## Harmonics

One of the most unique things a guitar can do is play harmonics.
What is a harmonic?

The bell-like chime sound that occurs when the string is plucked at very specific places on the guitar.

## Where do Harmonics Happen?

## Played on Fret

## The Sound that Occurs

- $\mathbf{1 2}^{\text {th }}$ Fret (The Strongest) An octave above the open string tone.
- $7^{\text {th }}$ Fret (The Next Strongest)An octave plus a fifth above open string.
- $5^{\text {th }}$ Fret (The Weakest) Two octaves above the open string tone.

There are others, but these are the three most useful harmonic positions on guitar.

## Why do Harmonics Happen?

When you divide the string (halves, thirds, quarters) certain frequencies happen. In physics, these division points of a string are called "nodes". In music, these points are where harmonics occur.

## How Do You Play Harmonics?

Let's start at the $12^{\text {th }}$ fret harmonic since it is the strongest and easiest to play.

- Lightly touch your fretting hand finger to the string directly over the $12^{\text {th }}$ fret metal bar. (Accuracy counts - Make sure your finger is not between the frets, or at the $11^{\text {th }}$ or $13^{\text {th }}$ fret. It must be exactly over the $12^{\text {th }}$ fret bar.)
- Pluck the string while fretting hand finger is lightly touching the string - not pressing down - just lightly touching.
- For a clearer sound, release your fretting hand finger just after the note is plucked.
- Plucking the string closer to the bridge will produce a louder harmonic.


## How Are Harmonics Notated?

In music, harmonics are notated as with a diamond notehead instead of the normal notehead.


## Harmonics Licks

Here is a favorite lick in the key of $G$ using the harmonics at the $12^{\text {th }}, 7^{\text {th }}$, and $5^{\text {th }}$ fret on the $2^{\text {nd }}, 3^{\text {rd }} \& 4^{\text {th }}$ strings. These harmonics form a $G$ triad and $D$ triad.


Here is a similar lick in Em - using the $1^{\text {st }}, 2^{\text {nd }}, \& 3^{\text {rd }}$ strings.


