



Year 10 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	SP6 - Radioactivity	<ul style="list-style-type: none"> • Understand the basic structure of the atom • Describe and compare the three forms of nuclear radiation • Understand the relevance of radioactive sources in everyday life, including background radiation • Develop knowledge of the history of radiation including major disasters. • Understand the history of our understanding of the atomic model • Describe uses and dangers of radioactivity • Explain some of the uses of radioactive substances in diagnosis of medical conditions • Evaluate the advantages and disadvantages of nuclear power for generating electricity
Spring	SP7 - Astronomy SP8 - Energy – Forces doing work SP9 - Forces and their effects	<ul style="list-style-type: none"> • Recall the components of our Solar System • Describe how methods of observing the Universe have changed over time • Describe the evolution of stars • Describe the red-shift and how it provides evidence for the Universe expanding • Compare the Steady State and Big Bang theories • Describe, with examples, how objects can interact • Use vector diagrams and free body force diagrams
Summer	SP10 - Electricity and circuits	<ul style="list-style-type: none"> • Draw and use electric circuit diagrams • Describe the differences between series and parallel circuits • Use and understand the key terms associated with electricity • Explain how changing the resistance in a circuit changes the current • Describe how energy is transferred in different domestic devices • Explain the difference between direct and alternating voltage • Explain the difference in function of the wires in a plug