



**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	<b>Topic: Forces</b>
WC 29/08	Introduction to science (expectations, standards, health and safety, introduction of key skills and assessing prior knowledge).
WC 05/09	What are forces? How can I measure a force? How are scalar and vector quantities different?
WC 12/09	How do objects behave when forces act on them? How do elastic materials behave when squashed?
WC 19/09	Is friction a bad thing? How does streamlining help performance?
WC 26/09	Could you lift an elephant? How do we calculate speed?
WC 03/10	How do we represent speed? Does my weight change in different places?
WC 10/10	Are we alone in the universe?
Half Term 2	
Date	<b>Topic: Keeping Healthy</b>
WC 31/10	What are the functions of a cell? How are organisms organised?
WC 07/11	What is respiration? Do we always need oxygen to respire?
WC 14/11	How does our body respond to exercise? How are the lungs adapted to carry out their function?
WC 21/11	What is the function of the heart? What is in my blood and how does it travel around my body?
WC 28/11	How does the body move? What is a pathogen and how are they harmful?
WC 05/12	How do drugs affect a person?
WC 12/12	
Half Term 3	
Date	<b>Topic: Electricity and Magnetism</b>
WC 02/01	Is static electricity always bad? Why are wires covered in plastic?
WC 09/01	Why do we use symbols in circuits? Why does the lightbulb light up?
WC 16/01	How do I measure current? How can I make two bulbs brighter in a circuit?
WC 23/01	How do series and parallel circuits differ? How does the resistance of a wire change with length?
WC 30/01	What is the national grid? How do magnets behave?
WC 06/02	Are all magnets permanent? How can we make motors?
Half Term 4	
Date	<b>Topic: Chemical Reactions</b>
WC 20/02	What are atoms, elements and compounds? How is a word equation represented?
WC 27/02	How do we use symbols and numbers to count atoms? What is the difference between a chemical and physical reaction?
WC 06/03	How is atomic structure linked to the periodic table? What is the conservation of mass?
WC 13/03	Why does the mass of a reaction appear to increase? How do we test for hydrogen, oxygen, carbon dioxide and chlorine?
WC 20/03	What is combustion? What is meant by endothermic and exothermic?
WC 27/03	How does the temperature change when an acid reacts with an alkali?
Half Term 5	
Date	<b>Topic: Ecology, inheritance and variation</b>
WC 17/04	How do we group living organisms? How do organisms change over time?
WC 24/04	How can we show how closely organisms are related? How is energy transferred through living things?
WC 01/05	How do we show the difference in trophic levels? What affects where an organism lives?
WC 08/05	How are things suited to where they live? How do organisms survive in harsh environments?
WC 15/05	How tall can you be? What is genetic information and how is it passed on from one generation to the next?
WC 22/05	Why did the dinosaurs die out? What is biodiversity and why is it important?
Half Term 6	
Date	<b>Topic: Energy from foods</b>
WC 05/06	What makes a balanced diet? How is food broken down?
WC 12/06	How is the digestive system departed to absorb nutrients? How do plants make their food?
WC 19/06	How do we test for starch? How are leaves adapted for photosynthesis?
WC 26/06	How are plants adapted to absorb water and nutrients? How do farmers grow more crops?
WC 03/07	How do plants reproduce?
WC 10/07	End of year assessments
WC 17/07	