Circle of Fifths for Guitar

The circle of fifths is a diagram which shows all the major and minor keys with their key signatures and how they all relate to each other. The circle gets its name because, if you work clockwise around the circle, each note is a perfect 5th apart (7 semitones (half a step)). As you go from the top of the circle you will notice that a sharp is added to the key signature each time you move around clockwise. If you work anti-clockwise from the top of the circle you will notice that a flat is added to the key signature each time you move. Sometimes this is known as the circle of fourths as if you are working anti-clockwise you are moving down a 4th, rather than going up a 5th, but it still gives you the same result as going down a 4th is the same as going up a 5th. For example if you start on C and go down a 4th you will get to G, and if you go up a 5th from C you will also arrive at G.

In the outer ring of the circle you will find the major keys, then in the inner circle you will see the relative minor keys (the minor key which has the same key signature - this is very useful for transposing/modulating). Running around the outside of the circle are the key signatures (how many sharps or flats are in that key). You will notice that at the bottom of the diagram there are 3 keys that have alternative names ie. F# major/Gb major. These keys actually work out at the same pitch, but one of them is using sharps and the other using flats. This is what we call the enharmonic equivalent, they are the same pitch, but different note names.
Here is a diagram of the circle of fifths complete with guitar chord diagrams and the relative minor keys.

### Key
- ① Finger number & placement on string
- X Do not play this string
- ○ Open string - play string with no fingers
- ①① Place finger flat across (barre) the strings
The circle of fifths is really useful for finding the primary chords I, IV & V in a key. Working clockwise, if you pick any key and find it in the circle, this is your chord I, then the note before it is your chord IV and the note after it is chord V. This works for both major and minor keys. For example:

E major - Chord I = E,  Chord IV = A,  Chord V = B
b minor - Chord i = b,  Chord iv = e,  Chord V = F#

Using this chart choose any major key and work out chords I, IV and V in that key, then find the 3 relative minor chords and play around with moving between these 6 chords - they should all work really well together. For example in the key of C, try using C major, F major, G major, a minor, d minor & e minor. You could also use these for transposing within a composition because these would be the most popular new keys to move to and then when you are in your new key then you will get your new set of I, IV & V.

The circle of fifths is also very useful if you are using a lot of chord V to chord I chord progressions (or even dominant 7th chords), because if you are playing a chord I, then all you have to do to find the chord V is move forward one (clockwise) on the circle. For example if you were playing a chord I in D Major, so a D chord, then to find your chord V, move forward one around the circle to A, this would be your chord V. This also works vice versa. If you are on a chord V and want to find chord I simply move back one on the circle, so if you were playing a B chord and this was your chord V, then to find chord I move back one in the circle to E.

It is also really easy to find a ii-V-I chord progression (this is a very common chord progression). If you take any 3 notes next to each other, then take the last one and work anti-clockwise then they are the 3 chords for your ii-V-I progression, with the last chord (chord I) being your key. This example is the ii-V-I progression for Bb major:
Using the Circle of Fifths to find Guitar Scales

There are many patterns, sequences and relationships in the circle of fifths. Let's take the major pentatonic scale. If you are working out the major pentatonic scale from the major scale the construction is 1, 2, 3, 5, 6….so to work out C major pentatonic, we would use C major and use the construction just mentioned which gives us the scale - C, D, E, G, A - now let's look at this on the circle:

Now you know the pattern you can simply transpose this by using the same pattern, but starting on the new tonic (1st) note. So let's try using the same pattern to work out G major pentatonic:

This gives us G, A, B, D, E as the scale for the G major pentatonic.
You can use this method with any type of scale really, as long as you know one version of the type of scale and then repeat the pattern starting on the new tonic note. How about the minor pentatonic scale. If you are working out the minor pentatonic scale from the major scale then the construction is 1, lowered 3, 4, 5, lowered 7 (the lowered notes are lowered by half a step/semitone). So if you were trying to work out 'a minor' pentatonic you would use the A major scale and the construction as previous and you should get: A, C, D, E, G - if we put this pattern on to the circle the pattern would look as follows:

![Circle of Fifths](image)

So let's apply this pattern to g minor pentatonic:

This gives us G, Bb, C, D, F for the g minor pentatonic scale.

Note: The minor pentatonic scale contains the same notes as it's relative major pentatonic, but starting on the minor key note. For example:

C major pentatonic = C, D, E, G, A, then the relative minor is a, and a minor pentatonic = A, C, D, E, G.  
Bb major pentatonic = Bb, C, D, F, G, then the relative minor is g, and g minor pentatonic = G, Bb, C, D, F.
Let's try a major scale - we know that C major has no sharps or flats (refer back to the original diagram for key signatures) so the scale is C, D, E, F, G, A, B, C. On the circle the pattern looks as follows:

Now let's use the same pattern, but starting on a new note - Eb major. If you use the same pattern this gives you the scale Eb, F, G, Ab, Bb, C, D, Eb which is correct for the key of Eb major.
Now let’s look at the pattern for a harmonic minor scale. We will start with ‘a minor’ as we know this hasn’t got any sharps or flats (refer back to the original diagram for key signatures), but we do however raise the 7th note in a harmonic minor scale. The ‘a harmonic minor’ scale is A, B, C, D, E, F, G#, A. For this one we will use the inner circle (minor chords) so that if you want to pick out chords rather than scales you can do so.

Look at this pattern on the circle and now let’s use the same pattern, but starting on a new note - F# minor. If you use the same pattern this gives you the scale F#, G#, A, B, C#, D, F (which actually should be E#), F#.

You will notice here the 7th note is F when it should be the raised 7th E# (in scales there should be one of every letter name). E# is actually the same pitch as F, so for playing purposes will sound the same (this is an enharmonic equivalent), but for written purposes if you were writing out the scale it should be E#. You may come across this sometimes using the circle of fifths.
Here are some blank circle of fifths charts which you can use to work out chord progressions, scales and maybe even discover other patterns: