PHYSICS KS3 CURRICULUM ROADMAP

1

Energy Stores and Transfers
Students will learn about different forms of energy, how energy is stored, transferred, and conserved in physical systems and everyday contexts.

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.

2

3

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.

4

5

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

7

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.