

Science

Science Intent statement

Science is an essential element of a rounded education. At Hyde Park Infants our vision is to give children a Science curriculum which enables them to explore and discover the world around them, confidently, so that they have a deeper understanding of the world in which we live. We achieve this by making science an exciting, practical and hands on experience that encourages curiosity and questioning. Our aim is that these stimulating and challenging experiences help children secure and extend their scientific knowledge and vocabulary. We believe that these opportunities will ensure that our children are confident, life-long learners who will explore the world around them and understand the basis of new scientific developments as they affect their future lives.

Implementation

Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all children are capable of achieving high standards in science. Our school wide approach to the teaching and learning of science involves the following;

- Science will be taught in planned and arranged cross-curricular blocks, with a project-based approach. This is a strategy to enable the achievement of a greater depth of knowledge.
- Through our planning, we involve problem solving opportunities that engage children. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This curiosity is celebrated within the classroom. Planning involves teachers creating appealing lessons to aid understanding of conceptual and subject knowledge. Teachers use precise questioning in class to explore and expand children's conceptual knowledge and skills, and assess children regularly to identify those children with gaps in learning, so that all children keep up.

- We build upon the learning and skill development of the previous years. As the children's knowledge and understanding increases, and they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the topics.
- Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding. Teachers find opportunities to develop children's understanding of their surroundings by accessing outdoor learning, both in the school grounds and through trips.
- Regular events, such as project days and visitors, allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve visitors to the school.

Impact

The successful approach at Hyde Park Infant School results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world. Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them. Frequent, continuous and progressive learning outside the classroom is embedded throughout the science curriculum. Through various workshops, trips and interactions with experts and local charities, children have the understanding that science has changed our lives and that it is vital to the world's future development. Children at Hyde Park Infant School enjoy science and this results in motivated learners with sound scientific understanding.

Vocabulary

Topic	EYFS	Year 1	Year2
Working Scientifically	change, explain, alive, plant, animal	Additionally - question, answer, test, compare, measure, observe, group, record.	Additionally - data, chart.
Habitats			habitat, micro-habitat, food chain, predator, prey
Plants	plant, seed, flower, leaf	Additionally - deciduous, evergreen , plant, leaf, leaves, flowers, blossom, petals, fruit, roots, bulb, seed, trunk, branches, stem).	Additionally - germination
Animals including humans	animal, food, well, unwell	Additionally - fish, amphibians, reptiles, birds, mammals, head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth	Additionally - exercise, nutrition, health
Materials		Property, hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy;	Additionally - purpose

		waterproof/not waterproof; absorbent/not absorbent; opaque/transparent	
Seasons	weather, season.	Additionally - Sun, weather, season, spring, summer, autumn, winter, day length	