

RIM1230  
Day 3

Today:

- Define the difference between a half step and whole step
- Build major scales based on a whole step and half step formula
- Calculate/Identify the interval of a Major 2nd vs. a minor 2nd

**Half step** in “western music” is also referred to as a **semitone**  
On the keyboard, it is any note adjacent to it.

ex: C to C# or C to Db, E to F or B to C

**Whole step** is a pitch 2 half steps apart C to D, D to E

NOTICE: E F#. And B - C#, or Eb to F and Bb to C are also whole steps. If you look on the keyboard the missing black note between E and requires the F to be a F# in order for it to be a whole step.

We can use the concept of whole steps and half steps to build major scales.

**Major scale pattern:**

H = half step W = whole step

C Major Scale

W-W-H, W-W-W-H (steps)

C D E F G A B C

G Major Scale

W-W-H, W-W-W-H (steps)

G A B C D E F# G

F Major Scale

F G A Bb C D E F

W W H. W W W H

Musical Intervals: Is another way of labeling distance between two pitches

### Calculating or Identifying Intervals

Musical Intervals have two parts

1. **The distance** - 2nd 3rd 4th 5th 6th 7th octave
2. **The quality** - minor, Major (we will get to the others later such as perfect, diminished, augmented etc..)

**The distance** is simply how far apart the interval is within the musical alphabet:

**A B C D E F G**

1 2 3 4 5 6 7

The distance between A and B is a 2nd. The distance between A to C is a 3rd and A to D is a 4th etc..

This works starting on any note: B to C is a 2nd, B to D is a 3rd and B to E is a 4th etc..

The quality of a 2nd is determined by the exact number of half steps  
We will find that 1 half step = minor 2<sup>nd</sup> and 2 half steps = Major 2nd

The short hand of **M2** represents a Major 2nd, **m2** represents minor a 2nd

Let's do some together

F - Gb - m2

B - C = m2

Bb - C = M2

C - Db = m2

Eb - F = M2

You really should not rely ONLY on keyboard to calculate intervals.

For example:

C Db minor 2nd

C D major 2nd

But...C to C# is not a minor second, just as A to A# is not. Why? Because when labeling/identifying intervals of a 2nd, they must be the next letter name in the musical alphabet. C to D (Major 2nd) or C to Db. (minor 2nd)

B# to C# is a m2, because the quality of the 2nd is minor (1/2 step apart) Look at it on the keyboard to see how that works. E# to F# is also a m2 for the same reason.

Get some practice at doing these in On-Line Practice 2 on the D2L site