



Year 11 Curriculum Grid

Separate Physics

Year/Term	Unit	Intent
Curriculum purpose		<ul style="list-style-type: none"> • Ensure students have a secure understanding of the key concepts of Physics, building on knowledge from KS3. • Encourage students to carry out practical work safely with increasing independent skills. • Enthuse students with a love of Physics by incorporating a holistic approach and relating concepts to actions and behaviours.
Autumn	SP11 - Static electricity SP12 -Magnetism and the motor effect SP13 - Electromagnetic induction	<ul style="list-style-type: none"> • Explain how an insulator can be charged by friction • Recall that like charges repel and unlike charges attract • Explain some of the uses and dangers of electrostatic charges • Describe the shape and direction of the electric field • Explain the difference between permanent and induced magnets • Recall that the strength of the field depends on the size of the current and the distance from the long straight conductor • Explain where and why step-up and step-down transformers are used in the transmission of electricity in the national grid
Spring	SP14 - Particle model SP15 - Forces and matter	<p><i>Students will sit their PPEs at the start of this term</i></p> <ul style="list-style-type: none"> • Use a simple kinetic theory model to explain the different states of matter • Explain the differences in density between the states of matter • Explain ways of reducing unwanted energy transfer • Explain the pressure of a gas in terms of the motion of its particles • Explain the effect of changing the temperature of a gas • Explain that stretching, bending or compressing an object requires more than one force • Explain why atmospheric pressure varies with height above the Earth's surface • Describe how pressure in fluids increases with depth and density
Summer	SP1 – SP15 - Revision	<ul style="list-style-type: none"> • Practise examination technique and time management • Revisit core practicals and assess understanding • Prepare for the public examinations • Students are encouraged to become more reflective of their learning through self-assessment of their examination answers • Students will have frequent exposure to exam style questioning and practice papers • Intervention sessions will allow students to revisit topics from Years 9 and 10 up until the summer examinations