

Intervals

An interval is the "distance" in pitch between two notes. It's easiest to think about intervals in relation to a keyboard, or to written music.

Intervals are counted from the lower note to the higher note, the lower note being counted as one. So if you think of a keyboard or written music you'll see that the interval between, say, C and D is a second; between C and E a third; between C and F a fourth and so on.

The example below is based on a C Major scale, but would work for any major scale. The number in brackets (below the name of the interval) gives the number of semitones that make up the interval

A musical staff in treble clef showing intervals from unison to octave. The notes are C, D, E, F, G, A, B, and C. Below each pair of notes is the interval name and the number of semitones in parentheses.

unison	second	third	fourth	fifth	sixth	seventh	octave
(0)	(2)	(4)	(5)	(7)	(9)	(11)	(12)

The unison, fourth and fifth have particular qualities - not important to go into now - that lead to them being designated as "perfect". So the interval between C and G is called a perfect fifth; between C and F, a perfect fourth etc.

The second, third, sixth and seventh are major intervals - they come from the major scale, after all.

If you flatten a major interval you change it to a minor interval: the *type* of interval remains the same (second, third etc) but the *quality* changes (major/minor)

A musical staff in treble clef showing perfect and major intervals from unison to octave. The notes are C, D, E, F, G, A, B, and C. Below each pair of notes is the interval name and the number of semitones in parentheses.

perfect unison	major 2nd	major 3rd	perfect 4th	perfect 5th	major 6th	major 7th	perfect 8ve
(0)	(2)	(4)	(5)	(7)	(9)	(11)	(12)

A musical staff in treble clef showing perfect and minor intervals from unison to octave. The notes are C, D, E, F, G, A, B, and C. Below each pair of notes is the interval name and the number of semitones in parentheses.

perfect unison	minor 2nd	minor 3rd	perfect 4th	perfect 5th	minor 6th	minor 7th	perfect 8ve
(0)	(1)	(3)	(5)	(7)	(8)	(10)	(12)

There are other "qualities" of interval (diminished and augmented, compound) but we'll look at those in another article.

So far we've related everything to a lower note of C, but that's just to explain the concept. Any two notes form an interval.

Taking D as the lower note, but not using sharps or flats, you get the intervals shown below. Remember, the *type* of interval is given by counting the number of scale steps; the *quality* of interval depends on the number of semitones in encompasses.

A musical staff in treble clef showing intervals from unison to octave starting on D. The notes are D, E, F, G, A, B, C, and D. Below each pair of notes is the interval name and the number of semitones in parentheses.

perfect unison	major 2nd	minor 3rd	perfect 4th	perfect 5th	major 6th	minor 7th	perfect 8ve
(0)	(2)	(3)	(5)	(7)	(9)	(10)	(12)