

Building chords from the major scale

Chords are built from scales. Taking a look at the basic chords built from a C major scale is the best place to start your chord theory exploration. A C major scale contains no sharps or flats. Below are the notes of a C major scale.

C Major scale = C D E F G A B C



If you start on C and take notes 1, 3 and 5 this is a C major chord.

C D E F G A B C
|___|___| = C (C major chord)

If you start on D and do the same thing, a Dm chord is created. What makes this a minor chord will be looked into later in this lesson.

C D E F G A B C
|___|___| = Dm (D minor chord)

The process of stacking 3 notes up in the major scale could continue until you have a total of 7 different chords, one for each note of the scale.

C D E F G A B C
|___|___| = Em (E minor chord)

C D E F G A B C
|___|___| = F (F major chord)

C D E F G A B C D
|___|___| = G (G major chord)

C D E F G A B C D E
|___|___| = Am (A minor chord)

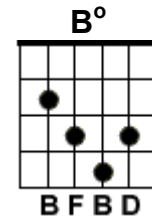
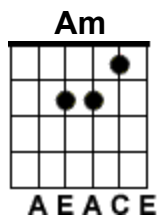
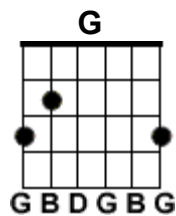
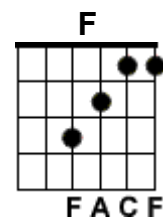
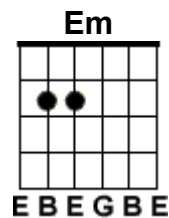
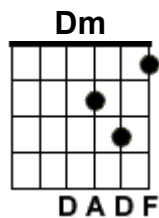
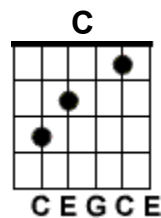
C D E F G A B C D E F
|___|___| = B[°] (B diminished chord)

*The small circle after the B means diminished when used in a chord symbol. A diminished chord is just another "flavor" of chord sound. Plain 3 note diminished chords are not very common on the guitar. So for now you are going to learn that it exists, but don't lose sleep because you don't know how to play one.

Applying the theory to the neck of the guitar

So every basic major and minor chord that you know, and will ever learn, only has 3 different notes in it. If you are strumming a basic C major chord, and play 5 strings...you are still only playing the notes C, E and G. It is just that there are 2 C notes and 2 E notes.

Here are some basic chord forms for C, Dm, Em, F, G, A m and B^o. You will see that each chord only contains 3 different note names. Some of the notes are just doubled or tripled. The notes in the chord do not have to follow any particular order, as long as there is a D F A....it is a Dm chord.



Theory

Basic Chord Construction

Comparing major and minor chords

No matter what major scale that you build chords from, the order of major, minor and diminished chords remains the same.

Major....Minor....Minor....Major....Major....Minor....Diminished

So the chords built from the D major scale are as follows:

D major scale = D E F \sharp G A B C \sharp D

Chords in D = D Em F \sharp m G A Bm C \sharp °

\sharp = sharp...equal to one fret higher on the guitar \flat = flat...equal to one fret lower on the guitar

Looking at the D major scale, you can start to see what the difference between a major and minor chord is.

The D major chord is made up of the notes D, F \sharp , and A. And a D minor chord has the notes D, F and A.

D E F \sharp G A B C \sharp D --> D major scale
|___|___| = D (D major chord)

C D E F G A B C --> C major scale
|___|___| = Dm (D minor chord)

Chord formulas

If you look at a D major scale and give each note in the scale a number, then a D major chord is made up of 1, 3, and 5.

D E F# G A B C# D --> D major scale
 1 2 3 4 5 6 7 1 --> Scale degrees
 |___|___| = D (D major chord)

If you look at a D minor chord and compare it to a D major chord, you will see that there is only one note that is different. There is an F# in the D major chord, and there is an F in the D minor chord.

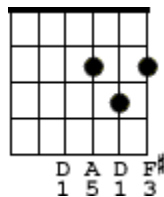
So if D major is 1, 3 and 5 (D F# A), then D minor is 1, b3 (flat 3) and 5 (D F A). The b3 just means that the note is a half step (1 fret) lower than the 3rd note in the major scale with the same root (D). No matter what chord you are looking at, you are always going to compare it to the major scale. So what you have learned here is the "formula" for a major and minor chord. This idea of a chord formula will be very important as you learn about constructing other types of chords.

D E F G A B C# D --> D major scale with b3
 1 2 b3 4 5 6 7 1 --> Scale degrees
 |___|___| = Dm (D minor chord)

Major and minor chord formulas

Major = 1 3 5
 Minor = 1 b3 5

Here is a basic D major chord with the note names and the formula numbers.



Here is a basic D minor chord with the note names and the formula numbers.



Here are some other basic chord formulas, and the notes that would be in the chord if the root was C. This is by no means a comprehensive list. A more detail explanation of these chords will be given in the up comings lessons in this chord construction series (3 note chords, 4 note chords, extended chords). But this will at least get you thinking about other types of chords.

major = 1 3 5 (C E G)

minor = 1 b3 5 (C E^b G)

augmented = 1 3 #5 (C E G[#])

diminished = 1 b3 b5 (C E^b G^b)

sus2 = 1 2 5 (C D G)

sus4 = 1 4 5 (C F G)

major 7 = 1 3 5 7 (C E G B)

7 = 1 3 5 b7 (C E G B^b)

minor 7 = 1 b3 5 b7 (C E^b G B^b)

minor 7b5 = 1 b3 b5 b7 (C E^b G^b B^b)

diminished 7 = 1 b3 b5 b^b7(6) (C E^b G^b B^b^{*} or A)

6 = 1 3 5 6 (C E G A)

minor 6 = 1 b3 5 6 (C E^b G A)

* b^b = Double flat means to lower a note by 2 half steps (2 frets)