



Key Learning Constructs to be developed over the academic year. – Core Knowledge	Scheme of Learning Autumn Term	Scheme of Learning Spring Term	Scheme of Learning Summer Term
<p>* the use of models, as in the particle model of matter or the wave models of light and of sound</p> <p>* the concept of cause and effect in explaining such links as those between force and acceleration, or between changes in atomic nuclei and radioactive emissions</p> <p>* the phenomena of 'action at a distance' and the related concept of the field as the key to analysing electrical, magnetic and gravitational effects</p> <p>* that differences, for example between pressures or temperatures or electrical potentials, are the drivers of change</p> <p>* that proportionality, for example between weight and mass of an object or between force and extension in a spring, is an important aspect of many models in science</p> <p>*that physical laws and models are expressed in mathematical form.</p>	<p>Part 1 Magnetism and Electromagnetism 1</p> <p>Part 2 Magnetism and Electromagnetism 2</p>	<p>Part 3 Revision</p> <p>Part 4 Revision</p>	<p>Part 5 Revision</p> <p>Part 6</p>
Hinterland Knowledge	Real examples of the APPLICATION of the content studied (eg the work of Michael Faraday in electricity generation)	Real examples of the APPLICATION of the content studied (eg the Hubble Space Telescope)	
Assessment: -Formative Techniques	Use of whiteboards, hinge questions, recall questions.		
	-Summative Pieces	End of Topic Tests	End of Topic Tests
Key Vocabulary	Key scientific terminology appropriate to each topic studied	Key scientific terminology appropriate to each topic studied	Key scientific terminology appropriate to each topic studied
Key Skills	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects
Opportunities Outside the taught			

Curriculum.	Careers, STEAM enrichment activities, educational visits	Careers, STEAM enrichment activities, educational visits	Careers, STEAM enrichment activities, educational visits
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