

KS4 Science Curriculum 2024-25

	Year 10		Year 11	
	Knowledge and skills	Curriculum links	Knowledge and skills	Curriculum links
Cycle 1	<p>Paper 1 content Biology – Topic 1: Cell biology, and Topic 2: Organisation Chemistry – Topic 1: Atomic structure and the periodic table, and Topic 2: Bonding, structure, and the properties of matter Physics – Topic 1: Energy, and Topic 2: Electricity Cycle 1 assessments: Topics 1 and 2</p>	<p>Maths – throughout all topics. DT – links to digestion and food groups.</p>	<p>Paper 2 content Biology – Topic 6: Inheritance, variation and evolution Chemistry – Topic 7: Organic Chemistry, and Topic 8: Chemical analysis Physics – Topic 5: Forces (Forces and motion), and Topic 6: Waves (wave properties) AUTUMN MOCKS: Paper 1 content (combined or separate science content, dependent on set) Bio – Topics 1-4 Chem – Topics 1-5 Phys – Topics 1-4</p>	<p>Maths – throughout all topics. Interpreting graphs. RE – Evolution.</p>
Cycle 2	<p>Paper 1 content Biology – Topic 3: Infection and response, and Topic 4: Bioenergetics Chemistry – Topic 3: Quantitative chemistry, Topic 4: Chemical changes, and Topic 5: Energy changes Physics – Topic 3: Particle model of matter, and Topic 4: Atomic structure Cycle 3 assessments: Topics 3 and 4</p>	<p>Maths – throughout all topics. Recognising patterns. Reading and drawing graphs. PE – movement, circulation, link to fitness RSE – Personal health, healthcare.</p>	<p>Paper 2 content Biology – Topic 7: Ecology Chemistry – Topic 9: Chemistry of the atmosphere, and Topic 10: Using resources Physics – Topic 5: Waves (Electromagnetic waves), Topic 7: Magnetism and electromagnetism, and Topic 8: Space physics (separate sciences only) SPRING MOCKS: Paper 2 content (combined or separate science content, dependent on set) Bio – Topics 5-7, Chem – Topics 6-10, Phys – Topics 5-7 (combined) or Topics 5-8 (separate)</p>	<p>Maths – throughout all topics. Geography – links to sustainability. RE – The Big Bang Theory.</p>
Cycle 3	<p>Paper 2 content Biology – Topic 5: Homeostasis and response Chemistry – Topic 6: The rate and extent of chemical change Physics – Topic 5: Forces pt.1 END OF YEAR 10 MOCKS: Paper 1 (combined sciences) content Bio – Topics 1-4, Chem – Topics 1-5, Phys – Topics 1-4</p>	<p>Maths – throughout all topics. Using equations. Interpreting and drawing graphs. RSE – Health, human reproduction and contraception.</p>	<p>Consolidate and revise Papers 1 & 2 – identify areas to improve, revision, exam technique GCSE exams: Combined science: 2x 1h 15 min paper/science Separate sciences: 2x 1h 45 min paper/science</p>	