & 6. The keys may change a little, but the chords are almost exclusively those four. Become familiar with the 1, 4, 5, & 6 chords in a key and you'll be ready to play almost any hit from the 1930's on.

Here is a cheat sheet of those important chords in each key...

The list is way too large to put them all here, but here are a small fraction of the songs that use a repeating cycle of 1, 4, 5, & 6...

	1	2	3	4	5	6	7
Key of C	C	D-	E-	F	G	A-	B <sup>0</sup>
Key of D <sup>b</sup>	D <sup>b</sup>	E <sup>b-</sup>	F-	G <sup>b</sup>	A <sup>b</sup>	B <sup>b-</sup>	C <sup>0</sup>
Key of D	D	E-	F#-	G	A	B-	C# <sup>0</sup>
Key of E <sup>b</sup>	E <sup>b</sup>	F-	G-	A <sup>b</sup>	B <sup>b</sup>	C-	D <sup>0</sup>
Key of E	E	F#-	G#-	A	B	C#-	D# <sup>0</sup>
Key of F	F	G-	A-	B <sup>b</sup>	C	D-	E <sup>0</sup>
Key of G <sup>b</sup>	G <sup>b</sup>	A <sup>b-</sup>	B <sup>b-</sup>	C <sup>b</sup>	D <sup>b</sup>	E <sup>b-</sup>	F <sup>0</sup>
Key of G	G	A-	B-	C	D	E-	F# <sup>0</sup>
Key of A <sup>b</sup>	A <sup>b</sup>	B <sup>b-</sup>	C-	D <sup>b</sup>	E <sup>b</sup>	F-	G <sup>0</sup>
Key of A	A	B-	C#-	D	E	F#-	G# <sup>0</sup>
Key of B <sup>b</sup>	B <sup>b</sup>	C-	D-	E <sup>b</sup>	F	G-	A <sup>0</sup>
Key of B	B	C#-	D#-	E	F#	G#-	A# <sup>0</sup>

**1,6,5,4**— Friday (Rebecca Black), How Sweet It Is To Be Loved By You (James Taylor), Purple Rain (Prince)

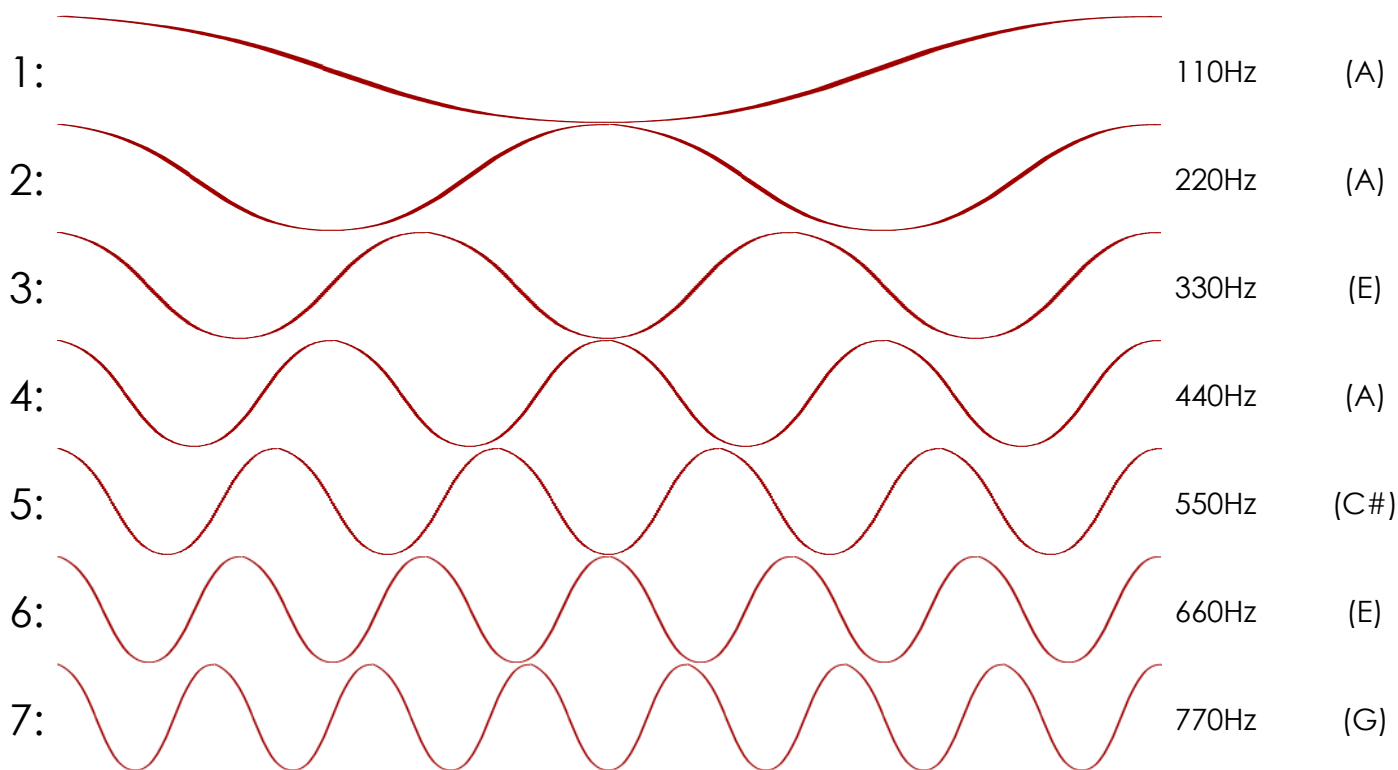
**1,4,6,5**— Dynamite (Taio Cruz), Good Life (OneRepublic), Trading Sorrows (Darrel Evans), Hit Me With Your Best Shot (Pat Benatar), More Than A Feeling (Boston)

**1,6,4,5**— Baby (Justin Bieber), Stand By Me (Benny King), Blue Moon (Richard Rogers), Unchained Melody (Righteous Brothers), I Will Always Love You (Whitney Houston), Love Will Keep Us Alive (Eagles), Heart and Soul (Frank Loesser)

**1,5,6,4**— Don't Stop Believing (Journey), Crazy Girl (Eli Young Band), Apologize (OneRepublic), Can You Feel the Love Tonight (Elton John), I'm Yours (Jason Mraz), She Will Be Loved (Maroon 5), Poker Face (Lady Gaga), Let It Be (Paul McCartney), Hey Soul Sister (Train), Country Roads (John Denver), Under The Bridge (Red Hot Chili Peppers), What If God Was One of Us (Alanis Morissette)

## Overtones and Fundamentals

When you think you're hearing a single note, you're usually hearing several notes.



When we strike a string (such as on the piano or guitar), it vibrates from one end to the other, creating a wave, and we hear the note the wave creates. That note is called a "fundamental." The shorter and/or faster the wave, the higher the note.

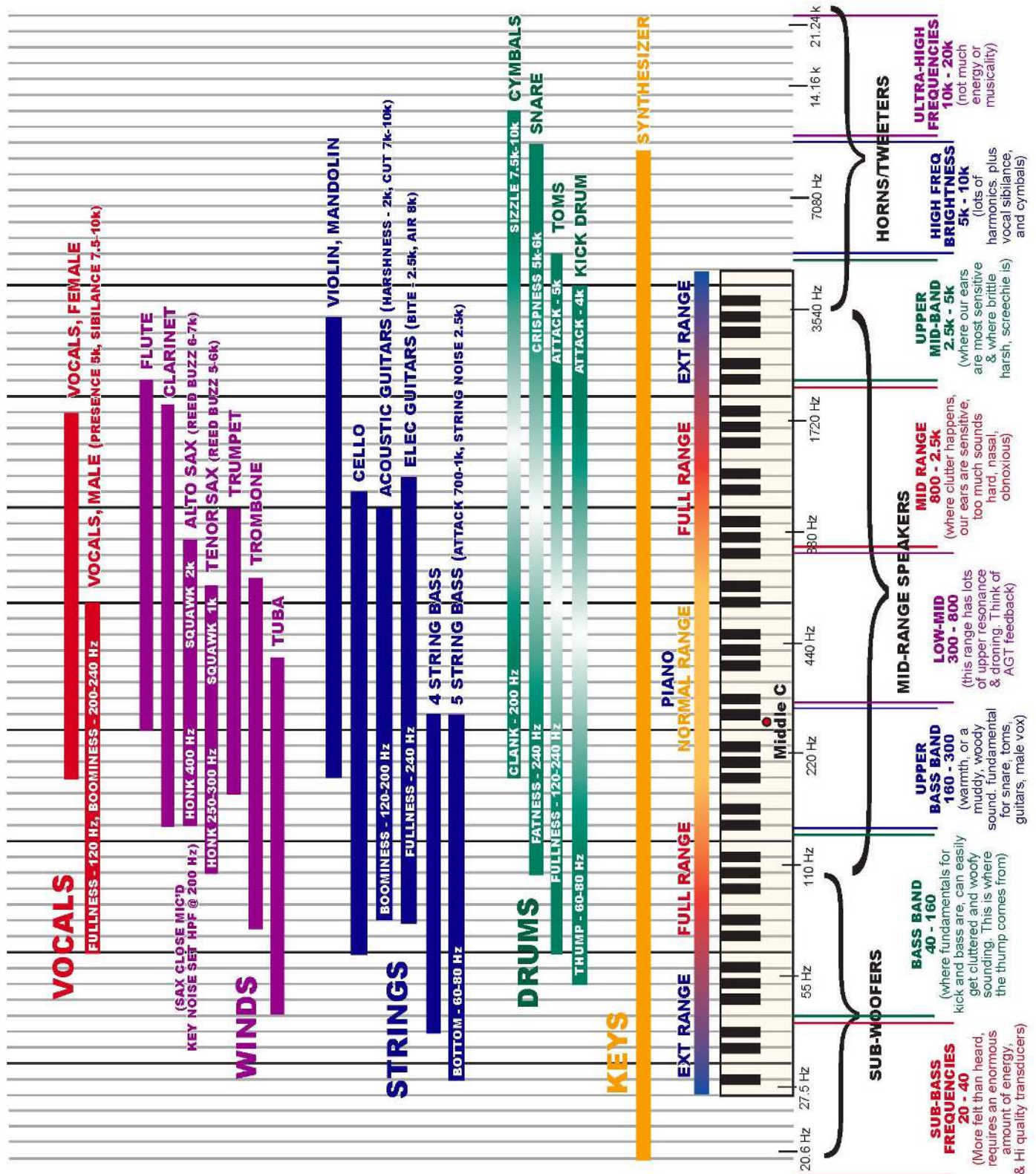
For example, any string vibrating at a speed of 440 waves (cycles) per second creates the same sound as the "A" above middle C. (That's why the note is known as "A 440".)

However, every string that vibrates from end-to-end also vibrates from the middle to the end. In other words, there is a wave that takes up the whole string but there is another wave at the same time that only takes up half the string, so it can have two full waves on the same string. It may not be a surprise, then that the string is also vibrating with three full waves on the same string...and four...and five...and six...and seven...

These additional, shorter waves (called "overtones") do, in fact, make a sound, but they are usually over powered by the original, largest, lowest-sounding wave. Below is an example of the different waves happening at the same time on the same string playing a low "A".

# Ranges on the Sound Spectrum

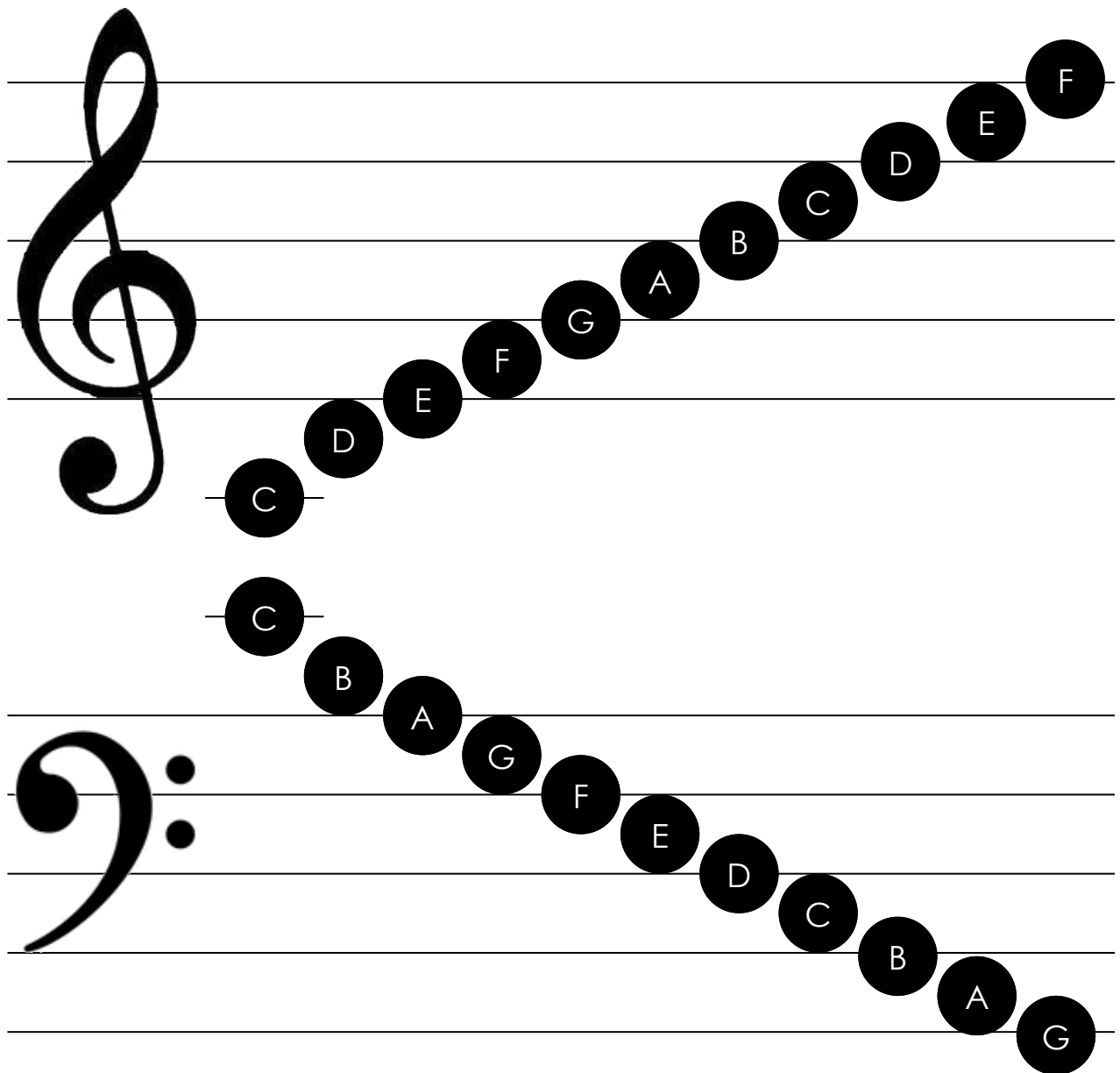
When multiple instruments play the exact same note, the sound can get 'muddy' and the individual sound of each instrument is lost. If you arrange music, you should know the range of the instruments so you don't have all the instruments playing in the same range. This chart also shows vocal ranges at the top, so you can have reasonable expectations when preparing parts for your vocalists.



# Notes on the Staff (Cheat Sheet)




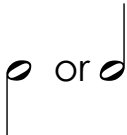
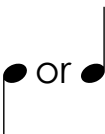

Here are all the names of the notes, as you'll see them on the treble clef and bass clef.





# Note Types and Values

How do you know when to play each of the notes, especially if you've never heard the song you're playing? If you're reading sheet music, you can tell by the type of note you're looking at. These rhythms are the same on all instruments:

NAME	NOTE	LENGTH OF NOTE (Counted in "beats")	Example of the counts the note would receive
Whole Note		4	<u>"1 &amp; 2 &amp; 3 &amp; 4 &amp;"</u>
Half Note		2	<u>"1 &amp; 2 &amp;"</u> or <u>"3 &amp; 4 &amp;"</u>
Quarter Note		1	<u>"1 &amp;"</u> or <u>"2 &amp;"</u> or <u>"3 &amp;"</u> or <u>"4 &amp;"</u>
Eighth Note		1/2	<u>"1"</u> or <u>"&amp;"</u> or <u>"2"</u> or <u>"4"</u>

By counting "1 & 2 & 3 & 4 &" evenly throughout the song, you can put each note exactly in its place, even if you've never heard the song before. Each thing you say is worth half of a beat, so a quarter note, for example (worth one whole beat...or two halves) would be held down while you said "1 &" or "2 &", etc. Here's an example of how you should count sheet music:

The image shows a musical staff with a treble clef and a 4/4 time signature. The melody consists of four measures. The first measure contains four quarter notes with counting cues "1& 2& 3& 4&" below them. The second measure contains two half notes with counting cues "1&2& 3&4&" below them. The third measure contains four quarter notes with counting cues "1 & 2 & 3& 4 &" below them. The fourth measure contains four quarter notes with counting cues "1&2&3&4&" below them. The bass staff is empty.

NOTE: \*The position of the notes do not affect how you count them.













\*Most songs get counted "1&2&3&4&". For examples of exceptions, see the "time signatures" page.

# 16th, 32nds, and Infinity

Notes can be very short! Quarter notes have no flag and are worth an entire beat. Each time a flag is added, the note is half as big (twice as fast), and the name is the fraction that is half as big. So, 1 flag is an eighth note, 2 flags is a sixteenth note, 3 flags is a thirty-second note, 4 flags is a sixty-fourth, and so on.

When we count with only quarter notes, we count "1,2,3...". When we add eighth notes, we 'sub-divide' each beat, so each eighth note has its own place by counting "1&2&3&...". With sixteenths, we count "1e&a2e&a..."

We rarely see notes smaller than 16ths, so there is no standard counting for 32nd notes and smaller.

1 e & a	2 e & a	3 e & a	4 e & a
			
			
			











Usually, when several short notes are strung together, bars connect them, replacing the flags. 1 bar = 1 flag, etc. Here's an example of how to count a passage with 16th notes:



1e&a 2e &a 3 e & a 4 e &a | 1e &a2e & a3 e& a4 e & a

# Rests

The pauses in music are indicated by 'rests'. When you see a rest, you count it just like a regular note, but you play nothing. Just like with the very short notes, you can keep adding flags to the rests to make them shorter and shorter.

Name	Value	Note	Rest
Whole	4		
Half	2		
Quarter	1		
Eighth	1/2		
Sixteenth	1/4		

Here's an example of how to count a passage with 16th rests:



1e&a    2e    &a    3 e    &    a    4 e    &a    |    1e    &a2e    &    a3    e&    a4    e    &    a



# Song Writing—Structure

Music and lyrics by

Intro:

Musical notation for the Intro section, showing piano accompaniment. The notation consists of two staves (treble and bass clef) in 4/4 time. The first measure contains a box with the text "Major song: 1" and "Minor song: 6". The following three measures each contain a box with the numbers "1, 4, 5, 6".

Verse:

Musical notation for the Verse section, showing piano accompaniment and a vocal line. The piano accompaniment consists of two staves (treble and bass clef) in 4/4 time. The first measure contains a box with the text "Major song: 1" and "Minor song: 6". The following three measures each contain a box with the numbers "1, 4, 5, 6". The vocal line consists of two staves (treble and bass clef) in 4/4 time. The first three measures each contain an empty box, and the fourth measure contains a box with the number "5".

<sup>13</sup> Chorus:

Musical notation for the Chorus section, showing piano accompaniment. The notation consists of two staves (treble and bass clef) in 4/4 time. The first three measures each contain an empty box, and the fourth measure contains a box with the number "5".