

Science

The national curriculum details that a high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Although not explicitly taught at KS1 level as these three distinct disciplines, pupils will be taught essential aspects of the knowledge, methods, processes and uses of science relating to them. They will be encouraged to understand how science can be used to explain what is happening in the world around them, predict how things will behave, and analyse causes.

Aims

The national curriculum for science aims to ensure that all children:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Intent

At Moss Lane, we want our children to have a desire to learn. When it comes to science, we aim to inspire our children to be inquisitive and to explore curiously by asking questions about the world around them and investigating ideas. We want all children to relate science to real life experiences and the wider world. Teaching and learning at Moss Lane aims to provide children with subject knowledge that can be applied to different areas of learning and in practical settings. We place emphasis on the development of scientific enquiry by opening avenues to scientific ideas that raise questions and foster an appreciation for the world and processes around them.

Implement

- To ensure high standards of teaching and learning in science, we have recently updated the school's long term plan to ensure that we provide a curriculum that is progressive throughout the whole school.
- As a school, we have signed up to the White Rose Science scheme of learning. This contains sequences of lessons, practical activities, and useful, accessible activities.
- Science is taught both as a discrete subject and with cross-curricular links made to other subject areas wherever possible, most particularly through Woodland School and other educational visits.
- We believe that science learning can and should take many different shapes and forms in and around the school environment.
- Children are given opportunities to show their existing knowledge and understanding, as well
 as their own related interests, at the beginning of a science unit of work. There are also White
 Rose assessments available for at the end of a unit of learning, which can be useful to support
 teacher judgement.
- At Moss Lane we recognise that visitors and guest speakers, local visits, trips and outdoor learning support children's understanding, help to make greater connections, and bring science to life, so we try to build these opportunities into topics.
- Special events such as British Science Week, duckling visitors, caterpillars and a visiting farm are used to enhance our teaching and learning of science and to allow further opportunities to develop a general interest in science more broadly.

Impact

- Children enjoy and are enthusiastic about science in our school.
- There is a clear progression of children's work and teachers' expectations in our school, evident through books and displays.
- Children are becoming increasingly independent in science, planning and selecting their own tools and materials and completing pupil led investigations.