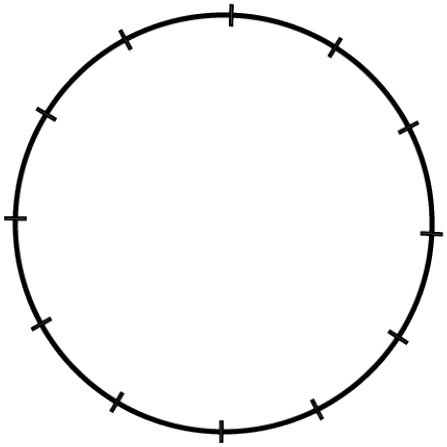
Circle of Fifths

You may have heard how useful the Circle of Fifths is for musicians. This is true, but it is not necessarily intuitive to construct. Pythagoras of geometry fame sorted this out in the 5th century BC, so we should be able to manage it. Here are 5 steps

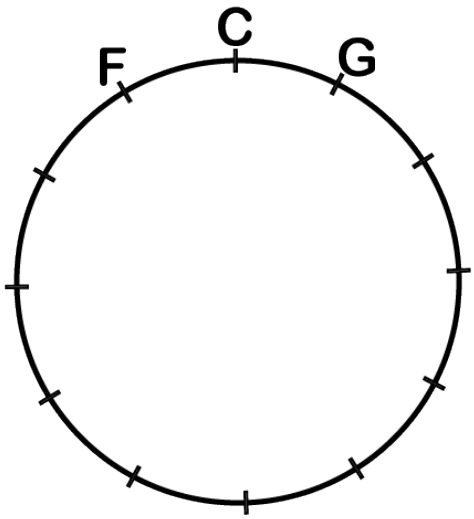
1. Draw circle, mark 12 points like a clock
2. Fill in FCG at 11, 12 and 1 o'clock (IV, I and V for C)
3. Go 180 degrees, write F#/Gb at 6 o'clock
4. Write BEAD up right side from F#/Gb
5. Write BEAD down left side..flatted

Let's go through them one by one…

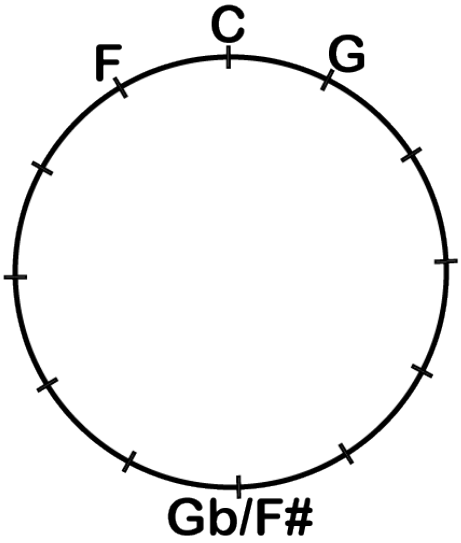
Draw circle, mark 12 points like a clock
Put in marks at 3,6, 9 and 12 o'clock
Then put 2 equally spaced between these



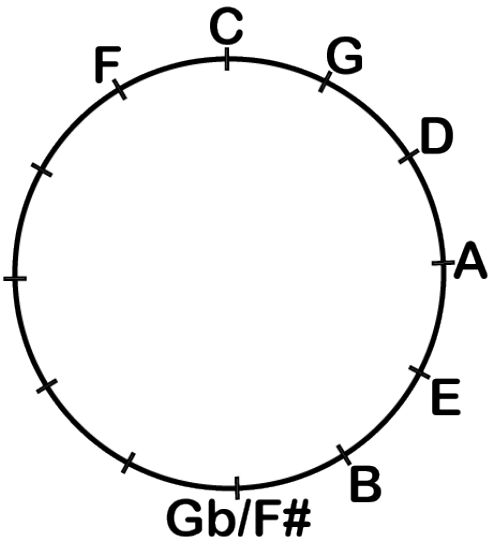
Fill in **FCG** at 11,12 and 1 o'clock
(The IV, I and V for C)



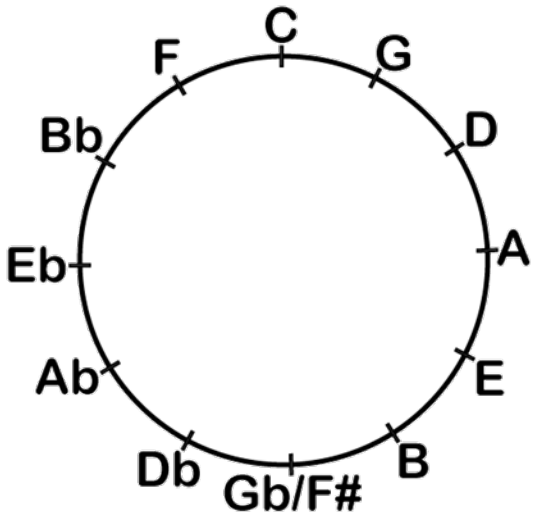
Go 180 degrees, write **F#/Gb** at 6 o'clock (Just have to remember this one – it is the hardest one anyway)



Write **BEAD** up right side from F#/Gb



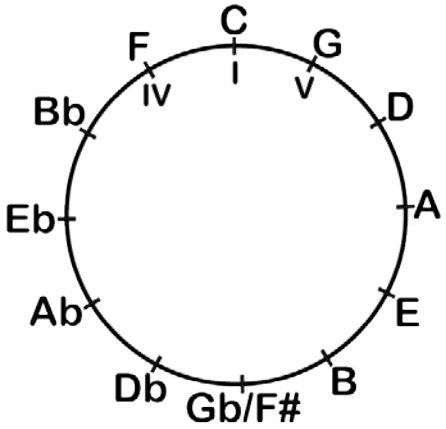
Write **BEAD** down the left side..flatted



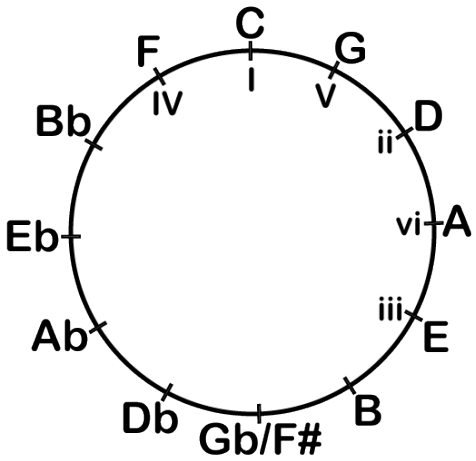
Practice this until you can do it on the back of a napkin

So, how can we use this tool, now that you can construct it anytime, anywhere?

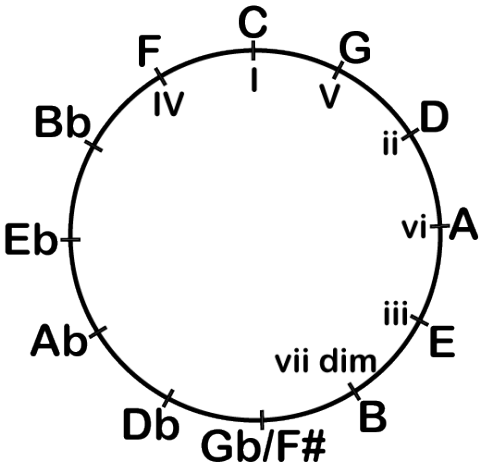
First by using it in terms of keys, begin by using it for the key of C. Put the C chord at the 12 o'clock position – the IV chord F is at 11 and the V chord G is at 1. This IV-I-V relationship is constant for any key you choose. If you were to rotate the circle and use the key of G, the 4th, C would be on the left and D, the fifth at the right. Fourths continue as you progress counter clockwise around the circle and fifths clockwise.



You can also use the circle to find the minor chords in that key as the ii, vi and iii are found to follow the V chord, progressing clockwise. The circle is often written with the relative minor for each key inside the major. This is unnecessary as it is always the relative minor, the vi chord, at 3 o'clock to the root, so go to the center and go 90 degrees left.



Finally, scale-wise, comes the vii diminished chord, vii dim.
Once all of these are in place, you can see how easy it would be to use this to transpose a song to a new key. Put the new key at I and use the circle to find the correct transposed chords.

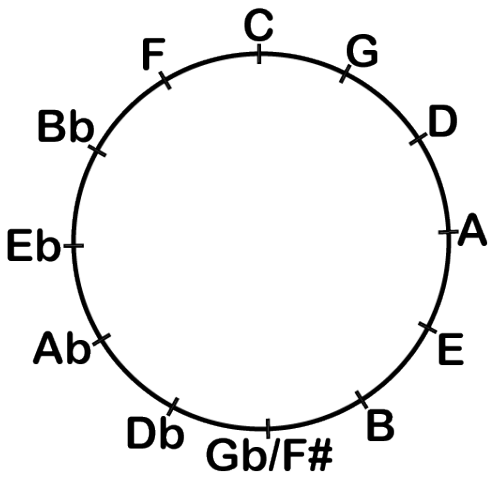


It is also very useful just to know the IV and V quickly even if just to keep up - If you are playing along without a lead sheet. Blues harmonica is often played in "cross harp" in order to get bendable notes into the draw reeds. One plays the harp that is the IV key above the key of the song to get this effect.

We can also use our circle to help remember how many sharps or flats each key has and their order. The key of C has no sharps or flats.. Sharps progress down the right side, beginning two spots back of your starting key. Flats progress down the left side, one ahead. Remember G has F# and F has Bb and you will see how to follow these along. C# would be enharmonic (musically the same) as Db, likewise with Cb and B. Seven sharps or flats – quite unusual to use these keys.

It is very useful to know the key you are playing in by looking at the score – you still may have to sort out whether it's major or minor key.

Flats	Key		Key	Sharps
Bb	F	C	G	F
Bb Eb	Bb	None	D	F# C#
Bb Eb Ab	Eb		A	F# C# G#
Bb Eb Ab Db	Ab		E	F# C# G# D#
Bb Eb Ab Db Gb	Db		B	F# C# G# D# A#
Bb Eb Ab Db Gb Cb	Gb	=	F#	F# C# G# D# A# E#



Another use of the circle is in writing music, it could help us to find the keys that share notes with the root key. For instance, if you wanted to add variety to a song, you could play the melody in the relative minor (Am for C). You could also modulate (change keys during a song) to a key that shares notes such as F or G for C. These are next to C, and only contain one not that is different in the scale. You can go to two spots away - you will see an example of this in My Girl from the song sheets –in this case, the song modulates from the key of C to D. It does this on the iii chord of C, is also the ii of D.

Now that you can conjure it up, try playing a song in C, and then in your mind's eye, see the circle and change key to a 5th G, D... Then fourths, counterclockwise.