

CURRICULUM MAP: Science Year 9 Long Term Plan 2022 - 2023

EXAM BOARD: Pearson (exploring science) – 25% Working Scientifically; 25% Biology, 25% Physics and 25% Chemistry



Throughout Year 9, pupils will study three Biology, three Chemistry and three Physics units. Each group will rotate through the subjects switching at the end of each school term. All units include planning investigations, recording and analysing data, drawing graphs, writing conclusions and evaluations. Pupils will also need to use their maths skills in Science lessons. Students will also partake in 3 core practical investigations focusing on science-specific skills. Pupils will regularly review content and knowledge throughout their studies. The Year 9 curriculum is designed to be engaging, contextual and assessable to all students and builds students' confidence in time for their GCSE studies. All content is revisited at GCSE level so is designed to scaffold learning over the year in preparation for key stage 4 studies and skills.

	Autumn Term 1 Weeks: 8	Autumn Term 2 Weeks: 7	Spring Term 1 Weeks: 6	Spring Term 2 Weeks: 6	Summer Term 1 Weeks: 5	Summer Term 2 Weeks: 7
Key Concepts	Biology	Biology	Physics	Physics	Chemistry	Chemistry
Themes	<p>Genetics and Evolution – Environmental variation, inherited variation, probability, dna, genes and extinction, natural selection, recreating animals.</p> <p>Plant Growth – Reactions in plants, plant adaptations, plant products, growing crops, farming problems, organic farming.</p> <p>Biology Revision – Cells, systems and movement, other organ systems, reproduction and health, energy in ecosystems, genetics and evolution.</p>		<p>Forces and Motion – Moving things, forces and movement, energy for movement, speed, turning forces, more machines, supplying the energy.</p> <p>Force Fields and Electromagnets – force fields, static electricity, current electricity, resistance, electromagnets, humans in space.</p> <p>Physics Revision – Models in science, energy, forces, waves and fields, machines</p>		<p>Making materials – About ceramics, polymers, composite materials, problems with materials, recycling materials, material failures.</p> <p>Reactivity – Demolition, types of explosion, reactivity, energy and reactions, displacement, extracting metals, Alfred Nobel.</p> <p>Chemistry Revision – Separating substances, chemical reactions, physical and chemical, the periodic table, earth and atmosphere.</p>	
Writing Whole School Literacy Focus	Constructing balanced, convincing arguments, order ideas clearly using appropriate emphasis.		Identify features of writing produced for different purposes and audiences, use cohesive devices to make text clearer and easier to read.		Identify and evaluate bias within text, suggest reasons why text might be biased, present ideas and opinions in active and passive voices, evaluate different ways of presenting the same information.	

Spiritual, Moral, Social and Cultural theme (SMSC) Fundamental British Values (FBV)	Spiritual & Social through presentations and practical work	Spiritual & Social through presentations and practical work	Spiritual & Social through presentations and practical work	Spiritual & Social through presentations and practical work	Spiritual & Social through presentations and practical work	Spiritual & Social through presentations and practical work
Key Assessment Focuses, Suggested Assessments and Feedback Week	<p>Online end of topic tests with instant feedback</p> <p>Summative end of term Chemistry test taken at foundation, intermediate or higher level. Students must achieve 50% to be working at the expected level</p>		<p>Online end of topic tests with instant feedback</p> <p>Summative end of term Biology test taken at foundation, intermediate or higher level. Students must achieve 50% to be working at the expected level</p>		<p>Online end of topic tests with instant feedback</p> <p>Summative end of term Physics test taken at foundation, intermediate or higher level. Students must achieve 50% to be working at the expected level</p>	
<p>An 'Assessment DIRT' will also be completed after each assessment where students identify strengths and areas for improvement using their PLC documents and will attempt to turn their PLC statement into a question and complete the answer.</p> <p>Students will self-assess their work with purple highlighters.</p>						

Special Events				Science Fair	Science Week	
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