



Moor First School Science Curriculum

'Together we unlock potential and learn for life'

Intent

At Moor First School we believe that the best science teaching fosters and develops children's curiosity in the subject whilst also taking an inclusive approach and supporting every pupil to fulfil their potential. We will teach key knowledge and skills in the scientific disciplines of Biology, Chemistry and Physics so that our children can acquire age appropriate scientific knowledge, in line with the National Curriculum.

We wish for every child to enjoy the experience of engaging and purposeful scientific enquiry, which will help them to ask and answer scientific questions about the world around them. We strive to give our children first hand experiences and the chance to investigate and develop their enthusiasm for science so that they can understand the uses and implications of science, today and for the future. Alongside this, we aim to provide children with lifelong skills that will be used by them throughout their education and beyond, including enquiry, making predictions, observation, analysis, problem solving and research.

Implementation

Key Stage one and two pupils are taught science weekly as a key stage. Science topics are taught in a two year rolling programme, with topics being organised in a way to support children's growing knowledge and retrieval of prior learning. Pupils are taught through a concept curriculum which helps children to make links within their learning across topics and retain knowledge and skills: see the whole school curriculum intent for more details.

Science topics are as follows:

KS1: Plants, Animals including humans, Everyday Materials, Seasonal changes, Living things and habitats.

KS2: Plants, Rocks, Light, Animals including humans, Forces & magnets, Teeth and digestion, States of matter, Sound, Electricity, Habitats and classification.

Science lessons are planned by teachers and follow the requirements of the National Curriculum. Teachers ensure that subject knowledge is built upon as children progress through the school and that their understanding is broadened. Each science topic introduces specific knowledge, skills and vocabulary. Objectives relating to scientific enquiry and working scientifically are set out in each topic and links are made to

relevant scientists. Science teaching involves adapting and extending the curriculum to match all pupils' needs. Stretch and challenge opportunities are given to enable all children to reach their potential. Activities will be planned to match children's needs and abilities so that all children have an equal opportunity to participate in science lessons, make good progress and enjoy science.

Working Scientifically forms an important part of science teaching. Each half termly block also has working scientifically skills included within it directly linking to the termly topic. This enables the children to embed working methodically, understanding the different types of scientific enquiry and completing fair/balanced investigations.

In the Early Years Foundation stage, science is covered through 'Understanding the World'. Throughout their learning, these children are given lots of opportunities to explain their own knowledge and understanding and to ask questions about why things happen and how things work.

Science events/sessions at the middle school enable year four pupils to develop their knowledge further and aid the transition into year five. Science days and visitors to school give children the opportunity to further their knowledge and see how science is present in everyday life and the world around them. School assemblies regularly celebrate and commemorate scientific discoveries and inventions and give children the opportunity to find out more about important developments in science.

Impact

Through the teaching of science, children at Moor First School will be given the opportunity to develop their sense of enquiry and extend their skills, concepts and scientific knowledge so that they gain a sense of awe and wonder about how the world works.

Specific impact:

Children will:

- Develop and extend their scientific knowledge and understanding;
- Develop their ability to work scientifically and be involved in planning, carrying out and evaluating investigations;
- Develop their scientific vocabulary and ability to articulate scientific concepts clearly and precisely and learn to read and spell scientific words appropriate for their age;
- Learn about science, where possible, through first-hand practical experiences;
- Build on their prior knowledge as they progress through the school;

- Develop their research skills through the appropriate use of secondary sources;
- Learn to work collaboratively in pairs, groups and/or individually;
- Learn to plan and carry out investigations with an increasing systematic approach as they progress through the school;
- Develop their questioning, predicting, observing, measuring and interpreting skills;
- Learn to record their work in a variety of ways e.g. writing, diagrams, graphs, tables;
- Learn about science using the outdoor learning environment;
- Take part in science enrichment activities, including trips, visitors to school, whole school science days etc.