

SOUND ENERGY

Watch the video as many times as necessary to understand sound energy and read the information below:

SOUND IS PRODUCED WHEN OBJECTS VIBRATE

Objects can sound: A harmonica, a beer bottle (air across the beer bottle will make sound), a pan and a wooden spoon, a metal fork..

* When we see in the video the point of the metal fork near water, we see the water spreading, we see **vibrations**.

THE VIBRATING OBJECT MAKES
SOUND ENERGY

SOUND IS PRODUCED BY A
VIBRATING OBJECT

* In the video we see how the **SPEAKER** and **RICE** to explain the **FREQUENCY / PITCH**

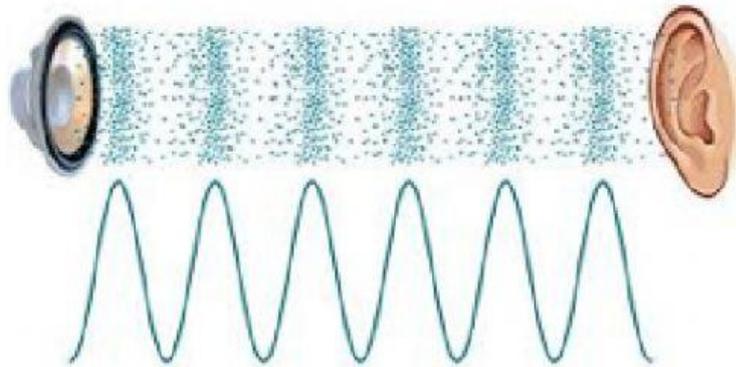
The rice shows the vibration of the speaker

When we increase the volume, the rice moves faster. When the volume is loud the speaker vibrates more and faster

When the volume is low it vibrates a slower

* The slinky is another example of **how sound molecules travel: HOW DOES THE SOUND TRAVEL?**

We are surrounded by air molecules (we cannot see them), they work as ping pong balls in a row, as we see in the video. The sound travels by pushing on the next molecule along and so it travels from the source to the ear.



SOUND IS A FORM OF ENERGY

ENERGY CAUSES CHANGE

ENERGY MAKES THINGS HAPPEN

SOUND CAN BE TRAVELED IN WOOD, AIR AND IN WATER

HOW FAST DOES SOUND TRAVEL?

- * When the man in the video claps the woods, we can see in slow motion how first we see him clapping the woods and later, we hear the wood, that is because **LIGHT TRAVELS MUCH FASTER THAN SOUND. SOUND TRAVELS AT 330 KILOMETERS PER SECOND IN AIR.**

ANSWER THE QUESTIONS

1. Sound is produced when objects vibrate / move / heat.
2. Frequency/pitch: when we increase the volume it vibrates less / more.
3. Sound travels in w_____, a_____ and in w_____.

Complete the sentences:

- a. Sound is _____
- b. Energy makes _____
- c. Energy causes _____