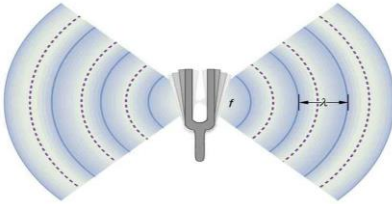


Knowledge Organiser – Sounds (Science Year 4)

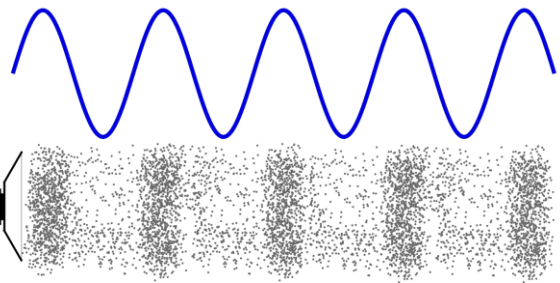
Key Vocabulary	Definition
Sound	Energy that travels in waves through air, water, or other substances, and can be heard.
Vibration	Movement back and forth.
Pitch	Frequency of a sound wave.
Volume	How loud or quiet the sound is
Insulation	Substance that stops heat, electricity or sound from passing.

Sound is made when something vibrates.



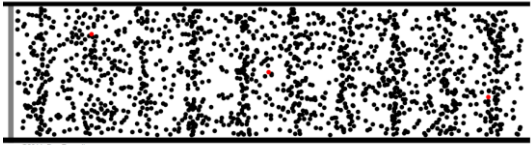
Vibration is a rapid back-and-forth movement.

Sound waves are caused by vibrations in the air.



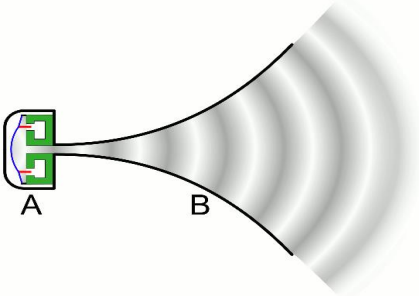
When an object vibrates, it causes movement in the air particles.

These air particles vibrate too and then bump into other air particles which then start to vibrate and so on.



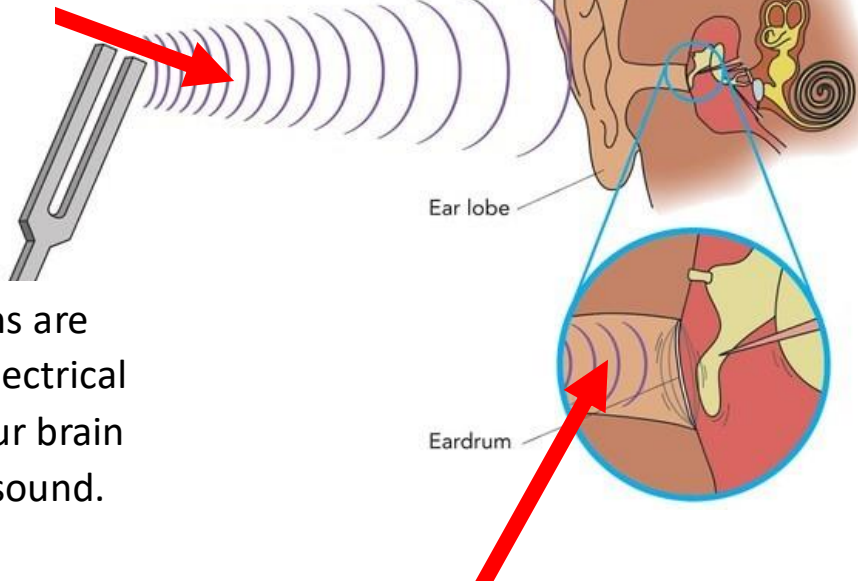
Sound is a form of energy like light. Both travel in waves and can be reflected

A sound vibration spreads out in all directions from its sources, like ripples from a pond.



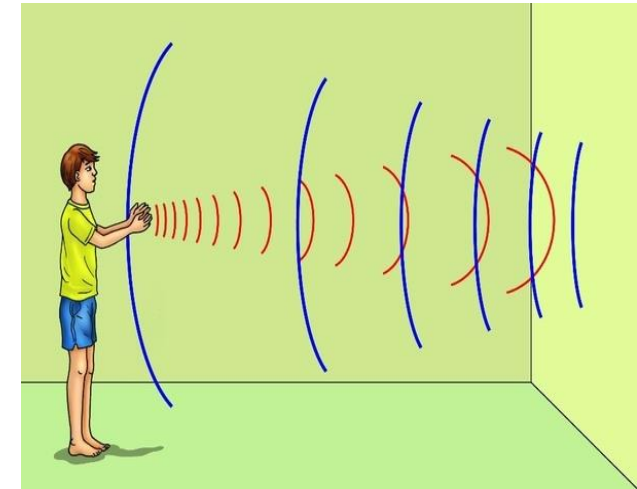
This continues in waves until the vibrations run out of energy. If the vibrations reach your ears, you will hear the sound.

Particles of air knock into each other.



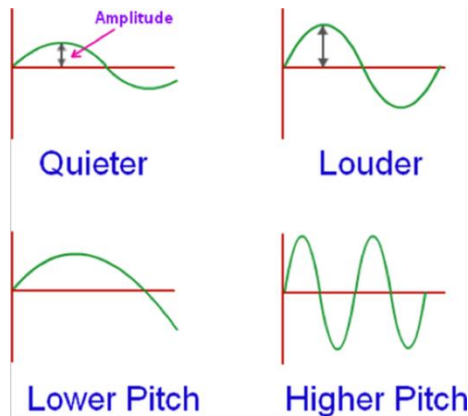
The vibrations are converted to electrical signals that your brain interprets as sound.

The number of vibrations per second is called the frequency of sound.



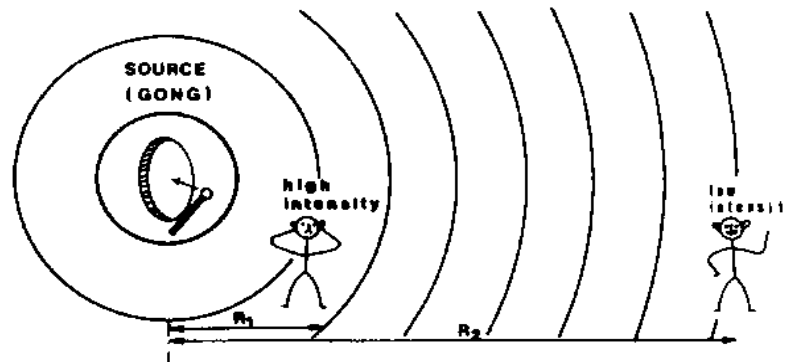
Sound that has been reflected is called an echo.

VOLUME (amplitude) describes how loud or quiet a sound is.



These vibrations reach the ear and make the eardrum vibrate.

PITCH describes how low or high a sound is.



Sounds get softer the further away you are from the source of the sound because the vibrations lose strength as they travel through the air.