## SCALES Oh, boy!!!

**Instructions:** These worksheets assume that you have watched the music theory videos posted on Cascadia's website. If you don't understand everything on the worksheet, review the video or email me. I will also be scheduling Zoom sessions for discussions. Happy Music Learning!!

1. A SCALE is any series of notes that falls into a pattern. There are hundreds of scale patterns from around the world. (World scales are another fascinating side adventure.) Our system of music is called DIATONIC, because the scales are constructed from two tones--the half step and the whole step. CHORDS, the subject of week #7, are all derived from scales, and when we "play" in a particular KEY, we assume that the melody and harmony are derived from the scale of that key.

An easy definition of the MAJOR SCALE is as follows:

- --a series of 8 notes in alphabetical order, spanning the octave (C to C, F# to F#, etc.)
- --all intervals are whole steps, EXCEPT:
- --3 & 4, and 7 & 8, which are half steps.

A KEY SIGNATURE lists the number of sharps or flats in a scale.

2. Following is the scale of C Major. Can you prove or disprove it?



The 1st requirement is that the series of 8 notes must be in alphabetical order, which it is: C D E F G A B C. The 2nd and 3rd requirements have to do with the intervals. All must be whole steps, EXCEPT 3 & 4, 7 & 8. which must be half steps. Let's check.

C to D? whole step; D to E? whole step; E to F? half step; F to G? whole step; G to A? whole step; A to B? whole step; B to C? half step. AREN'T YOU GLAD YOU LEARNED YOUR INTERVALS???

Because our naturally occurring half steps between E & F, and B & C fall beween the 3rd & 4th, and 7th & 8th notes, the Scale of C Major is correct as it is written, requiring no sharps or flats to correct the pattern.

3. NOW comes the fun part! There are 12 different possible major scales based upon the 12 pitches (7 white keys and 5 black keys on the piano).

Let's start on G. From left to right, check every interval.



Did you notice that the interval between the 6th & 7th notes was a half step, when it should have been a whole step? Increase the distance to a whole step by raising the F to F#, and you have also corrected the distance between the 7th and 8th notes, which was a whole step before. ALWAYS WORK LEFT TO RIGHT.

2 **SCALES** 

4. Let's try the key of F. From left to right, check every interval.

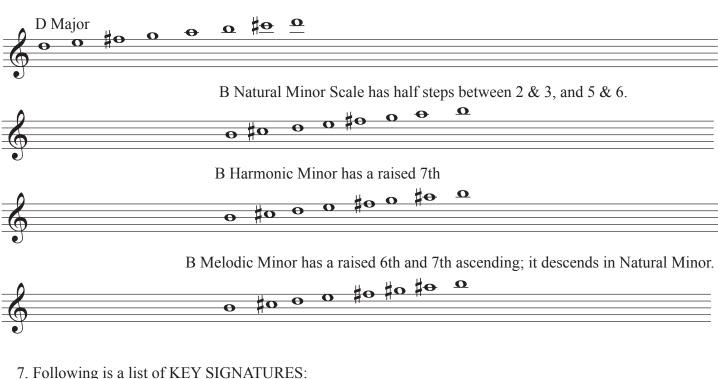


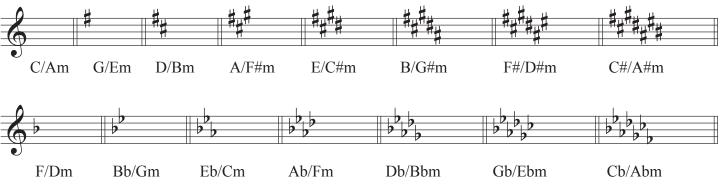
Did you find the error between the 3rd and 4th notes? The interval is supposed to be a half step, but A to B is a whole step. Make the interval a half step by flatting the B. At the same time the error between the 4th and 5th notes will be corrected.

5. There are 9 keys left to complete. Do your best. I wouldn't expect everyone to complete this exercise at this time. Enjoy the challenge! Try in the following order: D, A, E, B, Bb, Eb, Ab, Db, Gb.

There are three ENHARMONIC keys: B/Cb, F#/Gb, and C#/Db. Enharmonic Scales are just like enharmonic notes--the actual pitches played are identical but they are spelled two different ways.

6. MINOR SCALES: A RELATIVE MINOR KEY occurs with every major scale, starting and ending on the 6th note of the major scale. There are three forms of minor scales, as shown below:





SCALES 3