

# CRASH COURSE REFERENCE

## CHORD CONSTRUCTION AND VOICING

Each fret on the guitar is spaced by a semitone. A tone spacing is equal to two semitones.

The pattern of tones and semitones between notes to form a MAJOR SCALE is:

**1 T 2 T 3 S 4 T 5 T 6 T 7 S 8**

This is important to remember because (for now) we will use the MAJOR SCALE as our reference point when building chords. To build any chord, the letter name assigned to the chord (the root note) becomes the 1 note, and the rest is counted from there.

A major chord is built using the notes 1, 3, and 5 played at the same time. Generally the 1 note will be played lowest, but otherwise these notes can be voiced in any order, and notes can be doubled (or omitted) as desired. Example, from lowest to highest: 1 5 1 3 5 1.

A minor chord is built using the notes 1, b3, 5. 1 and 5 are easy enough, as we can find them by counting up or down our major scale. But we cannot do this to find the b3 as it does not feature in the major scale. What we can do is use our scale pattern to find the 3, and then flatten it by a single semitone to get the b3 note. Then, just like before, the 1 note will generally be played lowest with the others in any order.

We follow this basic method to build other more complicated chords.

The following are some of the more common chords you will come across, an example of their notation symbols using C as a base, and their construction. You should eventually memorise these:

• <b>MAJOR</b>	<b>C</b>	<b>1 3 5</b>
• <b>MINOR</b>	<b>Cm, C-</b>	<b>1 b3 5</b>
• <b>MAJOR SEVEN</b>	<b>CMaj7, CΔ</b>	<b>1 3 5 7</b>
• <b>DOMINANT SEVEN</b>	<b>C7</b>	<b>1 3 5 b7</b>
• <b>MINOR SEVEN</b>	<b>Cm7, C-7</b>	<b>1 b3 5 b7</b>
• <b>DIMINISHED</b>	<b>C<sup>o</sup>, Cdim</b>	<b>1 b3 b5 (bb7)</b> if a Diminished Seven is required, the 7 note is flattened TWICE.
• <b>HALF DIMINISHED</b>	<b>C<sup>ø</sup>, Cm7b5, C-7b5</b>	<b>1 b3 b5 b7</b> sometimes called Half Diminished Seven or Minor Seven Flat 5.
• <b>(MAJOR) SIXTH</b>	<b>C6</b>	<b>1 3 5 6</b> where 6 is voiced at (or very near) the top.
• <b>MINOR SIXTH</b>	<b>Cm6, C-6</b>	<b>1 b3 5 6</b> where 6 is voiced at (or very near) the top.
• <b>SUSPENDED X</b>	<b>Csus2, Csus4</b>	<b>1 X 5</b> where X is 2 or 4, often voiced near the top. 3 is omitted.
• <b>NINTH</b>	<b>C9</b>	<b>1 3 5 b7 9</b> where 9 is actually the 2 note but voiced at (or very near) the top.
• <b>MAJOR NINTH</b>	<b>CMaj9, CΔ9</b>	<b>1 3 5 7 9</b> where 9 is actually the 2 note but voiced at (or very near) the top.
• <b>MINOR NINTH</b>	<b>Cm9, C-9</b>	<b>1 3 5 7 9</b> where 9 is actually the 2 note but voiced at (or very near) the top.

This sheet should be used as a reference to create new chords, to get you playing around through most songs you come across. It should be paired with the *Introduction To The Guitar* series which demonstrates the common Root 5 and Root 6 Bar Chord patterns for the first 5 chord types listed above.