



Year 11 Physics Curriculum Overview

- ✓ Each lesson will start with a series of questions linked to both the previous lesson and topics studied previously.
- ✓ Formative assessment of skills linked to practical work will enable students to demonstrate their acquisition of new skills.
- ✓ Students are encouraged to consolidate learning at least once a week and seek tutor help if unsure on any topics.
- ✓ Within each unit, time will be allocated for consolidation and recall before assessment, this includes for mock exams.
- ✓ The following questions will be explored within the units
- ✓ **Content in blue is only taught to the A pathway (students on the triple science route)**

Half Term 1	
Date	Topic: Waves
WC 29/08	Introduction to science (expectations, standards, health and safety, introduction of key skills and assessing prior knowledge).
WC 05/09	What types of waves are there?
WC 12/09	How do we represent waves?
WC 19/09	How suitable is apparatus to measure the frequency, wavelength and speed of waves? Required practical: Waves
WC 26/09	What happens when waves hit a surface? Required practical: Reflection
WC 03/10	How do we use waves?
WC 10/10	What is the electromagnetic spectrum?
Half Term 2	
Date	Topic: Electricity and magnetism
WC 31/10	What do magnetic fields look like?
WC 07/11	How do you plot the magnetic field around a magnet? How do we know the Earth's core is magnetic?
WC 14/11	How do we create a magnetic field using a current? What is Fleming's left-hand rule and how do we use it?
WC 21/11	How do electric motors? Calculate magnetic flux density?
WC 28/11	How does a speaker work? How do we generate electricity?
WC 05/12	How do we use the generator effect? How do transformers work?
WC 12/12	Mock examinations
Half Term 3	
Date	Topic: Space
WC 02/01	What is our place in the Universe?
WC 09/01	How did our Sun form and what will be its fate?
WC 16/01	How do satellites stay in orbit?
WC 23/01	What is the Big Bang theory?
WC 30/01	How do we know if the Universe is getting bigger or smaller?
WC 06/02	Reflect and review.
Half Term 4	
Date	Topic: Consolidation
WC 20/02	Why do we need energy? Why is energy transferred? How does energy change in a system?
WC 27/02	Required practical: Specific heat capacity.
WC 06/03	How are particles arranged? How do we calculate density? How do particles behave in solid, liquid and gas?
WC 13/03	Required practical: Density
WC 20/03	How do we draw electrical components? How can electricity be supplied?
WC 27/03	Required practical: Series and parallel resistors. Required practical: I-V characteristics
Half Term 5	
Date	Topic: Consolidation
WC 17/04	Walking talking mocks
WC 24/04	What are forces?
WC 01/05	Equation retrieval and application
WC 08/05	Required practical: Force and extension.
WC 15/05	Required practical: Investigating force and acceleration.
WC 22/05	What do we remember about waves? Required practical: Reflection
	What do we remember about electricity? What do we remember about space?
Half Term 6	
Date	Topic: Exam season
WC 05/06	
WC 12/06	
WC 19/06	
WC 26/06	
WC 03/07	
WC 10/07	
WC 17/07	