



## Science



### Science at the Federation of Grewelthorpe and Fountains CE Primary Schools

*'A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes'*

*National curriculum 2014*

Across our Federation, we aim to develop in pupils, curiosity, enjoyment and skills and a growing understanding of scientific knowledge, through an approach in which pupils raise questions and investigate the world in which they live.

#### **Intent**

Our intent is to give all children a strong understanding of the world around them, whilst acquiring specific skills and knowledge to help them to think scientifically. Children will gain an understanding of scientific processes, as well as an understanding of the uses and implications of science, today and for the future.

Our intent is that all children will use a range of skills and build knowledge through a spiral curriculum that will include observations, planning and investigations. All children will learn to question the world around them and become independent learners by exploring possible answers for their scientific based questions.

Concepts 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.

#### **Implementation**

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

- Science will be taught in blocks.
- 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.
- We build upon the learning and skill development of the previous years. As the children's knowledge and understanding increases, they become more proficient in selecting and using scientific equipment, as well as recording 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 school career. Key skills include predicting, measuring, observing, reflecting, analysing, presenting results, then drawing conclusions.
- Outdoor learning is embedded, and teachers find opportunities to develop the children's understanding of their surroundings by accessing the surrounding environment.