



Sound

Science
Year 4
Autumn Term

Overview

During this topic, we will find out how sounds are made and how they travel to reach our ears. We will be completing different investigations to test volume and pitch. We will also be identifying patterns between pitch, volume and distance.



Knowledge & Understanding

In this unit, the pupils will:

- 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.

Enquiry Skills & Concepts

In this unit, the pupils will be:

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making observations and taking accurate measurements
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- using results to draw simple conclusions, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas
- using straightforward scientific evidence to answer questions or to support their findings.

Topic Vocabulary

medium – the material in which sound waves can travel through

pitch – how high or low the sound is

sound – when something vibrates and sends waves of energy (vibration) into our ears

sound wave – a series of vibrations that travel through a medium such as air or water

volume – how loud or quiet a sound is

vibrate – to move back and forth rapidly and steadily

Working Scientifically

classification – to sort things into different groups by their characteristics or features.

conclusion – an opinion reached after careful thinking and observation

data – facts or figures that can be used to give information about a subject.

evidence – findings and results that answer a question

fair test – testing without showing favour or allowing an advantage

observation – to look closely and make detailed thoughts / opinions about something

prediction – to use prior knowledge to state the outcome

variable – something that can change or has no fixed value.

Home – School link project

During this topic pupils can choose to:

- Create a string telephone model
- Create a musical instrument using boxes and materials from around the home.