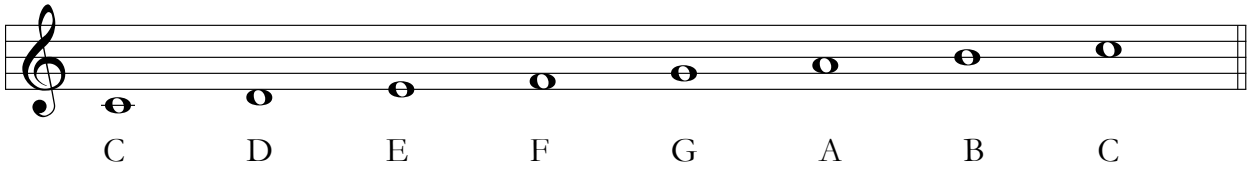
Unit 5 ~ Major Scales and Key Signatures

In the last unit we learned about tones and semitones. In this unit we'll learn about scales. A scale is a series or row of notes, usually adjacent - sort of like a necklace! There are many different scales used in different styles of music. Scales are distinguished from each other by the order of tones and semitones in them. To build one, you start on a note - called the TONIC - and go up note by note until you find yourself on the tonic again.

The first scale we will learn about is the MAJOR scale. It's a nice familiar place to start. You'll have heard major scales many times, whether you knew it or not. A simple way to build a major scale is to start on C and just go up until you get to C again, like this:

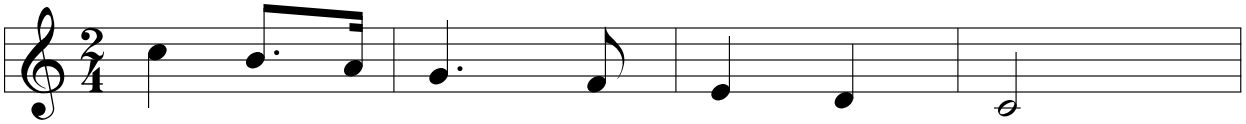


This scale, has a particular order of tones and semitones: C to D is a tone, to E is a tone, E to F is a semitone, etc. Here's the whole pattern:

tone - tone - semitone - tone - tone - tone - semitone

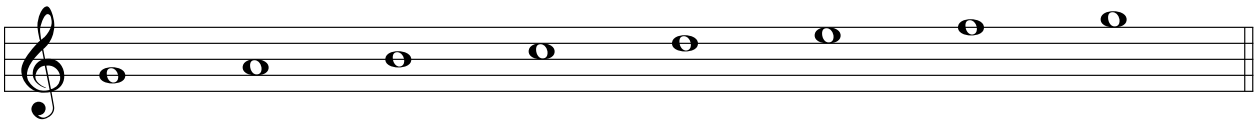
All major scales follow this pattern. If it doesn't follow this pattern, it's not a major scale!

What are scales for? You can use them to build melodies! The famous composer GF Handel wrote a tune that is a very popular Christmas carol these days. It's called 'Joy to the World' and it's just a major scale going down:



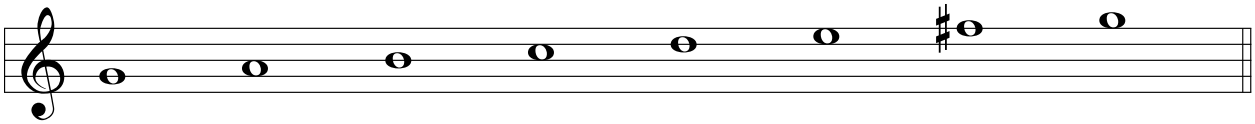
(You may be wondering what the '2' and '4' mean, and why the notes have different types of stems on them. They have to do with rhythm and we'll learn about this later)

Now, you can build a major scale on ANY note by following this same pattern. Let's try building a major scale on G and see what happens...

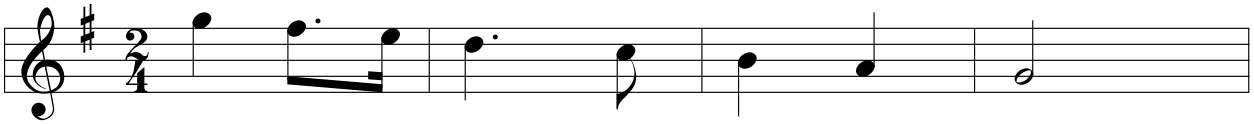


Now, this sequence is ALMOST a major scale. G to A is a tone. Check! A to B is a tone. Check! B to C is a semitone. Check! And on we go. Everything is fine until E to F. Here we need a tone, but E to F is only a semitone. Also we need to end with a semitone, but F to G is a tone.

We can fix both problems by raising F to F sharp. Now E to F# gives us the tone we need, and F# to G gives us the semitone:



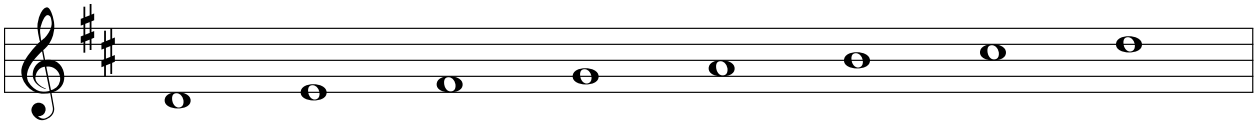
Voilà! We now have a major scale: G major. Here's 'Joy to the World' again, only this time it's in G major, not C major:



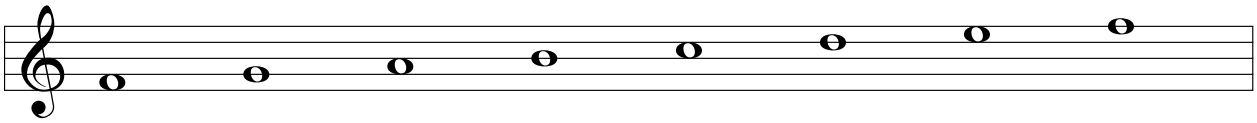
Notice that there is now a sharp at the beginning of the piece, right after the clef sign. This sharp is sitting on the F line and so tells us that every time we encounter an F we have to play F#. That's right: this sharp applies to every F in the piece.

When an accidental is placed at the start of a piece like this, it's called a KEY SIGNATURE. The key signature of G major is F#.

Let's keep going. If we build a scale starting on a D, we will have to add TWO sharps in order to have the right order of tones and semitones. The key signature of D major has two sharps, F and C.

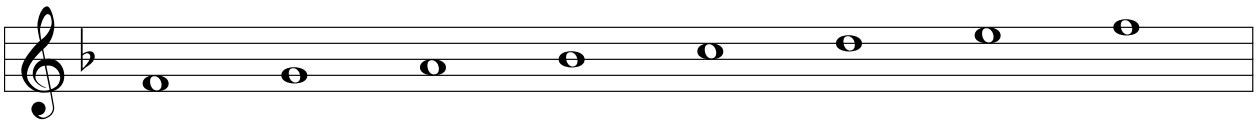


G major and D major use sharps to create the right order of tones and semitones. Depending on what note you start on, you may need a flat. For example, if you build a scale on F you will find that there is a tone between the 3rd and 4th notes, A and B.



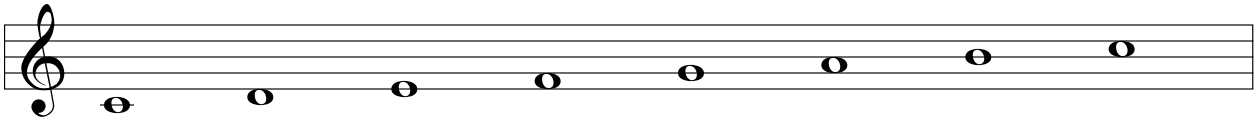
We need a semitone there. So, we'll use a flat to lower the B.

This makes F major scale, whose key signature is B flat:

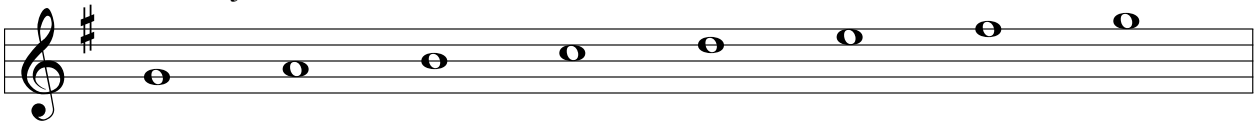


As I said before, you can build a major scale on any note. Here they all are:

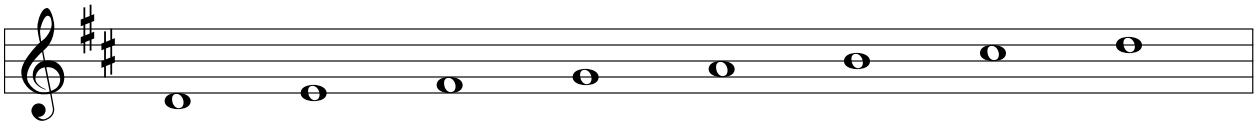
C MAJOR



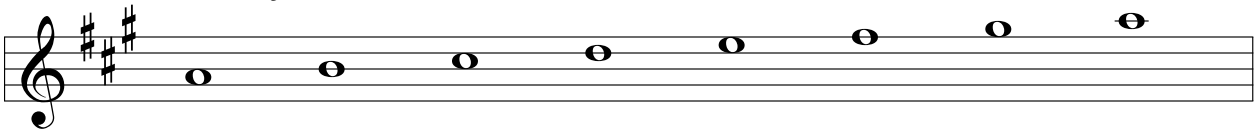
G MAJOR



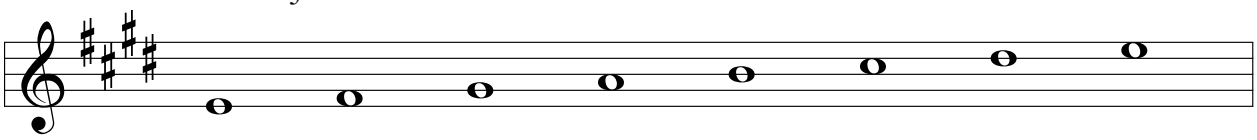
D MAJOR



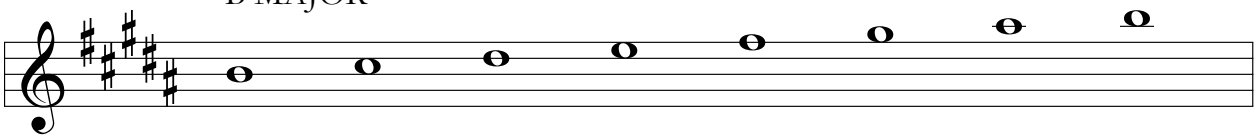
A MAJOR



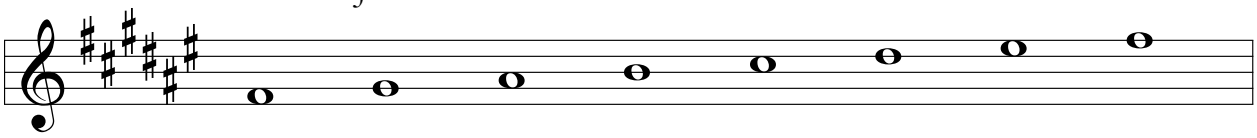
E MAJOR



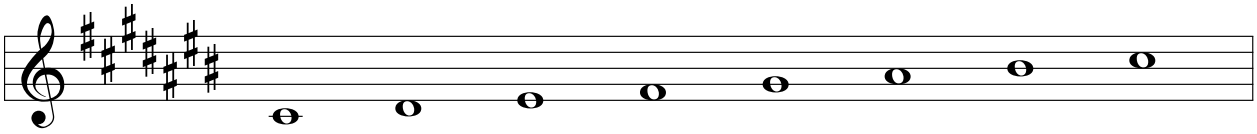
B MAJOR



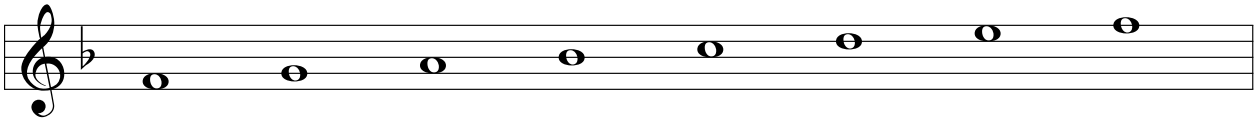
F# MAJOR



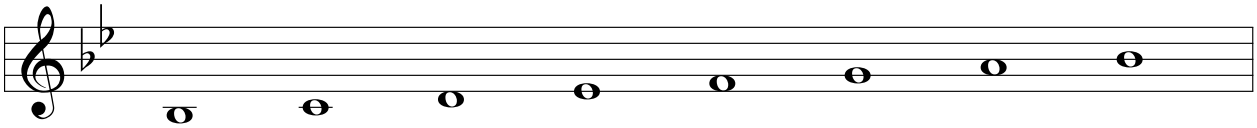
C# MAJOR



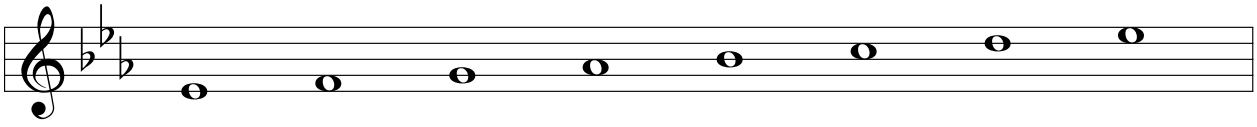
F MAJOR



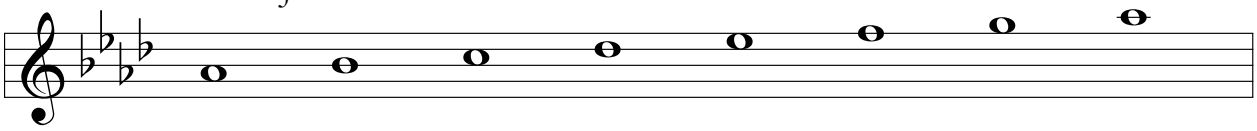
B♭ MAJOR



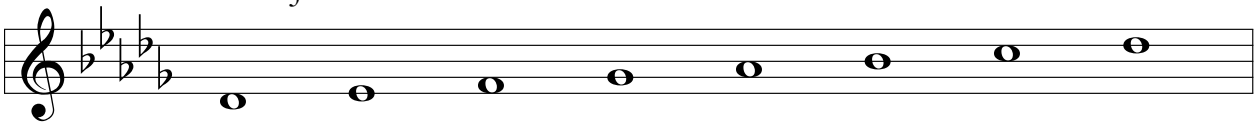
E♭ MAJOR



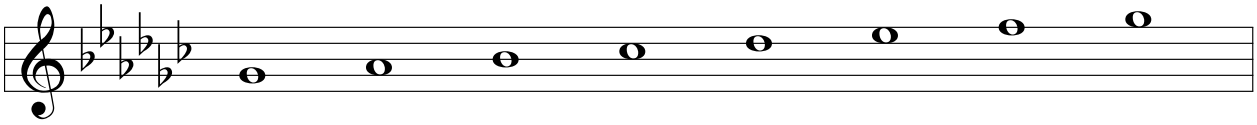
A♭ MAJOR



D♭ MAJOR



G♭ MAJOR



C♭ MAJOR