

## Learning to Play by Ear

For many people, the thought of playing 'by ear' or being able to anticipate the chords, notes and musical changes in a song you've never heard before seems an impossible task. It's often considered a 'God given' gift rather than a skill that can be learned and constantly improved on.

Playing by ear is really about recognising the number of musical 'steps' between the note you have just played and the one that comes next. Just as you can remember the melody of a song you can actually train yourself to 'remember' the sound of a note going from where it is to a number of steps (or interval) above. Exactly the same principle applies to chords. Most people can recognise the difference between a happy sounding major chord and a sadder sounding minor chord. Learning to go further and recognise a sequence of chords really is possible. With a bit of practice, you could play the same chord sequence or song in a variety of keys, without music. The secret is having a framework which helps you recognise what possible chords are coming next – and then the age old discipline of practice.

The same knowledge is used to work out what chords come next in a new song. When I started to play guitar in my teens I was at a church where people would often sing out a spontaneous song and I had to pretty quickly learn ways to figure out which chords to play as the song was being sung. The fear factor was a great motivator to learn!

How do we learn what chords are available to us in a key? The first way to start is to pick a song in a simple key – Try G, D or E for guitarists as we regularly play songs in those keys and are familiar with the chord shapes. For this exercise we'll start with G.

So, to find the notes in the key of G we use the major scale. If you're not too familiar with the notes in the major scale take a look at the exercise below.

### What is a major scale?

A major scale is easily recognised by the singing of the song Doh, Ray, Me, Fah, Soh, Lah, Te, Doh

Next, count how many 'steps' are between Doh, (sung low) and Doh, (sung high)  
**Only count Doh once.**

You will discover that there are **always seven** notes in any major scale. Remember the 1<sup>st</sup> note and the 8<sup>th</sup> are both named 'Doh' and have the same sound albeit an octave (or eight steps) apart.

So the way to work out the notes in a key is this: Write the numbers 1 2 3 4 5 6 7 across the top of a page and then underneath assign the notes in the key to the numbers.

For example in the key of G major we would start with G as note number 1 and work up alphabetically through our 7 musical notes.

1	2	3	4	5	6	7
G	A	B	C	D etc.		

**Three rules for working out what notes are in the major scale of any 'key'.**

1. There is always one of every alphabetical letter between A and G - the musical alphabet. There are never two of the same letter in the same scale. E.g. You won't find Bb and B together in a key.
2. You never miss out any letters. E.g. A scale will never go A B C E F, missing D.
3. You never mix sharps (#) and flats (b) together in the same key. Eg. A scale will never go A, Bb, C, D#, E, F#, G

I'll put in the sharps and flats at this stage and we'll learn how to do this together in a future article. For now, complete the table below to show the correct notes in each of the following keys.

C	A	G	D	E		
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You fill in the blanks

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
C	D	E		G	A	
A		#	D	E	#	G#
G	A			D		#
D		F#			B	#
E	#	#	A			
F			Bb	C		E

**Chords within the key**

In addition to the notes in the major scale or key, there are also seven chords that fit over the individual notes.

The chords are either major or minor in sound and all follow the same major/minor order sequence explained below

Each chord is made up from individual notes taken from the relevant major scale. The formula for the chords looks like this:

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Major	Minor	Minor	Major	Major	Minor	Minor (½ diminished)

Lets work this formula into the chord table above and line up our notes from the key of G major.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
G	A	B	C	D	E	F#
Major	Minor	Minor	Major	Major	Minor	Minor (½ diminished)

These seven chords make up the chords that you are likely to find in any song in the key of G. Some are more common than others. These are G major, C major, D major and E minor (the numbers 1, 4, 5 and 6). You may also have played the chords of A minor and B minor in songs within the key of G.

Don't worry about the 7<sup>th</sup> chord being described as ½ diminished. Just think of it as minor for now and I'll come back it in a later article and explain how why and where to use diminished chords and chords "outside the key" to great effect in a congregational worship band setting.

So try taking any song and play it the key of G working out the chords using the chart above. Listen out for which chords sound major or minor and choose the right chord by hearing which of our alternatives fits best. The more you do this, the more you will find your ear will 'tune in' to the possibilities of what chords fit the song.

Once you've got that mastered try it in other keys. The same Major/Minor chord formula works in exactly the same way in every major key.



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