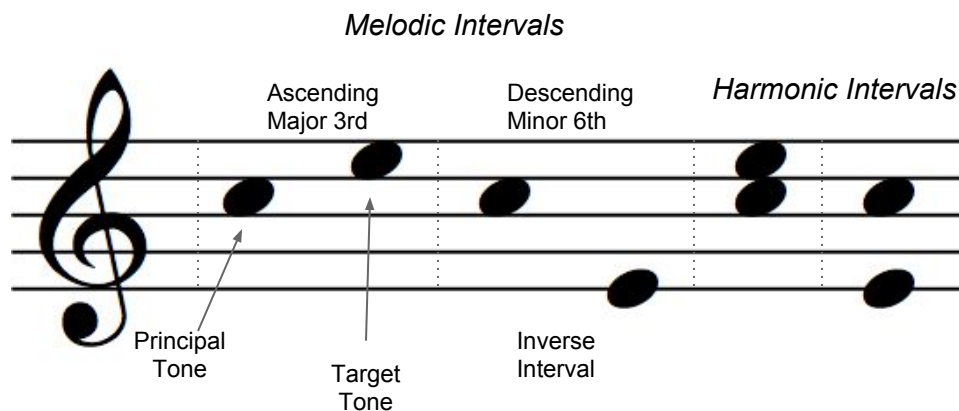# Intervals

The distance between two notes is called an **interval.** The starting pitch in an interval is called the **principal tone** and the ending pitch of an interval is the **target tone**. Intervals can either ascend ↑ or descend ↓ away from the principal tone. An **inverse interval** is created by going in the opposite direction of the principal tone and resulting in the same target tone. Intervals can be **harmonic** (played at the same time), or **melodic** (played separately). ,

The distance between a pitch and another twice its frequency is an octave. The octave can be divided into 12 equal parts called half steps. A **half step** is the smallest interval in western music. When two half steps are added together, they create a whole step. The following chart contains all of the intervals in an octave that are created by adding half steps together. An interval has two parts to it's name; the quality and the number. The quality can be either major, minor, diminished, augmented, or perfect.

Half Steps	Ascending Interval Quality and Number	Ascending Example	Descending Example	Inverse Interval Quality and Number
0	Perfect Prime	C and C	C and C	Perfect Octave
1	Minor 2nd	C and Db	C and B	Major 7th
2	Major 2nd	C and D	C and Bb	Minor 7th
3	Minor 3rd	C and Eb	C and A	Major 6th
4	Major 3rd	C and E	C and Ab	Minor 6th
5	Perfect 4th	C and F	C and G	Perfect 5th
6	Tritone (augmented 4th, Diminished 5th)	C and F#/Gb	C and F#/Gb	Tritone (augmented 4th, Diminished 5th)
7	Perfect 5th	C and G	C and F	Perfect 4th
8	Minor 6th	C and Ab	C and E	Major 3rd
9	Major 6th	C and A	C and Eb	Minor 3rd
10	Minor 7th	C and Bb	C and D	Major 2nd
11	Major 7th	C and B	C and Db	Minor 2nd
12	Perfect Octave	C and C	C and C	Perfect Prime