



## **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. Pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. They should be encouraged to understand how science can be used to explain what is occurring, 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 thirst for learning. When it comes to science learning, we aim to inspire our children to be inquisitive and to want to explore through curiosity; 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. We place emphasis on the development of scientific enquiry and seek opportunities to develop our children's exposure and opportunities for science.

### **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 adopted the Hamilton Trust Medium Term Plans. These contain sequences of lessons, each one specifically designed to address the primary science national curriculum (which began in September 2014) as well as excellent learning opportunities for children.
- Science is taught both as a discrete subject and with cross-curricular links made to other subject areas wherever possible e.g. line graphs in maths or links to English texts. Teachers have the flexibility to teach sessions in a variety of ways; these might include standalone sessions, blocked afternoons, themed or 'challenge and learn days' and through Woodland School or 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 interests, at the beginning of a science unit of work. This takes the form of a thought shower, to which they can add new learning when they revisit it at the end of a block of lessons. We also have practical end of unit assessments to aid teacher assessment of children's progress in Science.
- 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 for them and brings history to life and so try to build these opportunities into topics.



- Special events such as British Science Week, duckling eggs, caterpillars and a visiting farm are used to enhance our teaching and learning of Science and too allow further opportunities to develop awe and wonder.

### **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.