

Year 9 Curriculum Grid

Separate Physics

Year/Term	Unit	Intent
Curriculum		 Ensure students have a secure understanding of the key concepts of Physics, building on knowledge from KS3.
purpose		 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	SP1 - Motion SP2 - Forces and motion	 Explain the difference between vector and scalar quantities Apply speed equation Interpret distance time graphs and velocity time graphs Recall Newton's Laws and use them in appropriate situations Describe examples of momentum in collisions Explain that the stopping distance of a vehicle is affected by a range of factors
Spring	SP3 - Conservation of energy SP4 - Waves	 Describe how energy is transferred between stores of energy Manipulate the equations for Kinetic Energy and Gravitational Potential Energy Investigate how different resources can be used to generate electricity Compare the advantages and disadvantages of different energy resources Define and use appropriate terms associated with waves Describe the difference between longitudinal and transverse waves Explain uses of ultrasound and infrasound
Summer	SP5 - Light and the Electromagnetic Spectrum	 Explain, with the aid of ray diagrams, reflection and refraction Recall the order of the continuous electromagnetic spectrum Describe some uses and dangers of electromagnetic radiation