Sound

Prior Learning

No prior science specific sound objectives in any year group.

EYFS: Children sing songs and make music and experiment with ways of changing this.

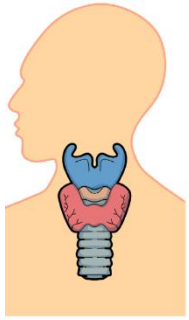
Year 1: Identify which body part is associated with which sense.

Year 4 Learning

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases.

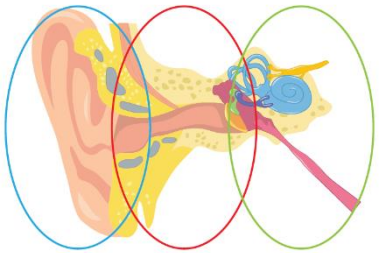
Your Voice

Everything that makes a sound vibrates. When we talk, our vocal cords vibrate.
Gently place your hand on your throat and make a sound.
Can you feel the vibrations?

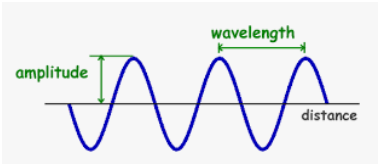


The Ear

The ear is divided into three parts. The inner ear, the middle ear and the outer ear.



Vibration



Sounds are made when an object vibrates. Vibration makes the air around the vibration, and the air vibrations enter your ear. You hear them as sounds.

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

Key Vocabulary

instruments	a tool or implement. Often an object used to make music.
sound	A type of energy made by vibrations.
Senses	There are 5 senses that help us make sense of the world- sight, sound, touch, taste and smell.
Ears	The body part that helps us to hear.
Loud	Having a large amount of sound- easily heard.
Quiet	Having a small amount sound- hard to hear.
Source	An object that vibrates and makes a sound.
Vibrate	An object that is moving very quickly causing a sound or buzz.
Vibration	Sounds are vibrations that travel to the ear through sound waves.
Travel	The way sound moves through air, solids, liquids or gases.
Pitch (low and high)	How high or low a sound is.
Volume	How loud or quiet a sound is.
Faint	A sound that is very hard to hear.
Insulation	A material that is used to absorb sound waves.

Sounds

Sounds can be loud or quiet. We call this the volume or loudness of the sound.

Loudness is the amount of energy in the sound. The energy creates different sized vibrations. If you hit the drum hard, you give it lots of energy, and the vibrations will be bigger than if you hit it gently. Bigger vibrations cause louder sounds.

Loudness is measured in decibels (dB).