



Year 8 Curriculum Overview

- ✓ Each lesson will start with a series of questions linked to both the previous lesson and topics studied previously.
- ✓ Formative assessment of skills linked to practical work will enable students to demonstrate their acquisition of new skills.
- ✓ Students are encouraged to consolidate learning at least once a week and seek tutor help if unsure on any topics.
- ✓ Within each unit, time will be allocated for consolidation and recall before assessment
- ✓ The following questions will be explored within the units

Half Term 1	
Date	Topic: Intro to science and Biology Topic: Keeping Healthy
Week 1	Introduction to science (expectations, standards, health and safety, introduction of key skills and assessing prior knowledge).
Week 2	What are the functions of a cell? How are organisms organised?
Week 3	What is respiration? Do we always need oxygen to respire?
Week 4	How does our body respond to exercise? How are the lungs adapted to carry out their function?
Week 5	What is the function of the heart? What is in my blood and how does it travel around my body?
Week 6	How does the body move? What is a pathogen and how are they harmful?
Week 7	How do drugs affect a person?
Half Term 2	
Date	Topic: Electricity and Magnetism
Week 8	Is static electricity always bad? Why are wires covered in plastic?
Week 9	Why do we use symbols in circuits? Why does the lightbulb light up?
Week 10	How do I measure current? How can I make two bulbs brighter in a circuit?
Week 11	How do series and parallel circuits differ? How does the resistance of a wire change with length?
Week 12	What is the national grid? How do magnets behave?
Week 13	Are all magnets permanent? How can we make motors?
Week 14	Revision and End of term assessments
Half Term 3	
Date	Topic: Chemical Reactions
Week 15	What are atoms, elements and compounds? How is a word equation represented?
Week 16	How do we use symbols and numbers to count atoms? What is the difference between a chemical and physical reaction?
Week 17	How is atomic structure linked to the periodic table? What is the conservation of mass?
Week 18	Why does the mass of a reaction appear to increase? How do we test for hydrogen, oxygen, carbon dioxide and chlorine?
Week 19	What is combustion? What is meant by endothermic and exothermic?
Week 20	How does the temperature change when an acid reacts with an alkali?
Half Term 4	
Date	Topic: Ecology, inheritance and variation
Week 21	How do we group living organisms? How do organisms change over time?
Week 22	How can we show how closely organisms are related? How is energy transferred through living things?
Week 23	How do we show the difference in trophic levels? What affects where an organism lives?
Week 24	British Science week: Research project
Week 25	How are things suited to where they live? How do organisms survive in harsh environments?
Week 26	How tall can you be? What is genetic information and how is it passed on from one generation to the next? Why did the dinosaurs die out? What is biodiversity and why is it important?
Half Term 5	
Date	Topic: Waves
Week 27	What are waves? How do we produce sound?
Week 28	How does sound travel?
Week 29	How can we measure waves?
Week 30	How can we use waves? What is light?
Week 31	How does light travel? What happens when light meets a boundary?
Week 32	What is the eye? How can we see colour?
Half Term 6	
Date	Topic: Energy from foods
Week 33	What makes a balanced diet? How is food broken down?
Week 34	How is the digestive system departed to absorb nutrients? How do plants make their food?
Week 35	How do we test for starch? How are leaves adapted for photosynthesis?
Week 36	How are plants adapted to absorb water and nutrients? How do farmers grow more crops?
Week 37	How do plants reproduce?
Week 38	Revision of topics learnt in year 8
Week 39	End of year assessments