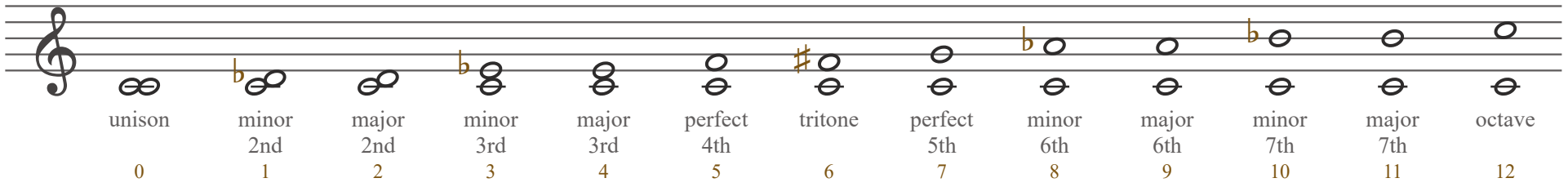
Intervals & How to Hear Them

An interval is the distance between two notes. It has a number, counted in letter names, and a quality, counted in semitones. Every interval below is measured up from middle C, with a tune that begins on it.

EVERY INTERVAL WITHIN THE OCTAVE, BUILT ON C



A TUNE FOR EACH ONE

INTERVAL	SEMITONES	FROM C	SING
Perfect unison	0	C – C	*A note repeated*
Minor 2nd	1	C – D♭	*Theme from Jaws*
Major 2nd	2	C – D	*Happy Birthday*
Minor 3rd	3	C – E♭	*Greensleeves*
Major 3rd	4	C – E	*When the Saints Go Marching In*
Perfect 4th	5	C – F	*Here Comes the Bride*
Tritone	6	C – F♯	*Maria, from West Side Story*
Perfect 5th	7	C – G	*Twinkle, Twinkle, Little Star*
Minor 6th	8	C – A♭	*The Entertainer*
Major 6th	9	C – A	*My Bonnie Lies Over the Ocean*
Minor 7th	10	C – B♭	*Somewhere, from West Side Story*
Major 7th	11	C – B	*Take On Me, at the chorus*
Perfect octave	12	C – C	*Somewhere Over the Rainbow*
Compound intervals	13+	C – D′	*A 9th is a 2nd an octave higher*

Counting the number

Count letter names, and count both ends. C up to G is C–D–E–F–G: five letters, a 5th.

Sharps and flats never change the number, only the quality. C–E and C–E♭ are both 3rds.

Read the number off the stave, not the keyboard. Two noteheads a line apart are always a 3rd, whatever the accidentals.

Naming the quality

Unisons, 4ths, 5ths and octaves are **perfect**. 2nds, 3rds, 6ths and 7ths are **major** or **minor**.

A major interval made a semitone smaller becomes minor; a semitone smaller again, diminished.

A perfect or major interval made a semitone larger becomes **augmented**. A perfect made smaller is **diminished** — there is no minor 5th.

Turning one upside down

Move the lower note up an octave and the interval inverts. The two numbers always add to nine: a 3rd becomes a 6th, a 2nd a 7th.

Quality flips with it. Major becomes minor, augmented becomes diminished, and perfect stays perfect.

The tritone is its own inversion. Six semitones each way, which is why it sits so oddly in a key — written as an augmented 4th or a diminished 5th depending on how it resolves.