

Major Scale

This is a major scale in the key of C (no sharps or flats) The major scale is built on the following formula- Whole steps between all notes except between the 3rd and 4th and the 7th and 8th notes of the scale.

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

Thirds

Harmony and chords are created when you combine two or more tones together. The next example is the same C major scale played in thirds. How do you find the third? Well just count up the scale two notes from the note you want to add the harmony to. An example would be C to E or D to F. Below you will see the entire scale in thirds. Try to play this and think of the distance between each note.

3
1

Triads

Now we will go to the next level by adding another note. The new note is the 5th of whatever bass note you are starting on. A few examples are C to G or D to A. Just count up the scale to find both the 3rd and the 5th. Once you have added the 5th this scale becomes a scale of triads. Triads are groups of three notes played together as a chord. The new note is now the 5th note above each starting note. An example would be C to G or D to A. Try playing the scale in triads as seen below.

5
3
1

7th Chords

The last step is to add a fourth note to each. This fourth note is the 7th step in the scale, in relationship to each chord. Example C to B or D to C.

Note: The 7th chord as they appear below are difficult to play and in some cases impossible. We will rearrange the order of the notes which will allow you to play them on the guitar.

7
5
3
1

Close and Open Voicing

So far everything you have seen has been in what is called close voicing. Close voicing is nothing more than using the closest note you need (within the octave of the scale). Below are a few examples of close voicings that are now played as (open) voicings. How do you get an open voicing? Well, we just move one or more of the notes up an octave. This (opens) the chord. For now we will be raising the 3rd or 2nd note from the bottom.

Close voicing	Open	Close voicing of a triad	Open voicing of the same triad	Close voicing of a 7th chord	Open voicing of the same 7th chord
<p>Raise the second note from the bottom up an octave</p>				<p>In the 7th chords we have four notes. Also with these chords raise the second note up an octave. This will make all the 7th chords possible on the guitar.</p>	

Note: Later when you start to learn inversions of chords and the same formula will be used. Inversions are chords that have a bass note other than the root. This will change the order of the notes and will change not only the bass note but also the note that will be raised. We'll get to that later.

Now the C major scale again played with the third of each scale tone added. **This is in close voicing.** As said earlier the third is two notes above, example- C to E or G to B.

Open Voiced- Raising the interval of a third

Now we will move the above scale in thirds to an open voicing. This interval is now a 10th. This is nothing more than raising the 3rd up an octave. Why is it called a 10th? Well, the note has been moved above the octave which is the 8 step, plus two.

Note: This sound is heard in all style of music.

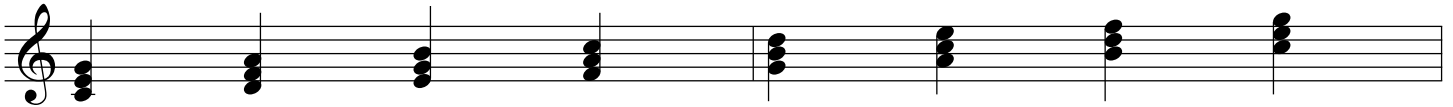
Octave- 8th step of the scale 10th = 8 steps plus two!

Chord names of triads in the Major scale

The next example is the C major scale played in triads, close voicing.

The order of the notes in each chord is Root-3rd-5th

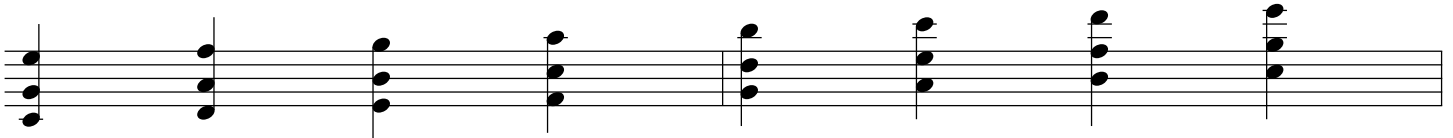
C Dminor Eminor F G Aminor BDiminished C



Open Voiced triads in the major scale

Now we will use the same triads in open voicing.

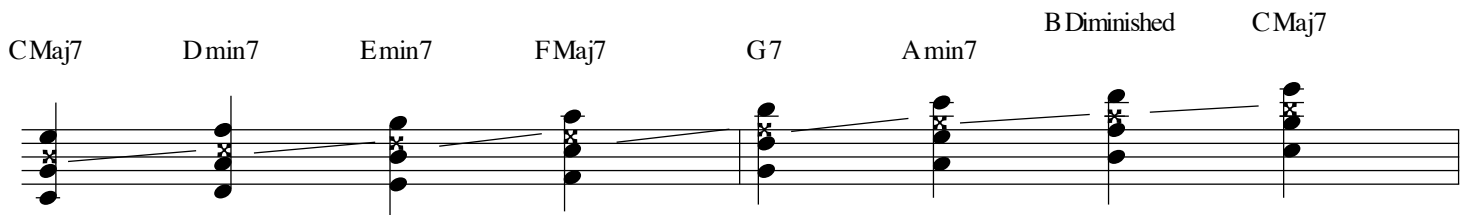
The order now is Root- 5th- 3rd



Making 7th chords out of the triads in open voicings

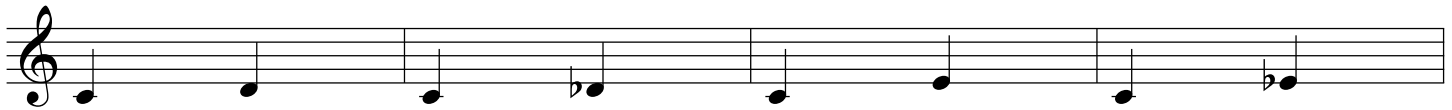
Now playable 7th chords!

To now make the open triads into 7th chords all we have to do is add the 7th interval of each chord. The new note in each chord will be placed below the top note which is the 3rd of each chord. Below you will see the 7th indicated with an (X)



Intervals

We will soon learn to build chords by learning the formula for each type, major, minor, diminished, augmented. Before we move to that we will first learn some basic intervals. Study these, memorize the formulas.



Major 2nd minor 2nd Major 3rd minor 3rd

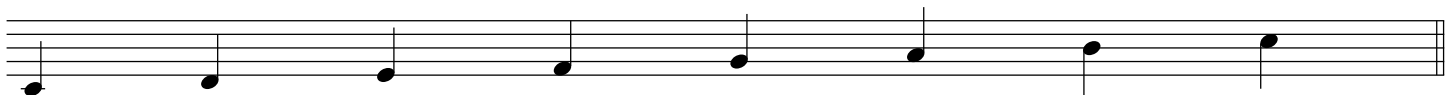


Perfect 4th Perfect 5th Diminished 5th Major 6th



minor 6th Major 7th Dominant 7th (b7) Octave

The following is the C major scale without any altered notes. Learn the scale degree and quality of the intervals, meaning major, minor, perfect.



Root Maj 2nd Maj. 3rd Perfect 4th perfect 5th Maj. 6th Maj. 7th octave

Half steps and Whole steps

Half Steps

What makes a half step? What makes a whole step? Half steps are the closest possible note. On a piano it would be the key above or below your starting note. On the guitar it would be the next fret above or below. Some examples are C- C# D- D#

Whole Steps

Whole steps are found by playing the second key above or below from your starting note on the piano. On the guitar it is the second fret above or below your starting note. Examples are C-D D-E E-F#

Note: Whole steps can be thought of as two half steps.

Note: Between E to F and B to C there is no half step! This is due to the construction of the major scale. This applies no matter what key.


Chord Formulas

What makes one chord major, another minor or diminished? It is the distance of the intervals, the space between each note. We will now learn the basic formula needed to build these chords. This is very important for all musicians to learn.

Formula for Major triad

To find any major triad use a major 3rd and the perfect 5th. This applies to all keys!

C major triad C major close voiced D major triad D major close voiced




Root 3rd 5th

C open voiced D open voiced

Formula for minor triads

The formula for all minor triads is the root with a lowered 3rd (can be called, minor 3rd or flat 3) The 5th remains unchanged.

C minor close voiced D minor close voiced



Root b3rd 5th

C minor open voiced D minor open voiced

Major-minor and diminished triad exercise #1

With this exercise you will play major, minor and diminished triads moving down in half steps until you moving back to your starting note an octave down. You will notice that after you have played one set of major, minor, diminished triads you will only have to move the bottom note or root down one half step to start the next set or group. Example: C- C minor- C diminished- next set = B- B minor- B diminished.

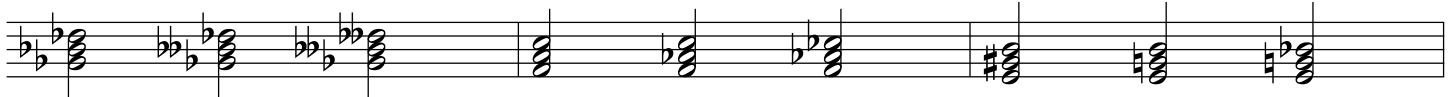
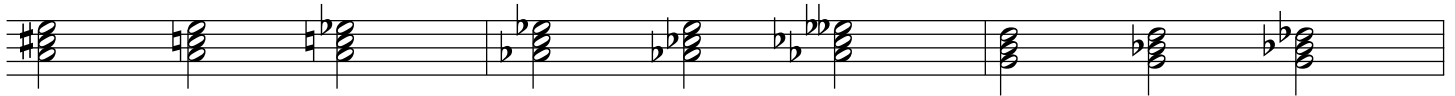
Note: only the pitch is important not the string group you choose to play on.
C Cmin Cdim

Note: If you need to move to another string group to lower a note do so.



Root C

I've given you the first three starting on C, now find your way down each group and think of each chord quality.



Enharmonic notes: Enharmonic notes are two tones that sound the same pitch (sound) but have different names such as B and C flat or E double flat and D natural or F flat and E. The purpose of this is to maintain correct spelling.

When spelling out the intervals (notes) of a chord the use of double flats (bb) or double sharps (X) are used to maintain the correct spelling of the chord. Three example are given below. Look at the chords below with brackets and you will see examples of incorrect spellings. The sound will be the same however you do need to learn the spellings. It's really not as difficult as it may seem. An example would be the following- If the major 3rd of the chord is C natural and you need a minor third you would spell it as C flat not B natural.

If the fifth of the chord is E flat and you need to lower the fifth to spell a diminished chord you would spell it E double flat, not D!. If you just follow the spelling of where you're at and consider what you need to lower or raise you will find the correct answer.

B^b B^bmin B^bdim B^bdim A^b A^bmin A^bdim A^bdim G^b G^bmin G^bdim



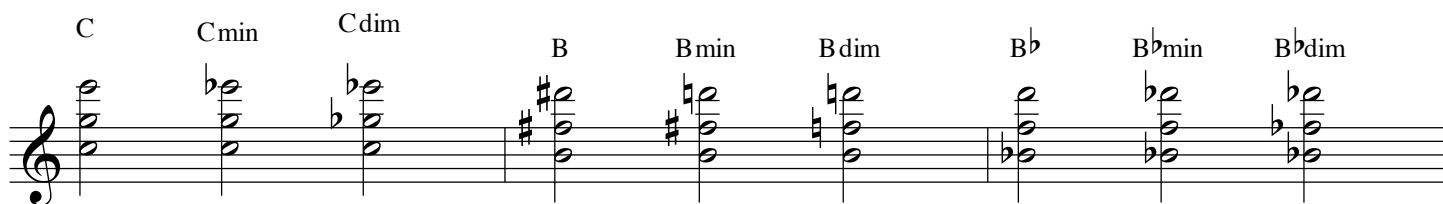
incorrect spelling,
sounds the same

incorrect spelling,
sounds the same

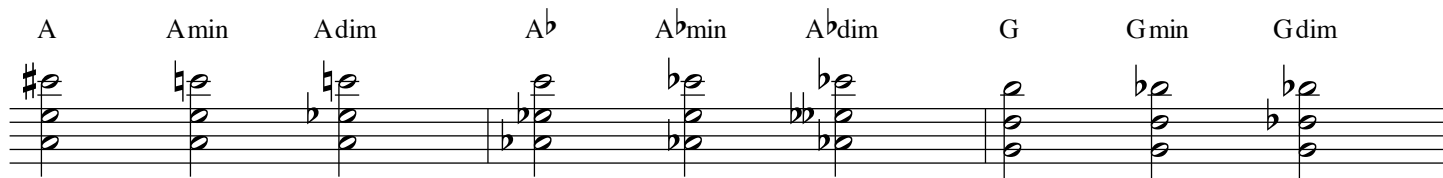
incorrect spelling
for two of the notes
(the minor 3rd should
be B double flat not A
and the lowered 5th
should be D double flat
not C!

Major-minor and diminished triad exercise #2 (open voicing)

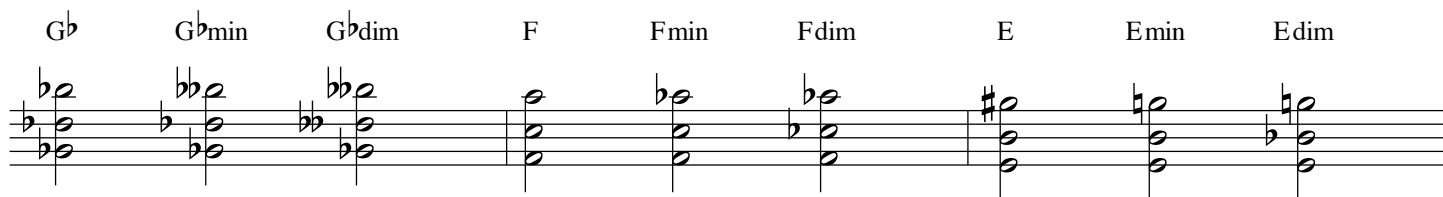
C Cmin Cdim B Bmin Bdim B \flat B \flat min B \flat dim



A Amin Adim A \flat A \flat min A \flat dim G Gmin Gdim



G \flat G \flat min G \flat dim F Fmin Fdim E Emin Edim



E \flat E \flat min E \flat dim D Dmin Ddim D \flat D \flat min D \flat dim C

