

Fareham Academy Science Overview – Year 10 Physics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic(s)	<p>Topic 4.1: Energy</p> <p>Topic 4.2: Electricity</p>	<p>Topic 4.3: Particle Model</p> <p>Topic 4.4: Radioactivity</p>	<p>Topic 1: Revision</p>	<p>Forces and Motion</p>	<p>Forces in Fluids</p>	<p>Topic 4.5: Forces Overview</p>
Topic Objectives	<p>Establish the fundamental ideas in the topic of energy and apply these to new situations.</p> <p>Analyse the real-world applications of electrical circuits.</p>	<p>Explain the properties of matter using the particle model. Link matter to energy.</p> <p>Evaluate the variety and uses of different types of nuclear radiation.</p>	<p>Establish techniques that will help individuals recall key information and apply this to new situations.</p>	<p>Analyse the forces that act on objects in different scenarios.</p> <p>Evaluate how forces change the movement of objects.</p>	<p>Establish properties of forces in gases and liquids.</p> <p>Examine scenarios related to forces acting on objects in fluids.</p>	<p>Explore complicated situations and establish how they relate to the forces topic.</p>
Acquired Knowledge/Skills	<p>Effective use of equation triangles and substitution of calculated values.</p> <p>Evaluation of different resources.</p>	<p>Equations that help explain the properties of materials around us.</p> <p>Types of nuclear radiation.</p> <p>Evaluate the uses of different types of nuclear radiation.</p>	<p>Revision techniques and individualised revision opportunities by topic.</p>	<p>The interaction of forces can explain the movement of all macroscopic objects.</p> <p>Linking forces to motion.</p> <p>Representation of motion in graphical form.</p>	<p>Analysis of graphical data.</p> <p>Use of equations to solve calculation questions.</p>	<p>Simplification and abstraction of problems.</p> <p>Multi-step equation practice.</p>
Assessments	<p>P4.1 topic test: Energy</p> <p>P4.2 topic test: Electricity</p>	<p>P4.3 topic test: Particle Model</p> <p>P4.4 topic test: Radioactivity</p>	<p>P1 topic test: Mock Exam</p>	<p>Interleaved assessments of forces and P1 topic test</p>	<p>Interleaved assessments of forces and P1 topic test</p>	<p>P4.5 topic Test: Forces</p>

Fareham Academy Physics Overview – Year 11

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic(s)	Topic 4.6: Waves	Topic 4.7: Electro-magnetism Topic 4.7: Astrophysics	Topic 2: Revision	Revision and Exam Practice	Revision and Exam Practice	
Topic Objectives	Explain the key concepts behind waves and link models of waves to real world applications.	Explain the concept of electromagnetism and electromagnetic induction. Relate ideas about forces to astronomical situations.	Recall key concepts and ideas. Apply these to unfamiliar scenarios.	Recall key concepts and ideas. Apply these to unfamiliar scenarios.	Recall key concepts and ideas. Apply these to unfamiliar scenarios.	
Acquired Knowledge/Skills	Analysis of the electromagnetic spectrum. Analysis of graphical representation of data.	Use of new equations. Sequential explanations of complicated concepts.	Improvement in exam skills and question analysis. Improvement in revision techniques.	Improvement in exam skills and question analysis. Improvement in revision techniques.	Improvement in exam skills and question analysis. Improvement in revision techniques.	
Assessments	P4.6 Unit Assessment	P4.7 Unit Assessment	P2 Mock	Unit assessments and revision questions as needed for individuals.	GCSE Examinations	