

What are “Intervals”?

They’re the way we name the jumps that a melody takes as it progresses.

Ever listen to someone whistling a well-known tune?

Did they know what key the original was in, and what key they’re whistling in? No!

Does it matter? No!

All that matters is whether the next note of the tune goes up or down, and by how much.

As long as you move around the piece by the correct amount relative to the previous note it doesn't matter what the starting note is.

Naming notes relative to other notes

There are two issues in describing a tune’s next note relative to the previous note.

- How to name a jump up or down the scale in relative terms - that’s this sheet
- How to name the note we’ve landed on in relative terms - see my Degrees of the Scale sheet.

The two parts to an interval name

An interval is the gap (in pitch, not time) between 2 notes. There are two parts to an interval name:

1. The first part says how many note names separate the 2 notes

Note - we count both the notes as well as those in between, so C to E is a third

2. The second part says whether the gap is large or small

Example - A to C is a third, but is 3 frets. C to E is a third but is 4 frets

We don't specify the actual number of frets of separation, we simply say whether it's a large gap or a small one

Types of interval

- For most intervals, we describe the gap with one of 4 qualifiers (you’ll find these names applying to chords too!)
Diminished, Minor, Major & Augmented - Minor is small, Major is large, Diminished is very small, Augmented is very large
- For the 4th and 5th (eg Tonic to Subdominant or Dominant) there is only one spacing that sounds "good"; we use Diminished, Perfect and Augmented - Perfect sounds good, the others sound "strained"

A convenient way to think of this (although there is an exception to the “rule” I’m about to give) is that Major, Minor & Perfect intervals relate to the gaps we find between any two notes of a scale, and that Diminished & Augmented intervals relate to gaps when one or both notes is altered by an accidental.

The exception to this "rule" in the key of C, for example, is the interval between F and B, which is an augmented 4th, and between B and F, which is a diminished 5th.

A table of interval names

Interval Name	Here are the Interval Names (from low to high note)						
	<i>The interval name is the same, even if the notes are sharp or flat</i>						
Unison	C-C	D-D	E-E	F-F	G-G	A-A	B-B
2 nd	C-D	D-E	E-F	F-G	G-A	A-B	B-C
3 rd	C-E	D-F	E-G	F-A	G-B	A-C	B-D
4 th	C-F	D-G	E-A	F-B	G-C	A-D	B-E
5 th	C-G	D-A	E-B	F-C	G-D	A-E	B-F
6 th	C-A	D-B(*)	E-C	F-D	G-E	A-F	B-G
7 th	C-B	D-C	E-D	F-E	G-F	A-G	B-A
Octave	C-C	D-D	E-E	F-F	G-G	A-A	B-B

* Example : The interval from the Open D string to the Open B string is found in the table on the row marked “6ths” - it’s a 6th.

The next table shows how to work out if it's a Minor 6th or a Major 6th.

Note : When we name intervals, we include the notes at either end. When we count the gap, we count the frets in the normal way (eg C-D is 2 frets)

Note: Intervals larger than an octave (such as a 9th) is also called a compound interval (a 9th is a compound 2nd)

A table of intervals

Interval/no of frets	0	1	2	3	4	5	6	7	8	9	10	11	12
Unison	Uni	Aug1											
2 nd	dim2	min2	Maj2	Aug2									
3 rd			dim3	min3	Maj3	Aug3							
4 th					dim4	Per4	Aug4						
5 th							dim5	Per5	Aug5				
6 th								dim6	min6	Maj6	Aug6		
7 th										dim7	min7	Maj7	Aug7
Octave												dim8	8va

Key (larger intervals are capitalised)

dim = diminished, min = minor, Maj = major, Aug = augmented

Per = perfect, Uni = unison, 8va = Octave

* Example : The interval from the Open D string to the Open B string is 9 frets.

Combining this with the result from the previous table, we see the interval is a Major 6th.

Inversions

These tables name the interval assuming that the lower note is first.

“Inverting an interval” means putting the lower note on top.

When we invert an interval, several things happen...

- The Interval Name becomes (9-The Interval Name)
- Augmented becomes Diminished and vice versa
- Major becomes Minor and vice versa
- Perfect stays perfect

Example : D to B is a Major 6th. B to D is Minor 3rd

This “swapping over” is much like the “swapping over” that happens in the order sharps and flats get added to a Key Signature

Why bother understanding inversions?

Recognising intervals helps with recognising chords, and, like intervals, chords are frequently inverted too; feeling at ease with groups of notes on the score is a powerful step towards being at ease with them on the fingerboard.

See also my Key Signatures sheet.