

## Year 11 Physics

Physics GCSE follows the AQA specification and builds on work studied at KS3 whilst also encountering new content that links into A level such as transformers.

There are 8 units (P1-P7) examined in two papers at the end of Y11; paper 1 examines P1-4, paper 2 examines P5-8  
There is no coursework but there are “Required Practicals” which students will be asked about in exams - these are integrated into lessons throughout the course along with other practical work and the development of broader scientific skills

At the end of each topic students complete a topic test made up of past exam questions. This is then marked and graded and used to identify strengths and areas in need of attention. Note that many topics overlap and so end-of-topic assessments may contain elements from different units which also acts as retrieval practice.

Each lesson begins with a Brain in Gear retrieval task and a Key Learning Question. There will be teacher input of some kind followed by tasks which use prior learning to develop greater knowledge understanding. Once understanding is established then students develop their ability to apply this to unfamiliar situations.

Note: P1 is taught at the end of year 9 and revised during year 11

Year 11 Curriculum	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
<b>Topic(s)</b>	<b>P5b: Forces in motion</b> Newton's laws Braking Momentum	<b>P6: Waves</b> Waves in air, fluids and solids Electromagnetic waves Lenses and ray diagrams Black body radiation Sound and ultrasound	<b>P7: Magnetism and electromagnetism</b> Magnetic forces and fields Electromagnetism The motor effect Generators, transformers and the national grid	<b>P8: Space physics</b> The Solar system The Life cycle of a star Red-shift and the Big Bang	Revision and beginning of formal GCSE examinations	
<b>Assessment</b>	Tests half way through each topic usually set as homework 'Key pieces' of work Formal end of unit tests Mock exams in November (paper 1) and January (paper 2)					

## Independent Work

Regular homework covering a variety of skills:

- GOALs (“Go Off And Learn”) for factual recall including learning key equations
- Application
- Practice exam questions to gain experience of recall, application, unfamiliar contexts and extended response
- Research
- Write ups of experimental work, especially work related to the Required Practicals
- Increasing use of Tassomai as the year progresses