

# Intervals

## Interval Basics

An interval is simply the distance between 2 notes.

- The root note (note 1 of a scale) is the note you start on ...for example in the key of A it would be the A note on the 6th string/5th fret.
- there are 7 general intervals: the 2nd, 3rd, 4th, tritone, 5th, 6th and 7th (there are also unison and octave)

This may help understand a little better.

Look at **one string** of the guitar, you have 12 frets, and that equals an octave between the first fret and the last fret.

1 fret	minor 2nd
2 frets	major 2nd
3 frets	minor 3rd
4 frets	major 3rd
5 frets	perfect fourth (no minor or major of this)
6 frets	tritone (tense and dissonant sounding)
7 frets	perfect 5th (no minor or major of this either)
8 frets	minor 6th
9 frets	major 6th
10 frets	minor 7th
11 frets	major 7th
12 frets	octave

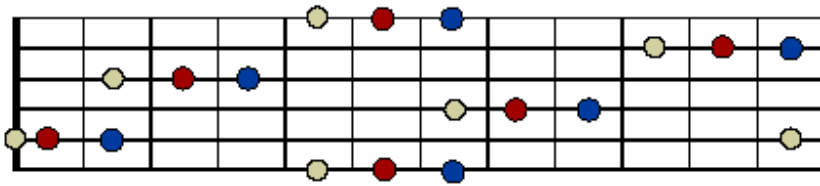
So if you look at the charts below, you'll see the root note (the note you start on) and you'll see the major, minor or perfect interval being illustrated. For example the first chart shows the 2nd interval. The root note is in tan. Count 1 fret up on the same string and you see that the black note (the minor 2nd) is right there. Count 2 frets up and the blue note (the major 2nd) is right there. From there you can see where these same notes are on all of the other strings.

Another example would be the 5th interval. This is a perfect interval because there are no minor or major notes for it, it's all by itself because it's perfect. Look at its chart. In this example the root note is an A on the 6th string, count up 7 frets and you see the perfect interval on the 12th fret. So the perfect 5th of an A is E ... **A B C D E**

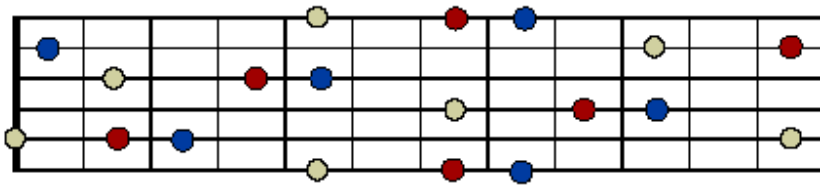
Hope this helps a bit.

● = root note   ● = minor interval  
● = major interval   ● = the perfect

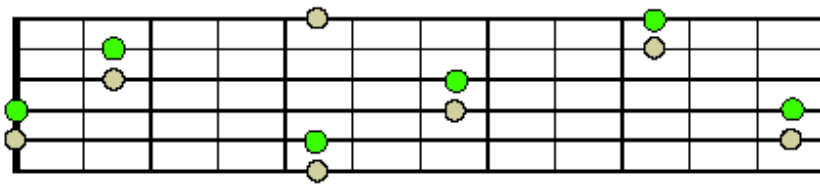
## Position of Intervals



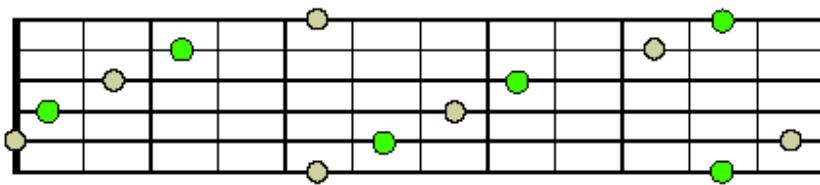
the Second Interval



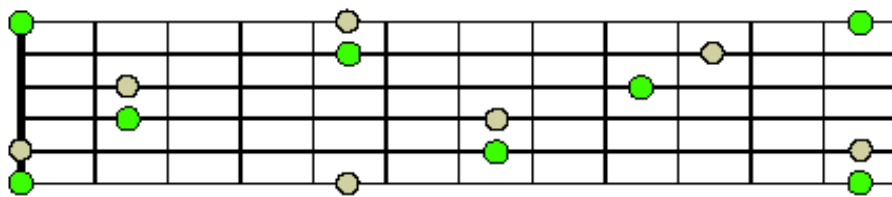
the Third Interval



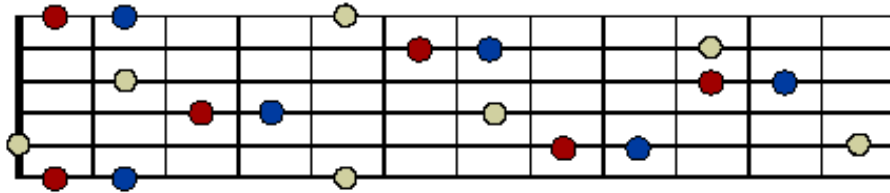
the Fourth Interval



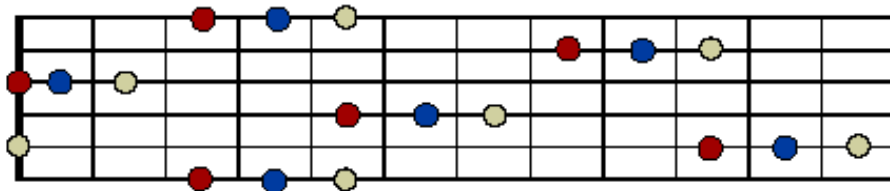
the Tritone Interval



the Fifth Interval



the Sixth Interval



the Seventh Interval

## Notes on Intervals:

Practice playing the notes on the fretboard and try to learn how the location of each interval relates to its root note.

Some key terms and concepts:

**Consonance:** This refers to when an interval is more harmonious. Or there doesn't seem to be much friction in their relationship aurally. They feel stable.

### Consonant Intervals:

- Octave (perfect consonance) can only be perfect, augmented or diminished Fifth (perfect consonance)
- Fourth (perfect consonance)
- Major Third (imperfect consonance)
- Minor Third (imperfect consonance)
- Minor Sixth (imperfect consonance)
- Major Sixth (imperfect consonance)

**Dissonance:** This refers to when an interval is not very harmonious. There seems to be friction or the notes sounding together sound unstable.

### Dissonant Intervals: the Tritone

- (major, minor, augmented or diminished) Minor Second
- Major Second
- Minor Seventh
- major Seventh
- Dissonant intervals feel as if they need to go somewhere. When they go to a major tone or chord this is called resolution.

If you look at any of the charts and study them, you'll see that the positioning of the notes on the fretboard reveal something. It reveals that certain intervals are closely related.

For example, second intervals and seventh intervals are closely related. If you take an A note and play its major 7th interval, you end up playing a G# (2 strings down and one fret up). Now where is that note compared to the A note's octave? A half step up, so it becomes a minor 2nd. This is called interval inversion.

## INVERTING INTERVALS

In general terms this is what happens when you invert intervals

Starts as	Becomes	
Perfect	Perfect	
Major	minor	So, for example, a perfect fourth of an open G is C. That C an octave lower is going to be a fifth lower.
minor	Major	
diminished	augmented	Take a few minutes to experiment on the fretboard and figure out each interval's position and then its inverse on the fretboard. You'll learn the fretboard in no time.
augmented	diminished	
unisons	octaves	
2nds	7ths	Great, what does augmented and diminished mean?
3rds	6ths	Well, when you lower and raise notes, you're changing intervals.
4ths	5ths	
5ths	4ths	Look at the chart below to get an idea what's going on.
6ths	3rds	
7ths	2nds	
octaves	unisons	

- 1 fret (1/2 step)	Interval	+ one fret (1/2 step)
diminished	perfect	augmented
diminished	minor	Major
minor	Major	augmented
---	diminished	minor or perfect
major or perfect	augmented	---

Okay so that seems like too many notes for the fretboard. Well it is. Some tones or intervals are named with several notes. These are called enharmonic intervals or notes. That's okay.

It would be quite an undertaking to create a chart to show every name of every note. So for now the important thing is that you understand the chart above.

On the next 2 pages there are some positioning exercises that may help you remember where these interval locations are on the guitar. Focus on the finger pattern from the root to the interval. If you want to get fancy, try to name the notes as you play them.

