Basic Chord Theory

Now that we know our intervals, let’s apply this knowledge and build chords. A chord can be defined as a group of notes heard together, but certain combinations sound better than others. The following is the theory behind finding notes that sound good together.

Most chords consist of three important notes called a triad. This triad determines the quality of the chord. There are four different triads: major, minor, diminished and augmented (augmented won’t be covered in this section). Major and minor are, by far, the most common.

When working with chord formulas, the octave where a note is played does not matter. Only concern yourself with the basic interval of each note compared to the root. E.g. An E is the 3rd of a C chord whether it’s played at the 12th fret of the 1st string or the 2nd fret of the 4th string.

If you are unfamiliar with chord diagrams and tab, please check out “Basic Tab and Chord Diagrams” in the Appendix on page 127.

Major chords

A major chord consists of the notes 1, M3 and P5 or simply 1, 3 and 5. These three notes are also known as the major triad.

Any chord that does not have a quality (e.g. major, minor, diminished, etc.) after it is assumed to be a major chord. E.g. a C chord is the same as a C major chord.

Applying the intervals of 1, 3 and 5 to C, we get C as 1, E as 3 and G as 5. The C major chord is made up of only C, E and G notes. When these three notes are played on an instrument at the same time, a C major chord is sounded. The lowest sounding note (bass note) should be 1, which is C in this case. The other notes (3 and 5) can be played in any order and in any octave.

Note: Inversions are chords that don’t have 1 as the lowest note, but for the ease of learning, all the examples in this book will have the bass note as 1.

This is a C chord on a guitar:

```
E 0---|---|---|---
B |---|---|---|---
G 0---|---|---|---
D |---|---|---|---
A |---|---|---|---
E |---|---|---|---
```
It consists of all the notes that make a C chord, but it would be hard to strum.

To make life easier, we can **double** any note in a chord.  
This would explain the more popular version of the C chord:

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<tr>
<th></th>
<th>E 0</th>
<th>B -1</th>
<th>G 0</th>
<th>D</th>
<th>A -3</th>
<th>E</th>
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</table>

In this version, the C and E notes are doubled.

In order from the lowest note to highest we get – C, E, G, C and E.  
The intervals are 1, 3, 5, 1 and 3.

The notes of a chord can be doubled in any octave as long as they equal their basic interval name and as long as the root is the lowest sounding note (later we’ll discover inversions).

Here are some more examples:

**Ex. 1**
What are the notes of a B chord?  
The formula for a major chord is 1, 3 and 5.  
B is 1. D#/musicalsharp is 3. F#/musicalsharp is 5.  
The notes of a B chord are B, D#/musicalsharp and F#/musicalsharp.

**Ex. 2**
Is this a major chord?

<table>
<thead>
<tr>
<th></th>
<th>E 0</th>
<th>B 0</th>
<th>G 0</th>
<th>D 0</th>
<th>A 0</th>
<th>E 0</th>
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</table>
| The 2nd fret of the A string is a B.  
The 4th fret of the D string is an F#/G♭.  
The 4th fret of the G string is a B.  
The 4th fret of the B string is a D#/E♭.  
The 2nd fret of the E string is an F#/G♭.  
B is the bass note so call this 1 or the root.  
What is the 3rd and 5th?  
D♯ is the 3rd and F♯ is the 5th of B.
Yes, this is a B major chord.
In this case, the intervals are 1, 5, 1, 3 and 5 (start from the lowest note to the highest note).

This could be a C\(\flat\) chord with the chord tones of C\(\flat\), G\(\flat\), C\(\flat\), E\(\flat\) and G\(\flat\) which are also 1, 5, 1, 3 and 5. We usually try to go with the most popular which in this case is B. Sometimes it takes trial and error to figure out if a note is a sharp or its flat equivalent. Always try to make the notes fit into the chord formula. For example, you can’t have a G\(\flat\) in a plain B major chord, this would be some kind of 6th, so it must be an F\# to make it the 5th.

Ex. 3
Is this a major chord? Why?

| E  | --- | --- | --- | --- |
| B  | --- | --- | --- | -3- |
| G  | --- | --- | --- | -3- |
| D  | --- | -1- | --- | --- |
| A  | --- | -1- | --- | --- |
| E  | --- | --- | --- | --- |

No. It has B as the root (1). E is the 4th. B is another 1st. D\# is the 3rd. This chord is made up of 1, 4, 1 and 3 or simply 1, 3 and 4. A major chord has to have 1, 3 and 5!

Remember if you were to call the D\# note an E\(\flat\), it wouldn’t make sense when comparing it to the B. B to E\(\flat\) is some kind of weird 4th (B to E\(\flat\) is a diminished 4th, but we won’t cover these intervals until volume two).

Test your knowledge of the major chord in Chord Quiz #1 on page 70.

**Minor chords**

A minor chord consists of the notes 1, m3 and P5 or 1, b3 and 5. These three notes are also known as the minor triad.

An m (minor) applied to intervals can mean the same thing as a flat (b), but this is not the case for chords. Minor and flat can not be interchanged when applied to chords.

An m preceding a number is a minor interval:
E.g. m3rd is the minor 3rd interval. This is the same as the flat 3rd interval.

An m following a letter is a minor chord:
E.g. Cm is the C minor chord.

Applying the minor chord formula to C, we get C as 1 (root), E\(\flat\) as m3 (b3) and G as 5.