



# Physics

## 1. Expectations for success are:

Students are expected to complete all questions on every homework that is set. If they find questions that they cannot answer or problems they cannot solve then it is expected that they will come and ask staff for extra help. If students do not achieve an acceptable grade in homework then they will be set a further task on that topic to improve their knowledge.

All students are required to bring to every lesson a clear 30cm ruler, a scientific calculator (not their phone) and a protractor.

## 2. The characteristics of an outstanding student in this subject are:

Students will need to have high levels of numeracy, literacy and problem solving skills. The context approach to the course means that exam questions can be asked that apply physics principles to many different situations. Students will need resilience and excellent problem solving skills if they are to achieve the highest grades. Physics is 80% exam and so constant revision is needed throughout the year to reinforce the topics covered in the course.

## 3. Wider Reading List:

Students need to ensure that they have a firm knowledge of all the areas of Physics covered at GCSE. A GCSE textbook such as 'Physics for You' is a good start. CGP also publishes a book called Head start to AS which covers many of the topics that link the AS and GCSE courses. Students may also wish to purchase an Edexcel AS Physics revision guide. These are published by both CGP and Letts.

Beyond the scope of the course students will find the articles in magazines such as 'New Scientist' 'Physics world' and 'Physics review' helpful and informative. For those students who would welcome a challenge the following are fascinating.

- 'A brief history of time' –Stephen Hawking
- 'In search of Schrödinger's cat' and 'Schrodinger's kitten' – John Gribbin

## 4. Independent Study Ideas:

At the start of the year students will be issued with a homework booklet. Dates will be issued as to when each task will need to be completed. Past papers will also be available from the start of the course and students should use these to consolidate their learning and understanding. The controlled assessment element of the course (worth 20%) has a section that is completed at home. Once set students will have 2 weeks to complete this task.

Students will be expected to follow the department twitter account '@physicswgsb'. This site will give reminders about homework and also allow students to discuss their work. The account will also provide information about university courses and Physics developments in the news.