

Science

At Hammer Lane we believe in aspiration and achievement for all



Intent – what we aim to achieve

We encourage our children to be ask questions and investigate in order to develop a deeper understanding of the world in which we live.

Foster inquisitive lifelong learners, who continue to explore the world around them.

Provide exciting and practical hands-on experiences that encourage curiosity and questioning.

Through a challenging and stimulating curriculum we aim to inspire and excite children fostering a thirst for knowledge, which delves into the scientific world around them.



Implementation - how we will achieve our aims

At Hammer Lane, we follow the national curriculum programme of study, using Cornerstones, which we adapt to meet the needs of our children, with children also following Understanding of the World topics. This begins in EYFS and continues through to Year 6, ensuring a consistent approach. The key concepts (Biology, Physics, Chemistry and Working Scientifically) are applied progressively and taught at the level of each child. The rich curriculum includes the acquisition of skills and knowledge and provides opportunities to develop knowledge and skills of science enquiry. The curriculum covers different strands of learning like forces & electricity, light & sound, Earth, living things and habitats, materials matters, plants, animals including humans, evolution.

Children have opportunities to explore the natural world around them through hands-on experiences and focused observation.

Children's understanding of the world is embedded through the language rich environment and teachers' modelling of the vocabulary needed to name specific features of the world, both natural and made by people.

Children have access to a range of opportunities to experience the natural world and understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Within science, in order for our children to be secure with their learning they must develop key working scientifically skills.

The working scientifically skills are:

asking questions, inferring, making predictions, observing over time, measuring, handling data, drawing conclusions and evaluating, A succinct cross-curricular approach is taken to ensure that these skills are taught regularly and adaptatively.

Science enquiry is also at the forefront of our development, we ensure that children find out more about the world and how it works. This can be seen in the children pattern seeking, identifying, classifying and grouping, observing over time, holding comparative and fair tests and researching using secondary sources. These skills are taught cross-curricularly and frequently to make certain the acquisition of these skills.

Visible Learning

Learning environment, displays and topic tables

Scaffolding- use of depth prompts

Recording work in books - How?, task design, questioning, vocabulary and challenge

In classrooms, science displays offer children support by displaying key vocabulary, questions, and sentence stems.

Children are encouraged to record science in a variety of ways including photographs or videos.

Cross Curricular

Science and mathematics are closely linked through the shared emphasis on recording, measuring, and applying mathematical concepts in scientific investigations. Written responses in science facilitate effective communication of findings, connecting science with English language skills.

Working Scientifically

Our Science curriculum offers inquiry-based learning through different types of scientific investigations. Children explore key questions, following a systematic process of prediction, testing, recording, analysing, and drawing conclusions. Children learn how to plan fair testing investigations, promoting accuracy and a deeper understanding of the process.



Impact - how we will know we have achieved our aims:

Children enjoy science and choose to further their understanding through wider reading and experimenting.

Children possess the knowledge and skills necessary to see themselves as scientists.

Children experience all enquiries and are confident in working scientifically.