



Walford Nursery & Primary School



FLUENCY in SCIENCE

By focusing on these key skills at each developmental stage, pupils can develop a strong foundation in Science, fostering love for curiosity, enquiry, critical thinking and a deep appreciation for wonders of the natural world as they progress through primary school.

Age 2 years – 5 years (EYFS – Nursery & Reception)	Age 5 years – 7 years (KS1 – Year 1 & Year 2)	Age 7 years – 11 years (KS2 – Year 3, Year 4, Year 5 & Year 6)
Observation Skills - Develop basic observation skills by exploring the immediate environment. - Encourage curiosity and questions about the natural world. Exploration and Investigation - Promote hands-on exploration using age-appropriate materials. - Encourage simple investigations to answer questions. Basic Vocabulary - Introduce basic scientific vocabulary related to colours, shapes and simple materials. - Encourage communication about observations and experiences. Scientific Inquiry - Foster a sense of wonder and curiosity through simple scientific inquiries. - Encourage asking questions and making predictions.	Observation and Recording - Develop more advanced observation and recording skills. - Introduce the use of drawings, diagrams, and simple charts to record findings. Comparisons and Patterns - Encourage comparing and contrasting different objects, materials and living things. - Explore patterns in nature and everyday life. Basic Experimentation - Introduce basic experimentation with a focus on cause and effect. - Explore changes and transformations in materials. Introduction to Scientific Concepts - Introduce foundational scientific concepts such as properties of materials, life cycles and basic forces. - Use hands-on activities to explore these concepts.	Scientific Method - Develop an understanding of the scientific method, including asking questions, forming hypotheses, conducting experiments, and drawing conclusions. - Encourage the formulation of testable questions. Critical Thinking - Foster critical thinking skills by analysing data and drawing evidence-based conclusions. - Encourage students to evaluate the reliability of sources. Investigative Skills - Develop more advanced investigative skills, including planning and conducting fair tests. - Introduce variables and controls in experiments. Classification and Categorisation - Explore the classification of living things and other objects. - Introduce the concept of species and habitats. Earth and Space - Introduce concepts related to Earth and Space, including the solar system, day and night and seasonal changes. - Explore the properties of rocks, soils and changes to landscapes. Electricity and Forces - Introduce the basics of electricity and magnetism. - Explore forces, including pushes, pulls, and the effects of gravity.

		Scientific Communication • Develop skills in scientific communication, including writing reports, presenting findings, and using scientific language. • Encourage discussions and debates about scientific topics. Environmental Awareness • Foster an understanding of environmental issues and the impact of human activities on the natural world. • Explore concepts of sustainability and conservation.
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