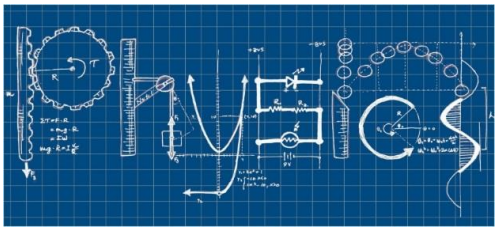
Physics

Exam Board	AQA
Qualification	GCE A level



Entry Requirements	Grade 7 in Physics and Grade 6 in Maths

Content (Outline of Course)	A Level students will cover the following topics Only 1 option topic is chosen to be covered by the class. Topics 1 – 5 will be fully covered in Year 12. Topics 6 – 9 and one option will be fully covered in Year 13. **Topic 1:** Measurements and Errors **Topic 2:** Particles and Radiation **Topic 3:** Waves **Topic 4:** Mechanics and Materials **Topic 5:** Electricity **Topic 6:** Further Mechanics and Thermal Physics **Topic 7:** Fields **Topic 8:** Nuclear Physics **Topic 9:** Thermodynamics **Option 1:** Astrophysics **Option 2:** Medical Physics **Option 3:** Engineering Physics **Option 4:** Turning Points in Physics **Option 5:** Electronics

Assessment	A Level Physics consists of linear assessments, with all exams at the end of the course in Year 13. In assssments, 40% of the total A-level marks require the use of Level 2 (Higher tier GCSE) mathematical skills. There will be no internal assessment that leads to marks that contribute towards the A-level grades. Practical work will solely be assessed in the written papers. 15% of the total A-level marks will be for practical knowledge and understanding in physics investigations. A separate 'endorsement' of practical work will be assessed by teachers when students carry out required practicals in lessons. This will not be graded. If students pass, it will be reported on their certificate, otherwise it will not be reported. **Examinations** To achieve an A Level qualification you must sit 3 written papers at the end of Year 13 carried out during the summer term. Each paper is 2 hours. Paper 1, marked out of 85, is 34% of the overall grade, which consists of 60 marks of qualitative questions and 25 marks of multiple questions on topics 1-5 and periodic motion. Paper 2, marked out of 85, is 34% of the overall grade, which consists of 60 marks of qualitative questions and 25 marks of multiple questions on topics 6-9. Paper 3, marked out of 80, is 32% of the overall grade, consisting of 45 marks on data analysis questions and 25 marks on the option topic. **Classwork** Work in class will be varied and the work will be assessed through class discussion, checkpoint and formal testing, homework booklet activities, additional work and independent study assignments.

	Students will be provided a class workbook for each topic and will work through this workbook completing different activites. These books can also be used as a revision aid later in the course. Class notes will be provided for the students to help structure learning in and out of lessons which provide students with basic course notes, sample questions, test your self questions, puzzles, revision checklists and course specifications. Students will be provided a class reading book for each topic and will use this reading book as the source of their course notes. These books can also be used as a revision aid later in the course. **Homework** Homework will be set regularly through weekly homework booklets and will be based on previous examination questions of the topics covered in the course to provide an insight into the experimental technique required. In Year 12, homework tasks will consist of multiple choice questions, longer questions based on class work and an extension question aimed at A/A* students. In Year 13, homework will consist of multiple choice questions, longer questions based on class work, extension questions aimed at A/A* students and revision questions based on work in Year 12.
Careers Guidance	Students who gained a qualification in A Level physics tend to gain entry into Higher Education institutions to study a very wide range of courses in faculties of Science, Engineering, Business, Medicine, Law, Electronics, and a variety of combined courses leading to rewarding and satisfying employment. Physics is considered by Russell Group universitites to be a 'facilitating subject' for many university courses. Most of the successful applicants over the last couple of years to Russell Group universities have offered facilitating subjects for most or all of their A-levels. The Russell Group guide 'Informed Choices' advises pupils wanting to be considered for a Russell Group university to pick two of them as part of their A-level mix. A small number of students prefer to enter the job market direct from Sixth Form.