Physics

Examination board: AQA



The study of A Level Physics allows pupils to explore conceptual ideas about how the world works; moreover, it facilitates the development of their analytical, problem-solving and experimental skills.

Content

Year 1

Much of what is studied in Year 12 in Physics builds on what pupils have learned as part of their GCSE work, in particular: Electricity, Mechanics and Waves. Particles and Quantum Phenomena are new topics.

Year 2

In Year 13, we move on to more complex, conceptual and mathematical ideas in Physics; topics include Circular Motion and Simple Harmonic Motion, Thermal Physics, Ideal Gases, Nuclear Physics and Fields (gravitational, electrical and magnetic).

Practical work

Practical skills are developed and practised throughout the two years of the A Level via a series of experiments that consolidate understanding of the theory. A separate endorsement of practical skills is undertaken; this is assessed by teachers, based on observation of pupils' competency in a range of areas.

Assessment

AQA A Level Physics is examined via three written papers.

Paper 1 covers the Year 1 material as well as Periodic Motion. It is a 2-hour paper, which consists of 60 marks of long questions and 25 multiple-choice questions.

Paper 2 covers Thermal Physics and Ideal Gases, Nuclear Physics and Fields. It has the same structure as Paper 1: 60 marks of long questions and 25 multiple-choice questions.

Paper 3 is in two sections: Section A covers practical skills and data analysis; Section B is on an optional topic.

Subject combinations

The A Level Physics syllabus involves a high level of mathematical content, and pupils often find it advantageous to study Physics and Mathematics in combination. Physics pupils who are not also studying A Level Mathematics attend an additional weekly lesson of mathematics support which focuses on developing and practising the mathematical knowledge required for an A Level Physics student.





