Science at Wheatcroft



"Somewhere, something incredible is waiting to be known." Carl Sagan



<u>Intent</u>

Children are provided with the foundations for understanding the world through the teaching and learning of the scientific disciplines of biology, chemistry and physics.

We aim to:

- inspire children's natural curiosity and sense of excitement about natural phenomena, and promote independent, creative thinking skills.
- equip children to ask perceptive questions and understand how science can be used to predict explain and analyse what is occurring.
- promote an investigational approach to science by developing a range of practical skills and understanding of scientific methodology.
- enable children to acquire a body of scientific knowledge and skills, and an enthusiasm to pursue scientific studies in the future.
- develop skills, attitudes and attributes that can support learning in other subjects and that are needed for life and work.

Implementation

- Science is taught within the school's linked learning themes, making links with other curriculum areas where possible.
- The school's locality is used to drive the science curriculum where appropriate, enabling scientific learning to be put in a meaningful context. This includes opportunities to all children to be involved in outdoor practical activities using the immediate inland and coastal environments.
- Science teaching and learning is offered with sufficient regularity as a core subject, either as a weekly session or blocked as part of a theme.
- In the foundation stage, scientific learning comes within the area of learning and development 'Understanding the World'.
- In Key Stage1, planning provides children with practical experiences, enabling them to explore and observe a range of phenomena.
- In lower Key Stage 2, science learning is planned to broaden children's scientific view of the world around them as they explore, test and develop ideas about everyday phenomena and the natural environment, and begin to develop ideas about functions, relationships and interactions.
- In upper Key Stage 2, these skills are developed further and children develop a deeper understanding of scientific ideas, becoming more systematic in their approach to enquiry.
- Children are encouraged to be curious, ask questions and work through scientific enquiry, including observation, pattern seeking, identification, classifying, controlled investigations and research.
- They are encouraged to explain their thinking clearly and discussion is used to probe and remedy misconceptions.
- Children build an extended specialist vocabulary and are taught to use scientific terms accurately.

Impact

- Through 'pupil voice', children are able to talk positively about their scientific learning and the impact it has.
- Learning in science is built on progressively and assessment measures achievement against a progression of skills in 'working scientifically' and the different strands of biology, chemistry and physics as set out the National Curriculum.
- Our children enjoy their investigative and practical Science. They are motivated and curious about the world around them.