Science Curriculum Overview

Year Group	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Nursery & Reception	The season of Autumn; Animals preparing for colder weather; Temperatures getting colder **All About Me** The Human Body;	Seasons of The Year: Winter **Celebrations** Changing state of matter; Forces	Seasons of The Year: Spring **Space** Our planet Earth; The solar system; Space travel **Dinosaurs** Fossils; Rocks	**Growing and Changing** How people change; How animals change; Habitats; **Growing and Changing** Plants	Seasons of The Year: Summer; **Kings and Queens** Summer gardens **Transport** Air transport; Water transport Contrasting environments;	Seasons of The Year: Summer; States of matter; **Stories from the Past** Staying safe in the sun; **Heroes and Adventures** Floating and sinking; Contrasting landscapes
Year 1	The Human Body; Seasonal Changes	Materials; Seasonal Changes	Planting; Animals	Caring for the planet; Seasonal Changes; Planting	Plants; Planting	Growing and Cooking; Seasonal Changes
Year 2	Animals' needs for survival; Humans	Materials; Plastic	Plants; Living things and their habitats	Living things and their habitats; Plants	Plants; Growing up	Bulbs and seeds Growing up Wildlife
Year 3	Skeletons; Movement; Nutrition and diet	Food waste Rocks	Fossils; Soils	Light	Plants	Forces; Magnets; Plants; Biodiversity
Year 4	Group and classify living things; Data collection	States of matter	Sound; Data collection	Electricity; Energy	Data collection; Habitats; Deforestation	The digestive system; Food chains
Year 5	Forces	Space; Global warming	Properties of materials; Animals including humans	Life cycles	Reproduction; Reversible and irreversible changes	Plastic pollution; Reproduction
Year 6	Living things and their habitats	Electricity; Renewable energy	Light; Light pollution	The circulatory system;	Variation; Adaptations	Fossils

Science Curriculum Overview

				Diet, drugs and lifestyle		

Year 7 Expectations

Aims

The national curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Working scientifically

Through the content across all three disciplines, pupils should be taught to:

Scientific attitudes

- pay attention to objectivity and concern for accuracy, precision, repeatability and reproducibility
- understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of publishing results and peer review
- evaluate risks.

Experimental skills and investigations

- ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience
- make predictions using scientific knowledge and understanding
- select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate
- use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety
- make and record observations and measurements using a range of methods for different investigations; and evaluate the reliability of methods and suggest possible improvements
- apply sampling techniques.

Analysis and evaluation

- apply mathematical concepts and calculate results
- present observations and data using appropriate methods, including tables and graphs
- interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions
- present reasoned explanations, including explaining data in relation to predictions and hypotheses
- evaluate data, showing awareness of potential sources of random and systematic error
- identify further questions arising from their results.

Measurement
- understand and use SI units and IUPAC (International Union of Pure and Applied Chemistry) chemical nomenclature
- use and derive simple equations and carry out appropriate calculations
- undertake basic data analysis including simple statistical techniques.