

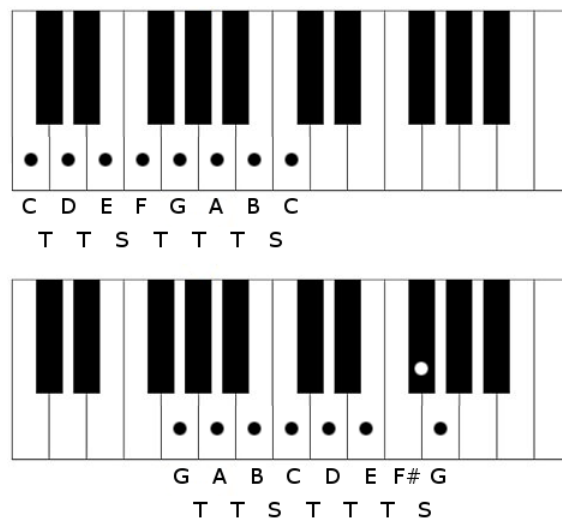
# Understanding Guitar Scale Patterns:

## 1. Tones & Semitones

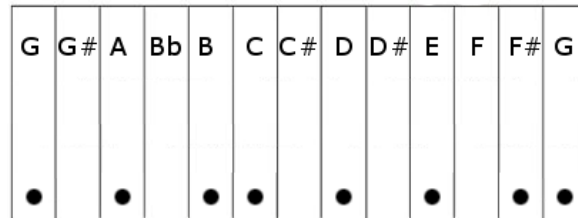
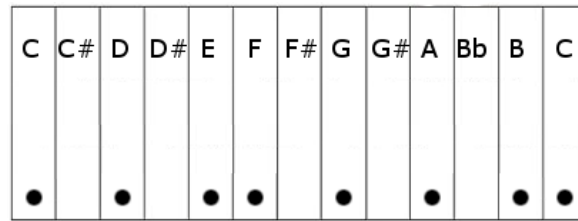
by Matt D'Netto

Recently I've had the same question pop up in a few guitar lessons, usually from students who are familiar with the keyboard, have learned to play guitar mainly by ear and know a few basic scales such as the two octave G-major scale played in second position. When I ask if the student can use their knowledge of that scale to play a two octave A-major scale some are stumped by the idea that you can just shift into fourth position and play the same pattern starting on A rather than G and, as if by witchcraft, you're now playing a completely different scale! So, the question in two parts is this – why can you just move the same finger pattern up & down the fret board and have the correct notes for a new scale and also, why is it that different scales 'look' different on the piano and not on the guitar?

To answer this I'm going to explain how to work out the notes of any major scale first by looking at the familiar example of the notes on a keyboard. The major scale is usually first explained as playing all of the white keys on a keyboard from C to C.

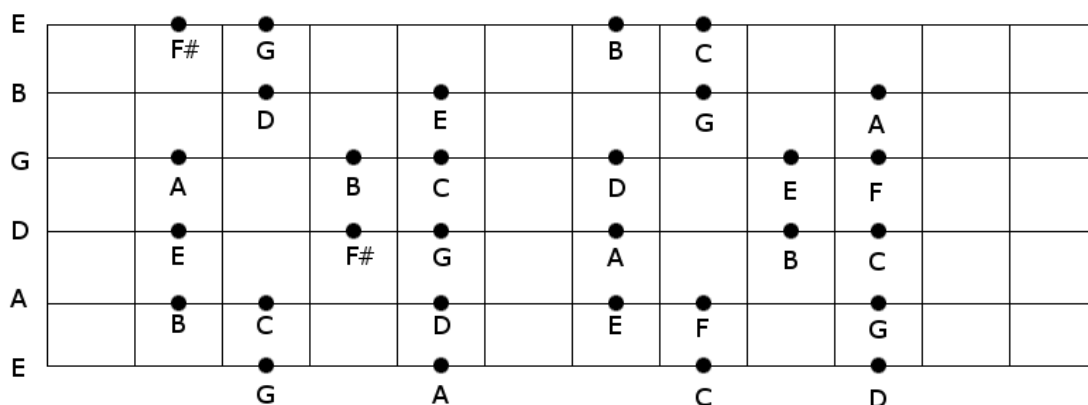


In the image above, the top keyboard shows this basic one octave C-major scale. What makes this a major scale is the pattern of gaps, or intervals, between each note in the scale. These gaps can either be tones (marked T above) or semitones (marked S). So if we look at the C-major scale above, moving from C to D requires a full tone, D to E again is a full tone, E to F is a semitone and so on. The full pattern reads T, T, S, T, T, T, S. This pattern of tones and semitones is what makes up a scale and this particular pattern can be used to work out any major scale. For example, in the lower keyboard above, if we start on G and use this pattern (one tone moves us up to A, another tone to B, a semitone to C and so on), we can work out the pattern for a G-major scale, where we have one sharp (F#). That's great, but I'm sometimes asked why the pattern of notes 'looks' different on a keyboard whereas the finger pattern stays the same when moving between keys on the guitar.



Well, to answer this misunderstanding I've drawn out a keyboard with all white keys, so the sharps and flats now look the same as the natural notes. Now if we line up the notes from our C-major and G-major scales we can see that the pattern is identical. That is to say, the reason why scales 'look' different on the keyboard is that keyboards white keys for natural notes and black keys for sharps, which can make it seem as if the patterns are different. String instruments like the guitar are different in that the natural notes and the sharps/flats all look identical.

So, what matters when trying to work out scales is the pattern of tones and semitones rather than memorising sharps/flats. Finally, if we take a look at our two major scales (C and G) on the fret board of a guitar, we can see that the reason why we can just use the same finger pattern between scales in different keys is that the finger pattern directly corresponds to the pattern of tones and semitones.



I hope that clears things up a bit if you're learning scale shapes and wondering how moving patterns up and down the frets on a guitar gives you the correct pattern for each scale – what matters is the tones and semitones between each note that make up the different scales. Try working out different major scales for yourself using the pattern of tones and semitones (T, T, S, T, T, T, S) to convince yourself it isn't witchcraft!