

Fareham Academy – Science Overview – Year 7

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic(s)	<ul style="list-style-type: none"> • Introduction • Matter 	<ul style="list-style-type: none"> • Cell organisation • Forces 	<ul style="list-style-type: none"> • Chemical reactions • Ecosystems 	<ul style="list-style-type: none"> • Energy • Reproduction 	<ul style="list-style-type: none"> • Space and our planet 	<ul style="list-style-type: none"> • Waves
Topic Objectives	<p>Introduction to Science H+S, familiarising with scientific equipment</p> <p>Matter Relate features of the particle model to the properties of materials in different states, explore diffusion, explore elements, mixtures and compound and investigate separation techniques.</p>	<p>Cell organisation Explore the organisation of plants and animals, link to specialised cells and explore the skeletal and muscular systems.</p> <p>Forces Identify different forces, measure different forces, investigate, explore weight and gravity</p>	<p>Chemical reactions Explore how we can test for acid and alkalis and link to understanding neutralisation and explore different properties of other materials.</p> <p>Ecosystems Identify the main organs of the plant's reproductive system, explore adaptations of predators and prey and explain bioaccumulation</p>	<p>Energy Recognise the energy types, link to transfers and efficiency. a closed system and explore the generation of electricity.</p> <p>Reproduction Identify and explain the sexual reproductive organs, understand the events in the menstrual cycle, puberty, pregnancy, inheritance and selective breeding.</p>	<p>Space and our planet Know the planets in our system and explore how days, years and seasons come about, and explore the geographical science of our planet.</p>	<p>Waves Explore the world of sound and light waves including properties of each and using wave diagrams.</p>
Acquired Knowledge/Skills	Risk assessment, handling formula, refine investigative techniques, using models in explanations. HSW planning.	Equation application, handling formula, evaluation techniques, graph work, HSW planning.	Refine research skills, compare data, conclude on data/information, HSW, using experimental work to make conclusions	Equation application, handling formula, using diagrams to represent information, HSW planning.	Use models to represent events, link lifestyle to quality of life, graph work, evaluative skills, moral discussions.	Comparison skills, evaluation skills, equation practise, graph drawing skills.
Assessments	<ul style="list-style-type: none"> • Baseline test • Matter test 	<ul style="list-style-type: none"> • Cell organisation test • Forces test 	<ul style="list-style-type: none"> • Chemical reactions test • Ecosystems test 	<ul style="list-style-type: none"> • Energy test • Reproduction test 	<ul style="list-style-type: none"> • Space and our planets test 	<ul style="list-style-type: none"> • Waves test