# PHYSICS KS4 CURRICULUM ROADMAP

1

**Energy**

Students will investigate energy transfers, efficiency, and specific heat capacity through practical experiments to develop measurement and analysis skills.

**Combined** **Triple**

**Electricity**

Students will build and test circuits to measure current, voltage, and resistance, exploring the relationships between electrical quantities.

**Combined** **Triple**

2

3

**Particle Model of Matter**

Students will study density, changes of state, and gas pressure to understand particle behaviour in different materials.

**Combined** **Triple**

**Atomic Structure**

Students will detect and measure radiation to explore nuclear properties and develop safe handling techniques.

**Combined** **Triple**

4

5

**Forces**

Students will measure forces, acceleration, and elasticity using practical methods to apply Newton's laws and formulae.

**Combined** **Triple**

**Waves**

Students will investigate wave properties such as frequency, wavelength, and speed with experiments involving sound and light.

**Combined** **Triple**

6

7

**Magnetism and Electromagnetism**

Students will explore magnetic fields and electromagnets, observing how electricity and magnetism interact.

**Combined** **Triple**

## Space Physics - Separate Science only

Students will simulate orbits and gravitational forces to understand astrophysical mechanics and space phenomena.