

## **Science Primary Curriculum Intent**

In Science, we provide an ambitious and knowledge-rich curriculum which is accessible and challenges all learners. This curriculum allows pupils to experience the significance of science in their everyday lives. The scientific knowledge and skills, developed by learners, will provide them with a secure foundation to prepare them for the study of the sciences beyond KS2, promote a passion for STEM study and a love of science. The curriculum will help to develop lifelong learners who aspire to become the scientists of the future.

Our Science curriculum will ensure that all children develop disciplinary, conceptual and substantive knowledge through the study of biology, chemistry and physics. The science curriculum is carefully sequenced to ensure progression of this knowledge, so that it builds over time. Children will also have the opportunity to build on and deepen their prior understanding of the nature, processes and methods of science through a broad variety of scientific enquiries. The enquiries they undertake will help them to answer scientific questions about natural phenomena they observe, understanding how science can be used to explain what is occurring, predict how things will behave and analyse causes. Through the study of science, pupils will be able to understand the broad variety of ways in which science is used in the world around them and its impact for the future. They will be able to describe processes and key knowledge in a common language, with technical terminology used accurately and precisely. Hence, they will build up an extended specialist vocabulary. They will also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data.

Our 'Working Scientifically' objectives help pupils to understand the nature, processes and methods of science and are not taught as a separate strand. 'Working scientifically' will be embedded within the content of science, focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. These types of scientific enquiry will include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Our pupils will seek answers to questions through collecting, analysing and presenting findings, drawing on the skills developed through their English and Maths lessons. The key skills developed in science will also support and enhance pupil achievement in other areas of the curriculum.

Whilst the children are learning curriculum knowledge and practising and refining a range of skills in Science, they will also be developing their personal development through the explicit teaching of a range of learning dispositions, including the 6Rs. We aim to deliver, where appropriate, our Science curriculum via activities which are successful incubators of these essential life skills, such as being curious, reflective and self-directed.

Through our study of Science, pupils will learn about and celebrate the work of a broad range of scientists from around the globe, understanding their impact on the world around us and humankind's knowledge of it.