Science Curriculum Overview

YEAR	OUR LEARNING	WHAT CHILDREN LEARN	KEY SKILLS DEVELOPED
Year 1	**Materials; seasonal changes; animals including humans; plants** Why are different materials used for different things? What happens in each season? How can we describe and group animals? How can we identify plants and trees?	Identifying and comparing everyday materials; observing seasonal changes; grouping animals; identifying plants and trees; naming body parts and exploring the five senses.	Observing closely, asking simple questions, comparing, identifying and classifying.
Year 2	**Animals including humans; living things and habitats; seasonal changes; uses of materials; plants** How do animals survive, grow and stay healthy? How do we know something is alive? What changes occur throughout the seasons? How are materials chosen in design? How do seeds and bulbs grow into healthy plants?	Exploring survival, growth and healthy living; living things, habitats, microhabitats and simple food chains; seasonal changes; uses of materials; growing plants.	Simple tests, recording observations, comparing, classifying and using evidence to answer questions.
Year 3	**Rocks and fossils; forces and magnets; healthy bodies; plants; light and shadows** What secrets can rocks and fossils tell us about the past? How do pushes and pulls make things move? What does our body need to stay healthy and strong? Why are flowers and fruits so important in the natural world? How does light create shadows and help us see?	Investigating rocks and fossils, forces and magnets, nutrition and skeletons; flowering plants, water transport, pollination and seed dispersal; light and shadows.	Planning simple enquiries, measuring, recording findings and drawing evidence-based conclusions.
Year 4	**Electricity; teeth and digestion; states of matter; living things and habitats; sound** How does an electrical circuit power an object? Excuse me, are these your teeth? How do solids, liquids and gases change state? How do changing environments pose a danger to living things? How are sounds made and how do we hear them?	Constructing circuits; exploring teeth, digestion and food chains; changes of state, evaporation, condensation and the water cycle; habitats and sound.	Fair tests, careful measurement, identifying patterns and presenting results.

Year 5	**Earth and space; forces; changing materials; life cycles and reproduction; human development** How does the Earth fit into our solar system? How do forces affect the way objects move? How do materials change? How do the life cycles of different living things compare? How do plants and animals reproduce? How do humans grow and change as they age?	Exploring the solar system, forces, material properties and changes; life cycles and reproduction in plants and animals; human growth, puberty and ageing.	Planning investigations, controlling variables, accurate measurement and interpreting evidence.
Year 6	**Electricity; evolution and adaptation; classification; circulatory system; light** What is the effect of changing variables in an electric circuit? How do animals and plants adapt to survive and thrive? How can we classify living things, including plants, animals and microorganisms? How does the circulatory system keep our bodies alive and how are nutrients and water transported? What happens to light when it travels, reflects and changes direction?	Investigating circuit variables; fossils, inheritance, variation, adaptation and evolution; classifying organisms including microorganisms; circulation, health and lifestyle; light.	Independent enquiries, controlling variables, evaluating reliability and explaining conclusions with evidence.

Science in the Early Years

In Nursery and Reception, children develop curiosity about the natural world through play, continuous provision, outdoor exploration and adult-led experiences. They observe plants, animals, materials and seasonal changes, notice similarities and differences and begin to ask questions and explain what they discover.

Scientific Skills, Vocabulary and Enrichment

Scientific enquiry is developed progressively through observation, classification, practical testing, measurement, recording and evaluation. Children learn and revisit scientific vocabulary across topics.