



SIXTH FORM

FRAMWELLGATE SCHOOL DURHAM

Preparation for A Level Physics

Specification:

Course Title	Physics	Exam Board	AQA
Module	Title	Weighting	Assessment Method
	Paper 1	34%	Written exam
	Paper2	34%	Written exam
	Paper 3	32%	Written exam

Resources needed for the first lesson in September:

Scientific calculator, A4 ring binder/lever arch folder

Recommended Textbook/revision guide:

A level Physics CGP textbook

A level Physics CGP revision guide

A level Physics: Essential Maths Skills -CGP

Task:

Mathematical skills

AS level physics demands a level of mathematical ability significantly higher than that required for GCSE. You are therefore required to complete a pre-course mathematics for physics task to assess and develop your understanding of the important mathematical skills.

The attached booklet contains notes, which you should read carefully, interspersed with exercises for you to practise the common mathematical techniques used.

Please complete this to the very best of your ability – if you require further support then please look in libraries for GCSE maths textbooks or use websites such as BBC Bitesize.

2) The frontiers of physics research

Throughout your course, links will be made to current physics research happening around the world.

In the second part of your induction task you are asked to research recent developments in particle physics which relate to one of the topics you will study in the autumn term.

Please create a poster (minimum A4 size) on the experimental discovery of the Higgs boson, to include the following points: What is the Higgs boson? How does it fit into the Standard Model of particle physics? What does it do? How does the Large Hadron Collider work? Why do scientists believe they have discovered the Higgs boson? Why can they not be certain? Why might the discovery have made Stephen Hawking grumpy?!

You may like to begin your research using this news article (4th July 2012): <http://www.bbc.co.uk/news/world-18702455>

Deadline Date: Tuesday 4th September