

Chord Foundation

There is an easy way to learn chords and there is a hard way to learn chords. We hope that you will see it our way and take the easy path presented in this section. Not only will you learn hundreds of chords quickly, but you will have a better understanding of how chords work.

Chords are 3 notes played at the same time. There are all types of chords. The most common chord is the major chord. Minor chords and Dominant 7th chords are used quite often as well. Some of them may have strange sounding names at first, but don't let the name scare you.

Knowing a little about key signatures and intervals will go a long way when learning chords.

Remember to take your time when learning chords.

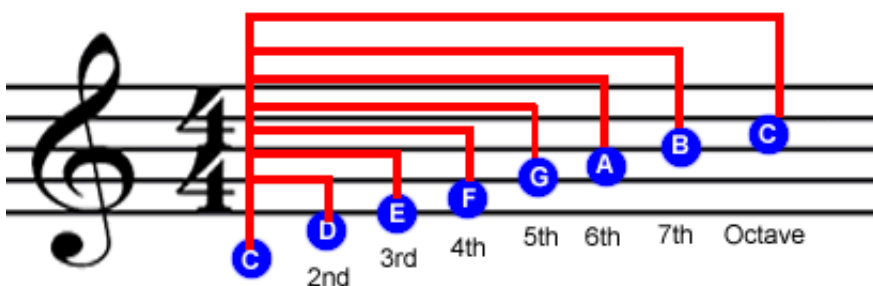
How Chords Are Formed

This article is a more 'representative' version of how chords are built. What I mean by this is that I've removed all the absolute basic information that you should already know and have supplied you with more literal definitions of the many chords we will be working with and how they are formed.

Intervals

Chords are built from *intervals*. An interval is **the distance between two notes**, measured by the number of letter names between them, including the names of the two notes themselves.

The following example, a C Major Scale, identifies the intervals from the bottom C:



Half and Whole Steps

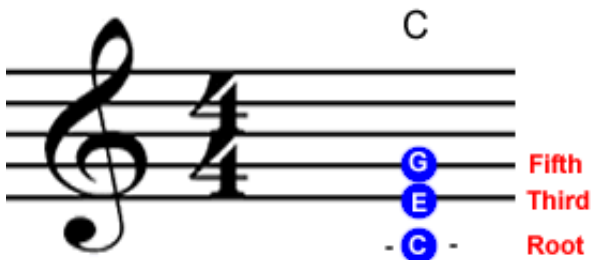
The most important intervals to understand are the 'half step' (minor second) and the 'whole step' (major second). A half step (HS) is the distance from one fret to the next on the guitar, or from one key on the keyboard to the next closest key (including black keys). A whole step (WS) is two half steps.

WS		WS		HS	WS		WS		WS		HS
1	2	3	4	5	6	7	8	9	10	11	12

Triads

The most basic chords have three notes in them. They're called triads. The first note is the root. As its name suggests, this note forms the bottom of the chord. For example, let's start with C as a root. Next comes the third, which lies an interval of a third above the root. For a C chord, that would be the note E. Finally, there's the fifth, which lies a fifth above the root. For the C chord, the fifth is the note G.

Here's the completed chord:



Now, this is how chords are built in theory; this is how to figure out what notes a chord contains. But it's not necessarily how the chords are played.

Major and Minor

The notes C-E-G spell a C Major chord. The symbol for this chord is simply the name of the root note - C. It's called a major chord because the third C-E is a major third, which equals two whole steps. If the third is lowered a half step, to Eb, it becomes a minor third (one and a half steps). The resulting chord, C-Eb-G is called a C minor chord. The chord symbol is Cm. Sometimes instead of a third, a chord has a fourth - technically called a perfect fourth (two and a half steps). For a C chord, it would be spelled C-F-G. The chord symbol is Csus4, or just Csus, because the fourth functions as a suspension, a dissonant note, that tends to resolve downward to a third. Guitarists often play 'power chords' which consist of just the root and fifth - with no third or fourth. Although it's fewer than three notes, it's still basically considered a chord (Sort of.) The symbol here would be C5, or C (no 3rd).

The fifth of the chord, by the way, is technically called a perfect fifth (three and half steps). Its presence in the chord is assumed, so it doesn't appear in the chord symbol unless it is altered - lowered or raised a half step - in which case you'll usually see b5 or #5 in the symbol. For example: C(b5) is a C major chord with the fifth lowered a half step.

Sometimes a lowered or raised fifth entitles a chord to a new name and symbol. (As in 'augmented and diminished').

Sixths and Sevenths

The triad is the foundation of all other chords. Other chords consist of mostly notes added to the triad. Adding a sixth above the root (a whole step above the fifth) creates what is called a sixth chord. For example: add the sixth, A to C chord, and you get a C sixth chord (symbol: C6). Add the sixth to a C minor chord and you get C minor sixth (symbol: Cm6).

The seventh is the most common addition to triads. The normal seventh above the C is not B, as you might expect, but Bb 0 sometimes called a flat seventh. It's a whole step lower than an octave. Add this to a C chord and you get C seventh - C7. Add it to C minor and you get C minor seventh - Cm7. Add it to a sus4 chord and you get C7sus4.

The note B above a C root is called a major seventh. Add it to a C chord and you get C major seventh - or Cmaj7. Add it to a C minor chord and you get C minor, major seventh - Cm(maj7).

Augmented and Diminished

A couple of chords have their own names, symbols, and rules. The first is the augmented chord, which is a triad with a major third and a sharp fifth. Common symbols are C+, C^{aug}, and C(#5).

Second is the diminished seventh chord (often called simply a diminished chord) which has a minor third, a flat fifth, and a diminished seventh - a seventh that is lowered a half step from the normal (flat) seventh. Common symbols are Cdim7, C^{dim}, C (with a degree sign), and C (with a degree sign)7. The diminished seventh of this chord is enharmonically equivalent to a sixth - the same note, spelled differently.

Augmented and diminished chords are unusual because the notes are equidistant from one another. Each note in an augmented chord is a major third from the next. Each note in a diminished seventh chord is a minor third from the next. This means that in either of these chords, any note can function as the root.

If you add or change any notes in these chords, you change their names and symbols as well. Take an augmented chord and add a seventh, and its symbol becomes C7#5. Change a diminished seventh chord so it has a 'normal' seventh, and you get Cm7b5 *infrequently called a half-diminished chord, with the symbol C (with degree sign) and a slash through it.)

Ninths

Most chords are made up of odd-numbered intervals: root (= first) third, fifth, seventh,

This keeps going through ninth, eleventh, and thirteenth. The most common of these larger intervals is the ninth, which is a whole step larger than an octave.

A ninth chord, C9, Cm9, C9sus4, actually contains not only the ninth, but the seventh as well. A major ninth chord (Cmaj9) contains the ninth and the major seventh.

Sometimes there are more notes in these chords than one hand can reach, so some notes are omitted. For guitar,

the fifth is sometimes left out.

Ninths are sometimes lowered or raised by a half step, and this is spelled out in the chord symbol C7b9, C7#9.

A chord with only the ninth, and no seventh, is called an added ninth chord. The most common is the major triad with added ninth - C(add9) - but you may into the minor version as well - Cm(add9).

A major triad with a sixth and a ninth added is a six-nine chord - C6/9.

Slash Chords and N.C.

Sometimes a chord symbol ends with a slash, and an extra letter, like this: C/G. This is used to specify a bass note other than the root of the chord. The example here means "a C chord with the note G in the bass."

Often, these bass notes are the tones of the chord, such as a third, fifth, or a seventh, though they maybe notes 'outside' the chord instead.

You might also see the symbol N.C.

This is an abbreviation for 'no chord.' It means what it says: don't play a chord - until you arrive at the next chord symbol. Sometimes the words 'no chord' are written out, and sometimes the Latin word 'tacet' is used, which means the same thing.

Other Chords

This site does NOT contain every possible chord, and I'm not sure that ANYTHING in a book or on the web does. If you run across a chord symbol that isn't spelled out as I've informed you about, I've got a solution.

Most of the additional chords you'll run across are actually seventh chords with an added note or two. Leave out the added notes (chances are they appear in the melody anyway) and play the basic version of this chord. The list below tells you which chords to use for a few examples:

If You See...	Play...
C7b9, C7#9, C7#11, C13	C7
C7#5(b9), C7#5(#9)	C7#5
C9sus4, C9sus, C11	C7sus4 (C7sus)
Cmaj7#11	Cmaj7
Cm11	Cm9

Neat huh?

Chord Formulas

As a general rule: major chords can be substituted with anything in the "major" table. And minor chords can be

substituted with anything in the "minor" table. Keep in mind that substitutions should only be used sparingly unless you really want to jazz it up. Let your ear be your guide!

Then there's the Dominant 7th chords which are called "dominant" because they are a common substitution for the dominant chord in a song. The dominant chord being the 5th of the tonic (in other words the 1st chord which is the key signature).

Major

Major Chord	R	3	5				
M6	R	3	5	6			
6/9	R	3	5	6	9		
M7	R	3	5	7			
M9	R	3	5	7	9		
M11	R	3	5	7	9	11	
M13	R	3	5	7	9	11	13
M7#11	R	3	5	7		#11	

Minor

minor Chord	R	Flat 3	5				
m6	R	Flat 3	5	6			
m 6/9	R	Flat 3	5	6	9		
m7	R	Flat 3	5	Flat 7			
m9	R	Flat 3	5	Flat 7	9		
m 11	R	Flat 3	5	Flat 7	9	11	
m13	R	Flat 3	5	Flat 7	9	11	13
m7/b5	R	Flat 3	Flat 5	Flat 7			
m/maj.7	R	Flat 3	5	7			
m/maj.9	R	Flat 3	5	7	9		

Dominant 7th

Dominant 7th	R	3	5	Flat 7			
9	R	3	5	Flat 7	9		
11	R	3	5	Flat 7	9	11	
13	R	3	5	Flat 7	9	11	13
7#5	R	3	#5	Flat 7			
7b5	R	3	Flat 5	Flat 7			
7b9	R	3	5	Flat 7	Flat9		
9#5	R	3	#5	Flat 7	9		
9b5	R	3	Flat 5	Flat 7	9		
7#5#9	R	3	#5	Flat 7	#9		
7#5b9	R	3	#5	Flat 7	Flat 9		
7b5#9	R	3	Flat 5	Flat 7	#9		
7b5b9	R	3	Flat 5	Flat 7	Flat 9		

Chord Symbols

These chord symbols are almost always a 'tried-and-true' standard for how you see chords listed on tablature, in chord diagrams, and more. Since there are always a few textual variations, we've included all of the common terms used for chord symbols.

Chord	Symbol
C Major	C, CM, CMaj.
C minor	Cm, C-, Cmin., C mi
C diminished	C dim.
C Augmented	C+, Caug.
C suspended	Csus., Csus.4
C Dominant 7th	C7, CDom.7
C Major 7th	CM7, CMaj7, Cmaj7, C7
C minor 7th	Cm7, Cmin. 7, C-7
C Dominant 9th	C9, Cdom. 9th
C Major 9th	CM9, Cmaj. 9, C9
C minor 9th	Cm9, C-9, Cmin.9
C eleventh	C11, Csus.4
C minor eleventh	Cm11, C-11
C Major Eleventh	CM11, CMaj.11
C Major add 6	C6, CM6, Cadd6
C minor add 6	Cm6, Cmin.6, C-6
C add 6th + 9th	C 6/9
C minor add 6th + 9th	Cm 6/9
C 13th	C 13
C minor 13th	Cm 13

C Major 13th

CM13, C Maj.13



Video Reference: Much more material is covered in our Strumming School DVD. Please refer to Chapter 1 "Chord Foundation" on the DVD for additional information.