



KS4 Curriculum Overview - Physics

Your child will learn about the physical properties of the world and beyond, develop their knowledge, skills and understanding of the scientific method during each half term.

Term	Year 10	Year 11
Autumn 1	- Particle Model of Matter - states of matter (covered at end of year 9) - Atomic Structure - radioactivity and the history of the atom.	- Forces - Momentum, levers and pressure - Waves - properties of waves and the electromagnetic spectrum
Autumn 2	- Electricity - building circuits and calculating features of a circuit. - Electricity - electricity in the home.	Waves - application of waves in the real world. Heat, light, colour, seismic waves, Ultrasound and sound
Spring 1	Energy - stores and transfers of energy	Magnets and Electromagnetism - how we use magnets and how to create electromagnets.
Spring 2	Forces - speed, distance and acceleration	Space Physics - life cycle of a star and the Big Bang Theory
Summer 1	Forces - graphs of motion and Newton's Laws	- Exam skills - Revision
Summer 2	Forces - Car safety.	GCSE Public Examinations

Through the study of Physics your child will be expected to develop the following knowledge, skills and understanding:

Concept / Skill	Concept / Skill
- Scientific investigation - Analysis of information - Practical skills using specialist physics equipment	- Graphical interpretation - Algebra and Numerical manipulation

Parents can support their child by checking [Google Classroom](#), testing pupils on key knowledge from [Cognito YouTube videos](#), [BBC Bitesize](#), and [Physics and Maths Tutor](#) website