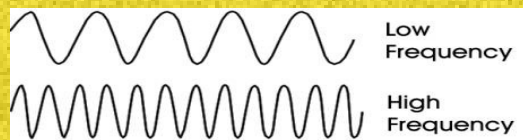


## MORE ABOUT SOUND

Sound is a type of energy made by vibrations. When any object vibrates, it causes movement in the air particles. These particles bump into the particles close to them, which makes them vibrate too causing them to bump into more air particles. This movement, called sound waves, keeps going until they run out of energy. If your ear is within range of the vibrations, you hear the sound. When the vibrations are fast, you hear a high note. When the vibrations are slow, it creates a low note.



### How do wind instruments make sound

In wind instruments, like the flute and trumpet, vibrating air makes the sound. The air particles move back and forth creating sound waves. Blowing across a flute's blow hole sets up slinky-like waves in the tube. In the clarinet, a vibrating reed (a thin piece of wood set in the mouthpiece) gets the waves started. Different pitches are played by pressing keys that open or close holes in the tube making the air column inside the tube longer or shorter. Longer air columns produce lower pitches.

### How do String Instruments make sound?

Stringed instruments are played by pressing the fingers down on the strings. This pressure changes the strings' length, causing them to vibrate at different frequencies and making different sounds. Shortening a string makes it sound higher. Strings produce different sounds depending on their thickness.

## FIND OUT MORE ABOUT SOUNDS. ANSWERS TO TRIVIAL QUESTIONS

### Can sound travel under the water?

Yes sound can travel under the water. It moves four times faster through water than through the air. It can travel such long distances that whales can hear each other when they are nearly a hundred miles apart.

### Is there sound on the moon?

No, there is no sound in space. Sound needs something to travel through like air or water.

### What is the speed of Sound?

Sound travels through air at 1,120 feet (340 meters) per second.