Sound

Overview of unit / topic

Children will learn how vibrations cause sounds and how sounds travel through different mediums at different speeds. They will explore how sounds can change in pitch and loudness and be able to explain this using scientific language. They will develop their scientific skills by planning a fair test investigation to answer the question: which material is the best at muffling sounds? Children will also learn what happens to sound vibrations when they reach the ear.

Key Questions

How are sounds made?
What is a sound vibration?
What is inside your ear?
What happens to sound vibrations when they reach our ear?
What is pitch?
What is volume?
Which material is best at muffling sound?

Key Vocabulary

vibrate/vibrations - forward and backward movement of an object (usually rapidly)
volume - how loud or quiet a sound is
pitch - how high or low a sound is
noise – a sound that is often unpleasant or unwanted
pinna - the outer portion of the ear (ear flap)
pinnae – ear flaps / outer ear
cochlea - the sound reception part of the inner ear
ear drum - the membrane which collects sound from the pinna and passes it to the inner ear

Key Knowledge and Understanding: What will we be learning about in this unit / topic?

Pupils will be taught to:
- 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.