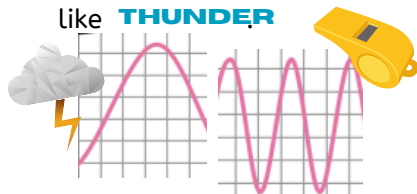




slower **vibrations**
= lower **pitch**
like **THUNDER**



faster **vibrations**
= higher **pitch**
like a **WHISTLE**



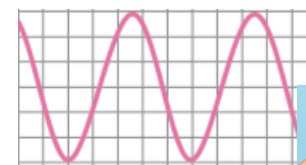
Pitch is a measure of how **HIGH** or **LOW** a sound is.

Sound is a type of energy. Sounds are created by **vibrations**. The louder the sound, the **BIGGER** the vibration.

Year Four Sound



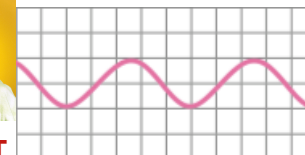
Autumn 1



LOUD

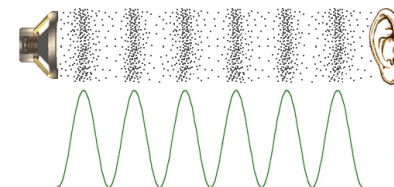


QUIET



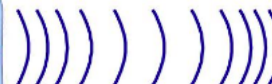
The size of the vibration is called the **amplitude**. Louder sounds have a **LARGER** amplitude, & quieter sounds have a **SMALLER** amplitude.

The vibration makes the air around the object vibrate and the air vibrations enter your ear. You hear them as sounds.



You cannot always see the vibrations, but if something is making a sound, some part of it is always vibrating.

Sound can travel through solids, liquids and gases. It travels as **Waves** vibrating the particles of the medium it is travelling through.



vacuum pump on

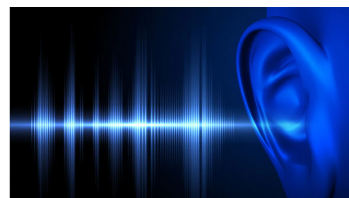


Just like space, sound cannot travel through a vacuum because there are no particles to carry the vibrations.

The sound **cannot** be heard

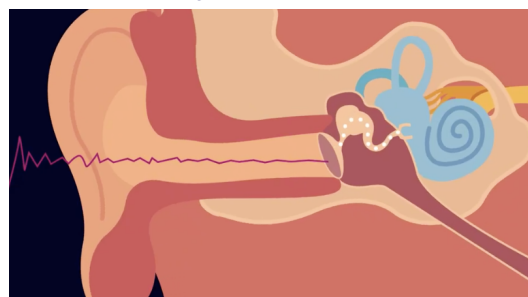


There is **NO** sound in space!



We hear because air particles closest to your ear vibrate, passing the vibrations into your ear.

Inside your ear, the vibrations **HIT** the eardrum and are then passed to the middle and then inner ear. They are then changed into electrical signals and sent to your brain.



Glossary

Absorb - to take in sound energy; absorbent materials can muffle sound

Amplitude - the size of a vibration

Eardrum - a part of the ear which is a thin, tough layer of tissue that is stretched out like a drum skin.

Pitch - how low or high a sound is

Particles - solids, liquids and gases are made of particles. They are so small that we cannot see them

Sound wave - vibrations travelling from a sound source

Vacuum - a space where there is nothing; there are no particles in a vacuum

Vibration - a movement backwards and forwards

Volume - the loudness of a sound