

# IGCSE PHYSICS - 0625

## Why should I choose Physics?

- In Physics you will gain confidence in a technological world.
- In Physics you will be aware of the application of science in everyday life which may be both helpful and harmful to the community and the environment.
- An excellent foundation for advanced study in pure sciences, in applied science or in science-dependent vocational courses.

## Why study Cambridge IGCSE Physics?

As well as a subject focus, the Physics syllabus enables students to:

- develop relevant attitudes, such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness
- develop an understanding of how scientific theories and methods have developed, and continue to develop
- develop an understanding of how groups and individuals work together
- better understand the influence and limitations placed on scientific study by society, technology and the environment
- develop understanding of the scientific skills essential for both further study and in everyday life.

## Course Content:

The course content is divided into 6 main sections. The first three sections are covered in Year 10, the second three in Year 11:

1. General Physics (length and time, speed acceleration, velocity, mass, density, forces, work, pressure, energy and power).
2. Thermal Physics (simple kinetic molecular of matter, thermal properties, transfer of thermal properties).
3. Properties of waves, including lights and sound (general wave properties).
4. Electricity and magnetism (simple phenomena of magnetism and electrical quantities).
5. Atomic physics (radioactivity and nuclear atom).
6. Space Physics (Earth and solar system).

## How will I learn?

A variety of learning methods are used throughout the course which include practical work, demonstration, presentations, group work, inquiry based project, interactive simulations, field research, peers and self-assessment.

## How will I be assessed?

You will be assessed by two papers that test your understanding of the content covered: one multiple-choice (45 minutes and worth 30% of the total marks) and one extended written paper (75 minutes and 50% of the total); and an alternative to practical test (60 minutes and 20% of the total) that tests practical technique, data handling and analytical skills.