Intervals & Chords

Scale	Frets	Steps	Names of the Intervals and common symbols
Do 1	0	0	Perfect First, P1, First, unison, 1
	1	1/2	Minor Second, m2, flat two, b2, -2
Re 2	2	1	Major Second, M2, two, 2
	3	1½	Minor Third, m3, flat three, b3, -3
Mi 3	4	2	Major Third, M3, three, 3
Fa 4	5	21⁄2	Perfect Fourth, P4, fourth, four, 4
	6	3	Diminished Fifth, Augmented Fourth, dim 5, aug 4, flat five, <i>b</i> 5, -5, sus 4, tritone
Sol 5	7	31⁄2	Perfect Fifth, P5, fifth, five, 5
	8	4	Augmented Fifth, Minor Sixth, aug 5, sharp five, #5, m6, flat six, <i>b</i> 6, +5, -6
La 6	9	41⁄2	Major Sixth, M6, sixth, six, 6
	10	5	Minor Seventh, m7, flat seven, b7, -7
Ti 7	11	5½	Major Seventh, M7, $\Delta 7$
Do 8 (1)	12	6	Perfect Eighth, P8, octave, eighth, eight, 8
	13	6½	Minor Ninth, m9 (Octave above m2)
Re 9 (2)	14	7	Major Ninth, M9 (Octave above M2), ninth, 9

The distance from one note to another is called an INTERVAL.

Each interval has at least one name -- most have picked up nicknames along the way. The names of the intervals start with the Perfect First or the "one" interval. "One" means unison, or the difference between a note and itself. ("Zero" wasn't yet a mathematical concept in Europe when they made up this system.) Twelve half-tones later we get to the Perfect Eight or "Octave." In between are a lot of confusing names. Over the years, classical musicians tend to use the "proper" terms, while pop and jazz players have developed a shorthand for naming the intervals.

Don't let the jargon buffalo you. Here is a chart listing the more common interval names you might see in print or hear at a session. Remember, an interval is the distance between two notes. The first note is, by default, ONE. The interval you are searching for is *X* many steps UP from your ONE.

Below the table is a chart of some common chords, each with its interval "formula" alongside. In pop music, a chord always bears the name of its root note, followed with a word or two that indicates the harmony notes – the intervals given here are the distance from that root for each harmony note in the chord.

common chord names

Major (M) (ma) (maj) Minor (m) (min) (-) Augmented (+) (aug) Flat Five (b5) Diminished (°) (dim) Suspended (sus4) (sus.) Sus 2 Major sixth (sixth) (6) (M6) Minor sixth (m6) Seventh (dominant seventh) (7) Major seventh (M7) (Δ 7) Minor seventh (m7) (-7) Augmented seventh (+7) (7+5) Diminished seventh (dim 7) (°7) Seventh flat five (7*b*5) Minor seven flat five (m7b5) Ninth (dominant ninth)(9) Maior ninth (M9) Minor ninth (m9) Add nine (add9) Eleventh (11) Thirteenth (13)

intervals based on the chord's root

1 - 3 - 5 1 - *b*3 - 5 1 - 3 - #5(*b*6) 1 - 3 - *b*5 1 - *b*3 - *b*5 1 - 4 – 5 1 - 2 - 5 1 - 3 - 5 - 6 1 - *b*3 - 5 - 6 1 - 3 - 5 - *b*7 1 - 3 - 5 - 7 1 - *b*3 - 5 - *b*7 1 - 3 - #5(*b*6) - *b*7 1 - b3 - b5 - 6 (bb7)1 - 3 - *b*5 - *b*7 1 - b3 - b5 - b7 1 - 3 - 5 - b7 - 9 1 - 3 - 5 - 7 - 9 1 - *b*3 - 5 - b7 - 9 1 - 3 - 5 - 9 1 - 3 - 5 - 7 - 9 - 11 1 - 3 - 5 - 7 - 9 - 11 - 13

MAJOR vs. MINOR CHORDS The words "major" and "minor" follow some conventions when used in a chord name. Don't get confused.. It is assumed that the "default" 3rd is a major. and that the "default" seventh interval is minor. So the word "minor" in a chord name means the triad is minor - we say nothing if the chord is major. The word "major" is reserved to indicate the 7^{th} is major – without the word "major" the 7^{th} interval is assumed to be minor. So a C7 means a *C* major chord with a minor 7th added. While a CM7 means a C major with a major 7th added. But a Cm7 means a C minor chord with a minor 7th added And the rare Cm(M7) would mean a C minor chord with a major seventh.