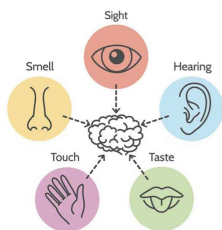




Knowledge you already have

- In year 1, I identified, named, drew and labelled the basic parts of the human body and was able to say which part of the body is associated with each sense, including that we use our ears to hear.



New Knowledge

During this unit:

- I will Identify how sounds are made, associating some of them with something vibrating.
- I will recognise that vibrations from sounds travel through solids, liquids and gases (for example, the air, water and objects) to the ear.
- I will find patterns between the pitch of a sound and features of the object that produced it.
- I will find patterns between the volume of a sound and the strength of the vibrations that produced it.
- I will recognise that sounds get fainter as the distance from the sound source increases.

Future Knowledge

At secondary school, I will learn:

- that waves on water are undulations which travel across water and can be reflected.
- that the rate of sound waves are measured in Hertz.
- about echoes, reflection and absorption of sound.
- about the speed of sound in air, water and solids.
- about how sound is detected
- about hearing in humans and animals.
- about pressure waves
- waves transferring information for conversion to electrical signals by microphone.

Scientific Enquiry

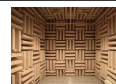
Comparative and fair testing:

- I will use data to identify patterns in pitch and volume.
- I will measure sounds over different distances. Use data to demonstrate how loudness can be reduced and increased by moving further from/closer to the sound source.
- I will measure sounds through different insulation materials and explain how loudness can be reduced.

Key Ideas and Vocabulary

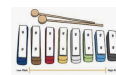
A sound produces vibrations which travel through solids, liquids and gases from the source to our ears. Sound cannot travel through a vacuum (an area empty of matter). The vibrations cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound. The loudness (volume) of the sound depends on the strength (size) of vibrations which decreases as they travel. Sounds decrease in volume as you move away from the source. A sound insulator is a material which blocks sound effectively. Pitch is the highness or lowness of a sound.

insulation



A material that prevents heat or sound from being transmitted.

pitch



The highness or lowness of a sound depending on the frequency of vibrations.

sound



Sound is created when something vibrates and sends vibrations into our ears.

source



The cause and location of sound.

vacuum



A space where there is no matter including air.

vibration



A back and forth motion.

volume



How quiet or loud a sound is.