

Curriculum area Physics AQA AS (7407) and AQA year 1 A-level (7408)

Topics	Assessment	How you can support your child's learning at home E.g. Books, Websites, Family learning through visits
Section 1 – Particles and Radiation 1. Matter and radiation 2. Quarks and leptons 3. Quantum phenomena	AS examination is taken in two papers each 1hour 30minutes in length. The papers have an equal weighting towards the overall grade. Paper 1 contains 70 marks of short and long answer questions.	Online material available. This can be found on the AQA website: http://www.aqa.org.uk/subjects/science/as-and-a-level/physics-7407-7408 Other useful websites are; http://www.s-cool.co.uk/a-level/physics http://www.cyberphysics.co.uk/ http://physicsnet.co.uk/ https://www.physicsandmathstutor.com https://www.revisely.co.uk https://www.senecalearning.com
Section 2 – Waves and Optics 4. Waves 5. Optics		
Section 3 – Mechanics and Materials 6. Forces in equilibrium 7. Motion 8. Newton's Laws 9. Force and Momentum 10. Work, energy and Power 11. Materials	Paper 2 contains 3 parts: -Section A: 20 marks of short and long answer questions on practical skills and data analysis. -Section B: 20 marks of short and long answer questions from across all areas of AS content. -Section C: 30 multiple choice questions from across all areas of AS content.	Students will be issued with a textbook ISBN 978-0198351863 for use during the course. A secondary textbook will be available as a hard copy in school or access to an online version through a log-on and password. Students have the option of purchasing through school (price) a range of support books including revision guides. Alternatively these and others can be purchased at retail prices in book shops or online.
Section 4 – Electricity 12. Electric Current 13. DC Circuits	A-Level examination is taken in the second year (Y2). In this, Paper 1 is 2 hours in length and contains 60 marks of short and long answer questions and 25 multiple choice questions.	Students will need a 4-ring A4 Folder for their everyday work to bring to and from school this should contain a copy of the practical skills booklet and data & formulae booklet that they will be provided with.
Required Practical's 1. Stationary Waves 2. Young's slit 3. 'g' by free-fall 4. Young Modulus 5. Resistivity 6. emf and internal resistance	This paper covers all AS (Y1) content as well as content from (Y2): Section 6: 17. Circular Motion and 18. Simple Harmonic Motion topics	Students will also require an A4 Lever Arch file to store completed notes, questions and assessments in to keep organised ready for revision. File dividers will be provided with specification points and textbook references to aid organisation. Following each lesson students are required to spend an equivalent proportion of time consolidating work by reading textbook topics and completing summary questions. At the end of each topic an end of topic assessments will be conducted. Termly progress tests will be conducted to evaluate cross-chapter questioning.