

PHYSICS

As well as a subject focus, the IGCSE Physics syllabus enables students to better understand the technological world in which they live, and take an informed interest in science and scientific developments. Students learn about the basic principles of Physics through a mix of theoretical and practical studies. Students also develop an understanding of the scientific skills essential for further study at A Level, skills which are useful in everyday life. As they progress, students learn how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

All candidates must enter for **three** papers.

Paper 1 45 minutes Multiple choice question paper Weighted at 30% of total available marks		
and either:	or:	
Paper 2 1 hour 15 minutes Core theory paper Weighted at 50% of total available marks	Paper 3 1 hour 15 minutes Extended theory paper Weighted at 50% of total available marks	
and either:	or:	or:
Paper 4 Coursework Weighted at 20% of total available marks	Paper 5 1 hour 15 minutes Practical test Weighted at 20% of total available marks	Paper 6 1 hour Alternative to Practical paper Weighted at 20% of total available marks

Aims

The aims of the syllabus listed below describe the educational purposes of this examination. The aims of

the syllabus are the same for all students and are not listed in order of priority. The aims are:

1. to provide a worthwhile educational experience for all candidates, through well designed studies of experimental and practical science, whether or not they go on to study science beyond this level
2. to enable candidates to acquire sufficient understanding and knowledge to:

- become confident citizens in a technological world, to take or develop an informed interest in scientific matters
- recognise the usefulness, and limitations, of scientific method and to appreciate its applicability in other disciplines and in everyday life
- be suitably prepared for studies beyond IGCSE in pure sciences, in applied sciences or in science dependent vocational courses

3. to develop abilities and skills that:

- are relevant to the study and practice of physics
- are useful in everyday life
- encourage safe practice
- encourage effective communication

4. to develop attitudes relevant to physics such as:

- concern for accuracy and precision
- objectivity
- integrity
- enquiry

- initiative
- inventiveness
- 5. to stimulate interest in, and care for, the environment
- 6. to promote an awareness that:
 - scientific theories and methods have developed, and continue to develop, as a result of co-operative activities of groups and individuals
 - the study and practice of science are subject to social, economic, technological, ethical and cultural influences and limitations
 - the applications of science may be both beneficial and detrimental to the individual, the community and the environment
 - science transcends national boundaries and that the language of science, correctly and rigorously applied, is universal