## **INTERVALS AND SCALES**

An **interval** is the difference between two pitches; a **semitone** (or half step) is the smallest interval. If you imagine a piano keyboard, a semitone is the "distance" between a white piano key and an adjacent black piano key. You'll also notice that there is no black note between E and F or between B and C, so the interval between those notes is also a semitone.

A **whole tone** is two semitones: examples are C to D, D to E, F to G, G to A and A to B *(there is a black note between each of these pairs).* 

On the staff in *Example 1*, the whole tones and semitones aren't as apparent so you'll need to remember where the semitones are: E to F and B to C.

When you introduce **accidentals** (sharps, flats and naturals) as in *Example 2*, the semitones are easier to spot.





In *Example 2*, a flat  $\flat$  *lowers* the pitch by a semitone (D to Db, the black note below), whereas a sharp  $\ddagger$  *raises* the pitch by a semitone (A to A#, the black note above)

## Scales

A scale is a series of notes in ascending or descending order, typically spanning an octave (8 notes). *Example 1* is a C Major scale; every letter in ascending order from C to high C. In choir practice we often sing major scales during our warmup.

The order of semitones and whole tones in the scale defines the type of scale. The order of whole tones and semitones for a **major scale** is: W W S W W W S. *(C to D is a whole tone, D to E is a whole tone, E to F is a semitone, etc...)* The note C is referred to as the **root**.



If you know that music is written in C Major (no key signature), then you know the root is C and from that you'll be able to figure out how to sing the intervals in the music, going from one note to the next. Memorizing the sounds of the intervals and the scale, and learning to read the intervals on a staff will help you **sight read** more effectively.

There are many types of scales, multiple key signatures and many different intervals, so this information is just to help get you started.

## How to Sing Intervals

Using C Major scale (C as the root) here are some basic intervals:

<u>interval</u>	<u>semitones</u>	<u>staff</u>	the first two notes of
Major 2nd	2 semitones	6	Happy Birthday
Major 3rd	4 semitones	<b>8</b>	Morning Has Broken
Perfect 4th	5 semitones		Here Comes the Bride
Perfect 5th	7 semitones		Twinkle Twinkle Little Star
Major 6th	9 semitones		Hush Little Baby
Major 7th	11 semitones		Somewhere Over the Rainbow (1st and 3rd notes)
Perfect 8th <i>(Octave)</i>	12 semitones		Somewhere Over the Rainbow

Historically, **perfect** intervals are so called because of their **consonance**, or pleasing harmonic sound; other intervals are considered more **dissonant** and not as restful. Perfect intervals aren't major or minor, but can be diminished (a semitone less) or augmented (a semitone more).

**Other intervals:** Using the Major 6th as an example, it is 9 semitones from the bottom pitch to the top. A **minor** 6th is 8 semitones and a **diminished** 6th is 7, whereas an **augmented** 6th is 10 semitones.