

Our Vision for Little Houghton CE Primary School

'Learning for Life'

Through:

Growth – realising our potential Community – sharing and contributing Spirituality – reflecting and thinking deeply Environment – appreciating local and global environments So that each child can flourish – like a flower of the field (Psalm 103:15)

Our curriculum vision is reflected in science through the key

concepts of:

Explore

Enquire

Exploration refers to the employing of the senses to the action, or process of closely observing or monitoring something or someone. This is linked with our school vision of **Spirituality** (thinking deeply) and **Environment** (appreciation).

Enquiry refers to the quest to find the answer to a question, using a scientific method. This is linked to our school vision of **Community** (contributing) and **Growth** (developing understanding and questioning).

Intent

The aims of teaching of science in our school have the key concepts of exploration and enquiry woven throughout.

Exploration - 'Stimulating and maintaining children's natural curiosity is fundamental to good science teaching and learning.' (Quoted from Snap Science).

Enquiry -'A scheme of work that has science enquiry at its' heart requires children to learn to use a variety of approaches to answer relevant scientific questions.' (Quote from Investigations: Developing Understanding: Association for Science Education.)

Science teaching at Little Houghton CE Primary School aims to give all children a strong understanding of the world around them, whilst acquiring specific skills and knowledge to help them to think scientifically; to gain an understanding of scientific processes and an understanding of scientific processes and an

understanding of the uses and implications of Science, today and for the future. In essence, we aim to allow growth in order that children will reach their potential, a key feature of our curriculum vision.







At Little Houghton CE Primary School, scientific enquiry skills are developed within each of the modules that the children study, and these modules are revisited and developed throughout their time at school.

All children are encouraged to develop and use a range of skills:

Exploring; observations, planning and investigations.

Enquiry; as well as being encouraged to question the world around them, becoming independent learners in exploring possible answers for their scientific based questions.

Science can engender that sense of awe and wonder, and provoke questions, which enable children to reflect and think deeply. Again, this approach links closely with our vision. Specialist vocabulary for each module of learning is taught and built up; and effective questioning to communicate ideas is encouraged. Concepts taught are reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. Much of science requires the children to share and contribute their ideas and thinking as well as explore the thinking of scientists and the scientific community.

The National Curriculum will provide a structure and skill development for the science curriculum being taught throughout the school, which is linked, where possible to the theme topics, to provide a creative scheme of work, which reflects a balanced programme of study.

At Little Houghton CE Primary School children have weekly lessons in Science throughout Key Stage 1 and 2, using various primarily the Collins Snap Science scheme. In Early Years, science is taught through the children learning about the world around them in their learning, largely through play and **exploration**.

We endeavour to ensure that the Science curriculum we provide will give children the confidence and motivation to continue to further develop their skills into the next stage of their education and life experiences.









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 whole school approach to the teaching and learning of science involves the following;

- Science will be taught in planned and arranged modules by the class teacher. This is a strategy to enable the achievement of a greater depth of knowledge.
- Through our planning, we involve problem solving opportunities that allow children to find out for themselves. 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 and in our outdoor environments. Planning involves teachers creating engaging lessons, inside or outside, often involving varied resources to aid

understanding of conceptual knowledge. Teachers use precise questioning in class to test 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 scientific skills in
 order to embed scientific understanding. Teachers find opportunities to develop children's
 understanding of their surroundings by accessing outdoor learning and workshops with
 experts whenever and wherever possible.



Impact

The successful approach at Little Houghton CE Primary results in an, engaging, high-quality science education, that provides children with the foundations for understanding the world. Our engagement with the local environment and the coherent curriculum key concepts of **exploration** and enquiry, ensures that the children learn through varied, and first-hand experiences of the world around them. Much of this scientific learning lends itself to the outdoor classroom where we provide children with opportunities to experience this, using a host of senses. This combined with various workshops, trips, interactions with experts and local charities, ensures our children have the understanding that science changes lives and is vital to the world's future prosperity, whilst also highlighting the endless possible careers in science. We are able to measure the impact of our science curriculum using regular skill and knowledge assessments, pupil voice interviews to determine what has been committed to long term memory and monitoring activities, such as learning walks and book scrutinies.

