

PCHS Curriculum Information

Course title: A-Level Physics	Exam board: AQA	Specification code: 7408
How will students be assessed?		
<p>Students will sit three two hour external exams at the end of Year 13. During the course, along with other practical work, students will carry out 12 assessed practicals which will lead to the students being awarded their practical skills endorsement.</p> <p>Physics Paper 1: (85 marks) Students will complete short and long answer questions (60 marks) on the topic from sections 1-5 and 6.1. The paper includes multiple choice questions (25 marks).</p> <p>Physics Paper 2: (85 marks) Students will complete short and long answer questions (60 marks) on the topic from sections 6.2 and 7 - 8 (the questions may assume knowledge from sections 1 - 6.1). The paper includes 25 multiple choice questions.</p> <p>Physics Paper 3: (80 marks) Students will complete 45 marks of long and short answer questions on practical experiments and data analysis, as well as 35 marks of short and long questions from the optional unit, unit 12 turning points in physics.</p>		

Half term	Key content	
	AMI	MST
1	Fields and their consequences Fields Gravitational fields Electric Fields	Further Mechanics and thermal physics Periodic motion SHM Required practical 7 SHM Pendulum
2	Capacitance Parallel Plate Capacitor Energy stored by a capacitor Capacitor charge and discharge Required Practical 9 Capacitors Nuclear physics Radioactivity Nuclear Instability Nuclear Radius	Thermal energy transfer Ideal gases Molecular kinetic theory model Required practical 8 Gas Laws
3	Nuclear Physics Mass and energy Induced Fission Safety aspects Required Practical 12 Inverse-square law for gamma radiation	Magnetic Fields Magnetic flux density Moving charges in a magnetic field Magnetic flux and flux linkage Required practical 10 $F = BIL$
4	Turning Points in Physics Discovery of the electron Wave-particle duality Special Relativity	Electromagnetic Induction Alternating currents The operation of a transformer Required practical 11 Magnetic Flux Linkage
5	Revision	Revision

