



Forces and magnets

Science
Year 3
Spring Term

Overview

During this topic, we will explore different forces and focus on Magnetism. We will be completing a variety of investigations to test how magnets act. We will also be testing which materials in our classroom are magnetic.



Knowledge & Understanding

In this unit, the pupils will:

- compare how things move on different surfaces
- notice that some forces need contact between two objects, but magnetic forces can act at a distance
- observe how magnets attract or repel each other and attract some materials and not others
- compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials
- describe magnets as having two poles
- predict whether two magnets will attract or repel each other, depending on which poles are facing.

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

- attract** – a force that draws something nearer
- force** – a push or pull upon an object
- magnet** – a magnet is an object that is made of materials that create a magnetic field
- magnetic field** – is the area around a magnet in which there is magnetic force
- magnetic force** – a push or pull upon a magnetic object
- north pole** – one end of a magnet that repels the other
- repel** – a force that pushes something away
- south pole** – one end of a magnet that repels the other

Working Scientifically

- classify** – to sort things into different groups
- conclusion** – an opinion reached after careful thinking and observation
- evidence** – findings and results that answer a question
- gather** – to collect from different sources and bring together information
- identify** – to recognise what something is
- investigation** – to find out the answer to a scientific question using tests and observations
- observation** – to look closely
- prediction** – to use prior knowledge to state the outcome

Home – School link project

- During this topic pupils can choose to:
- Explore the objects around your house and record which objects are magnetic.