

# **Motion and Forces**

Students will be introduced to the concepts of speed, velocity, and acceleration, exploring how forces affect motion and how to represent them.

## Series and Parallel Circuits

\_Students will investigate how electric current flows in series and parallel circuits, understanding the differences in current, voltage, and resistance.

#### **Heat Energy Transfers**

Students will explore how heat moves through conduction, convection, and radiation, and how insulation reduces energy loss.

### Magnetism and Electromagnets

Students will examine magnetic fields and investigate how electromagnets are made and used in practical applications.

# Transverse and Longitudinal Waves

Students will compare transverse and longitudinal waves, learning how vibrations transfer energy through different mediums.

6

### **Waves in Action**

Students will apply their understanding of wave behaviour to sound and light, including reflection, refraction, and absorption.

# **Working Scientifically**

Students will develop essential scientific enquiry skills, including planning investigations, collecting and analysing data, and drawing evidence-based conclusions, with a focus on accuracy, reliability, and fair testing.