

Year 9 Curriculum Overview [2026-2027]]
Science

Autumn Term	Knowledge & Understanding			Literacy Skills Opportunities for developing literacy skills	Employability Skills [if any]	Assessment Opportunities
	Composites	Components [KEY concepts & subject specific vocab]	Formal Retrieval [if any]			
HT1	Reactions	- Chemical Reactions - Word equations - Oxidation reactions - Decomposition reactions - Using ratios - Conservation of mass - Exothermic and endothermic	MCQ , Formative Assessment	- Keyword and definition - Subject language [Speak like a Scientist] - Inclusive questioning - Writing a method - Write like a Scientist - Comprehension/Extended reading - Extract key points from texts	Personal Skills - Teamwork - Problem solving - Practical applications Scientific Careers - Zoologist - Ecologist - Lab technician - Research scientist	MCQ – Reactions 10 marks Formative Assessment - Reactions, decomposition and combustion 10 marks Summative Assessment - Reactions 30 marks

HT1	Biological Processes	• Photosynthesis • Leaves • Plant minerals • Aerobic respiration • Atom Structure • Anaerobic respiration	MCQ , Formative Assessment, Summative Assessment	• Keyword and definition • Subject language [Speak like a Scientist] • Inclusive questioning • Writing a method • Write like a Scientist • Comprehension/Extended reading • Extract key points from texts	Personal Skills • Teamwork • Problem solving • Practical applications Scientific Careers • Atomic Research • Chemist • Engineer	MCQ – Biological processes – 10 marks Formative Assessment - equations, plant nutrients and starch test (10 marks) Summative Assessment - Term 1 assessment: Biological Processes (30 marks) + 15/20 marks reteach content from Reactions.
HT2	Light	• Light • Reflection • Refraction • The eye and the camera • Colour	MCQ , Formative Assessment	• Keyword and definition • Subject language [Speak like a Scientist] • Inclusive questioning • Writing a method • Write like a Scientist • Comprehension/Extended reading • Extract key points from texts	Personal Skills • Teamwork • Problem solving • Practical applications Scientific Careers • Sport Scientist • National Grid • Energy Conservationist	MCQ – Light 10 marks Formative Assessment – refraction 6 marks Summative Assessment - Light 30 marks

HT3	Inheritance	• Variation • Continuous and discontinuous • Inheritance • Natural Selection • Extinction	MCQ , Formative Assessment, Summative Assessment	• Keyword and definition • Subject language [Speak like a Scientist] • Inclusive questioning • Writing a method • Write like a Scientist • Comprehension/Extended reading • Extract key points from texts	Personal Skills • Teamwork • Problem solving • Practical applications Scientific Careers • Doctor • Nurse • Food development • Counsellor	MCQ – Inheritance 10 marks Formative Assessment – genetic inheritance 6 marks Summative Assessment - Term 2 assessment: Inheritance (30 marks) + 15/20 marks reteach content from Light
HT4	Motion and Pressure	• Speed • Motion graphs • Pressure in gases • Pressure in liquids • Pressure on solids • Turning forces	MCQ , Formative Assessment	• Keyword and definition • Subject language [Speak like a Scientist] • Inclusive questioning • Writing a method • Write like a Scientist • Comprehension/Extended reading • Extract key points from texts	Personal Skills • Teamwork • Problem solving • Practical applications Scientific Careers • Research Scientist • Engineer • Lecturer	MCQ – motion 10 marker Formative Assessment - Distance time 6 marks Summative Assessment - Motion and Pressure 30 marks

HT5	Metals and other materials	- Metals and acids - Metals and oxygen - The reactivity series - Metal displacement reactions - Extracting metals - Ceramics - Polymers - Composites	MCQ , Formative Assessment	- Keyword and definition - Subject language [Speak like a Scientist] - Inclusive questioning - Writing a method - Write like a Scientist - Comprehension/Extended reading - Extract key points from texts	Personal Skills - Teamwork - Problem solving - Practical applications Scientific Careers - Electrician - National Grid - Computer Hardware design	MCQ – displacement 10 marks Formative Assessment - Group 1 metals 7 marks Summative Assessment - Metals and other Materials 30 marks
HT6	Energy	- Food and fuels - Energy resources - Energy adds up - Energy and temperature - Energy transfer: particles - Energy transfer: radiation - Energy transfer: forces - Energy and power	MCQ , Formative Assessment End of year Exam	- Keyword and definition - Subject language [Speak like a Scientist] - Inclusive questioning - Writing a method - Write like a Scientist - Comprehension/Extended reading - Extract key points from texts	Personal Skills - Teamwork - Problem solving - Practical applications	MCQ – Food tests 10 marks Formative Assessment - Power stations and heat transfer 9 marks Summative Assessment - Energy 30 marks Y9 End of year exam Assessing units 9.1-9.6 minimum 50 marks
Catholicity Across the Science Curriculum	Reaction- Combustion lesson – Impact on planet: Common Good Inheritance – Jerome Lejeune – lesson on down syndrome (designer baby link) Energy – Nuclear resources v renewable resources – debate: Common Home Metals and Other Materials – Plastics: non-biodegradable – lesson/ slides/ opinions: care for common home					

