

The science curriculum at Laughton All Saints' has been crafted and designed to ensure that pupils progressively develop a wide range of scientific knowledge and skills as they move through the year groups. Along with covering the National Curriculum objectives, we have also developed our own approach to breaking complex units and objectives into smaller steps, teaching geology within the primary curriculum and having a focus on key scientists to help Laughton pupils develop into competent, well informed young scientists. All pupils have weekly science lessons which enable them to explore scientific concepts in the disciplines of chemistry, biology and physics, while building a range of investigative skills. Sometimes lessons may be 'blocked' dependant on the unit. Practical and investigative work is key throughout the curriculum and ensures that the 'invisible is made visible' to all pupils.

The fundamentals for scientific understanding begin in our Foundation Stage. During FS1 and FS2, pupils learn about and experience the world through play. Our pupils have opportunities to explore and discover concepts practically, beginning to develop an understanding of the world directly around them. Ideas are discussed in relation to their own understanding, such as 'push and pull' through playing on scooters or with play dough. The learning is based on themselves or on things in their local area, aimed at helping them make sense of the world. They are also encouraged to verbalise their learning using key scientific vocabulary.

Learning progresses in Key Stage One to focus on pupils developing a scientific understanding of the world around us, looking through a wider lens. This includes: plants, animals, humans and uses of everyday materials. They are introduced to the solar system. Pupils are introduced to the concepts of making predictions, fair testing and drawing conclusions to allow them to work as scientists from an early age. Pupils are encouraged to be curious and ask questions about what they notice.

Key Stage Two builds upon these ideas and then also begins to focus more on physics and chemistry with the introduction of geology. Pupils continue to develop their working scientifically skills as they progress through Years 3-6, focusing upon asking and answering questions, making careful observations, setting up and performing simple investigations, gathering and recording data, drawing conclusions and making well thought evaluations. As they work through Key Stage Two, pupils increasingly have carefully planned opportunities to apply their learning from other areas of the curriculum, such as maths, computing and design and technology. In the upper years, children are also expected to be more critical and independently curious with their learning.

We believe at Laughton All Saints' that all pupils are potential scientists and we ensure that they are exposed to scientific culture through trips, studies of significant individuals and visits from people in industry. Although not all of our pupils will go on to become scientists, all of our pupils will need to go on to be good scientifically aware citizens. With the vast range of news and media available, working and thinking scientifically helps pupils to make sense of it all and to think critically about the world around them. We will support and nurture all children with their understanding of how science has changed our lives and is vital to the world's future prosperity, giving them the ability to recognise the power of rational explanation. We want our children to be excited and curious about the world around them, so that they are inspired to think about science in a meaningful and responsible way throughout their lives.

