



Brookfield Primary School Knowledge Organiser

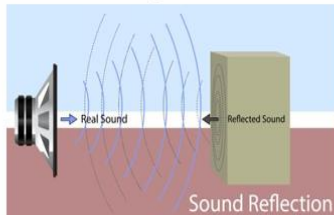


Year 4: Sound

Science is the study of the world around us through observation, description, investigation and experimentation.

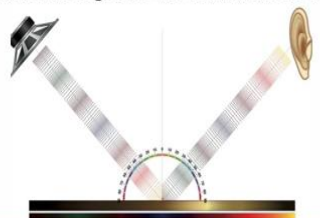
How sounds are made and travel

When objects vibrate, a sound is made. The vibration makes the air around the object vibrate and the air vibrations enter your ear. These are called sound waves. If an object is making a sound, a part of it is vibrating, even if you cannot see the vibrations. Sound waves travel through a medium (such as air, water, glass, stone, and brick).



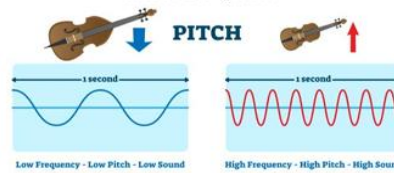
How do we hear?

The sound waves travel to the ear and make the eardrums vibrate. Messages are sent to the brain which recognises the vibrations as sounds.



Pitch

The pitch of a sound is how high or low it is. A squeak of mouse has a high pitch A roar of a lion has a low pitch.



A high pitch sound is made because it has a high frequency. The sound source vibrates many times a second.

Volume

The volume of a sound is how loud or quiet it is. Quieter sounds have a smaller amplitude and less energy (smaller vibrations) and louder sounds have a bigger amplitude and more energy. The closer we are to a sound source the louder it will be. A train arriving at a station sounds loud. The further away from a sound the fainter it will be. A train in the distance sounds quieter.



decibels

The unit used to measure loudness.

energy

The power to make something work, move or grow.

medium

A substance such as air, water or a solid.

pitch

How high or low a sound is.

reflect

Bounce back from a surface.

Sound source

The object that started the sound.

vibration

Particles moving very quickly.

volume

How loud or quiet a sound is.

General Scientific Words

Investigate, observe, explore, experiment, group, record, analyse.

Identify how sound is made.

Explore how vibrations from sounds travel through a medium to the air.

Explore sound insulation.

Explore volume.

Explore pitch.

Explore sounds from near and far.

