A proud member of

Science Policy

Date Written	28th September 2026	
Written By	Mr. A. Gilbey	
Date of review	September 2027	
Approved by:	(EHT)	Date: September 2026
	(Chair LSC)	Date: September 2026

The school is committed to safeguarding and promoting the wellbeing of all children and expects our staff and volunteers to share this commitment.

Aims and objectives

At Moorcroft Wood we believe that science teaches an understanding of natural phenomena. It aims to stimulate a child's curiosity in finding out why things happen in the way they do. It teaches methods of enquiry and investigation to stimulate creative thought. Science changes as human understanding and experience changes. It is an ongoing process as our ideas about the world around us are constantly developed and revised. Children learn to ask scientific questions and begin to appreciate the way science will affect their future on a personal, national, and global level.

The aims of science are to enable children to:

- ask and answer scientific questions;
- develop skills which may not be developed to the same degree in other areas of the curriculum.
- plan and carry out scientific investigations, using equipment, including computers, correctly;
- know and understand the life processes of living things;
- know and understand the physical processes of materials, electricity, light, sound and natural forces;
- know about the nature of the solar system, including the earth;
- evaluate evidence and present their conclusions clearly and accurately.

Role of the Subject Leader

The role of the subject leader is to;

- Advise and support staff in planning teaching and learning of science.
- Support staff with subject knowledge e.g. scientific vocabulary
- Provide and/or signpost staff to training opportunities relevant to the subject.
- Monitor teachers' planning as part of on-going subject monitoring and evaluation of practice
- Use feedback from monitoring to develop an action plan for science with realistic and developmental targets.
- Audit, identify, purchase and organise all science resources, ensuring they are readily available and well maintained.
- Document and review the agreed ways of working through a written policy document
- Compile a subject folder to document the 'quality of science provision' at the school which will include evidence of monitoring, children's science work and examples of good practice for staff to refer to.
- Keep up-to-date on the use of science in the curriculum.
- Promote science throughout the school e.g. Science Week
- Ensure that opportunities for children to learn about science in the Forest School are fully exploited.

Teaching and learning

We use a variety of teaching and learning styles in science lessons. Our principal aim is to develop children's knowledge, skills, and understanding, as well as a sense of enjoyment in science. Sometimes we do this through whole-class and small group teaching, while at other times we engage the children in an enquiry-based research activity. We encourage the children to ask, as well as answer, scientific questions. They have the opportunity to use a variety of data, such as statistics, graphs, pictures, and photographs.

They use ICT in science lessons where it enhances their learning. They take part in role-play and discussions and they present reports to the rest of the class. They engage in a wide variety of problem-solving activities.

Wherever possible, we involve the pupils in practical activities as these increase enthusiasm and motivation and provide first-hand experience. Opportunities for developing the range of intelligences are presented to the children and staff teach to visual, auditory and kinaesthetic learning styles.

Practical activities provide the children with a range of contexts allowing safe exploration of the world without the need to master facts and theories. By taking part in practical activities children with special educational needs are given the opportunity to develop fine motor skills and co-ordination. Knowledge and skills can be developed in small steps through practical work. Sequencing of written work becomes easier after practical experiences.

We recognise that there are children of widely different scientific abilities in all classes and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

We achieve this in a variety of ways by:

- setting common tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty (we do not expect all children to complete all tasks);
- grouping children by ability in the room and setting different tasks for each ability group;
- providing resources of different complexity, matched to the ability of the child;
- where possible, using classroom assistants to support the work of individual children or groups of children.
- mixed ability groups in which pupils plan and work together but record their work separately.
- The Equals Curriculum is used to structure learning for children in the SRP who have higher level SEND.

Early Years

Early Years use the September 2021 revised Development matters/ Birth to 5 document to plan adult led lessons and independent activities for Science. The different aspects of Science are encompassed within 'Understanding the World' in the Foundation Stage Curriculum, however elements can also be found in other areas of learning (Communication and Language and Personal, Social and Emotional Development for example).

Science in EYFS is introduced indirectly through activities that encourage children to explore, problem solve, observe, predict, think, make decisions and talk about the world around them. In the Early Years Foundation Stage, Science is an integral part of topic work and class teachers plan activities referring to the areas of learning, especially 'Understanding the World'.

Understanding the World involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. In EYFS, pupils have access to Child Initiated activities as well as Adult led scientific activities throughout the year.

Key Stage 1

The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.

Key Stage 2

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

Curriculum Planning

Staff at Moorcroft Wood use the PlanBee Science units of work as a basis for their planning. This scheme of work has been written around the new primary curriculum to ensure full coverage is being achieved in each year group. These units of work also allow children to build upon prior learning and ensure that there are opportunities for children of all abilities to develop their skills and knowledge in each unit and we also build progression into the science scheme of work, so that the children are increasingly challenged as they move up through the school. The class teacher is responsible for writing the lesson plans for each lesson. These plans list the specific learning objectives of each lesson. Learning objectives for each lesson are made explicit to pupils at the start of each lesson. Additionally to using PlanBee we have added in additional experiments at the end of each unit for children to investigate a big question and consolidate their learning. Alongside each unit a scientist has been linked to the aspect of science e.g. inventor, astronomer, geologist, biologist, chemist, zoologist etc…. We regularly revisit prior learning to ensure that knowledge is embedded and we encourage children to verbalise about their learning.

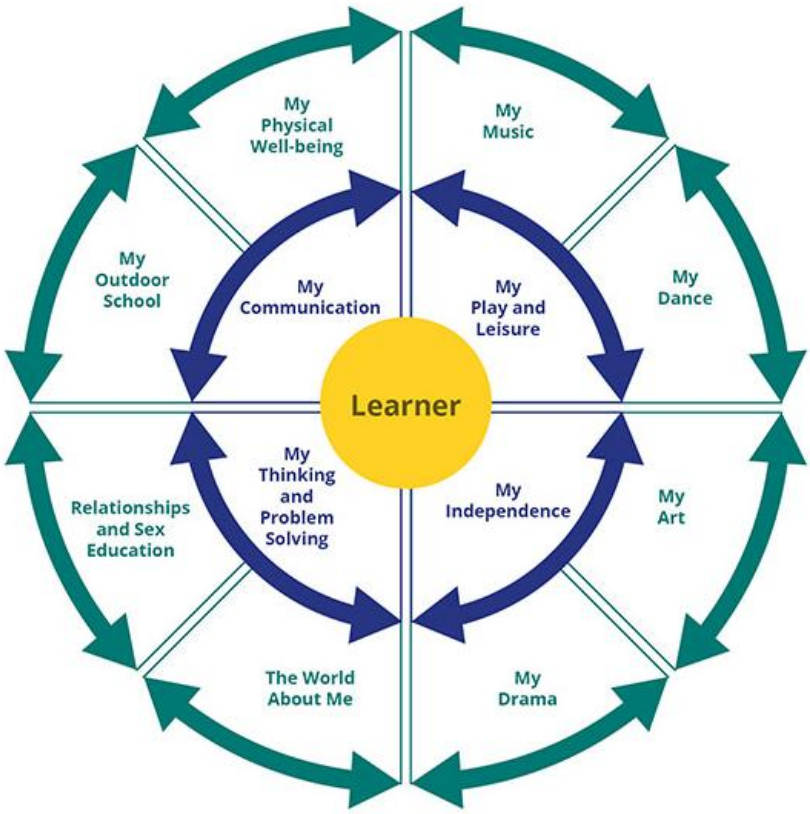
Inclusion

We teach science to all children, whatever their ability. Science forms part of the school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the needs of children with learning difficulties. Our work in science takes into account the targets set in the children's Individual Education Plans (IEPs).

Children who are educated in our specialist SEND provision, 'The Nest', follow the 'Equals Semi-Formal Curriculum - ' which recognises that differentiation from The National Curriculum is not sufficient to meet the needs of pupils and students with profound, complex, severe or global learning difficulties

For these pupils, who are all working consistently and over time below or very near the start of their national curriculum, curricula need to be different rather than differentiated, because the way such pupils learn is different, and often very, very different from neuro-typical, conventional developing learners for whom the national curriculum was designed.

Whilst we accept the desirability of providing a broad and balanced curriculum, it must be wholly appropriate to the needs of each learner. Ongoing assessment may point to a need for concentration and intensity in one or two particular areas for some learners for a part, and sometimes a considerable part of their time in education. *The Semi-formal Curriculum meets the needs of our children educated in 'The Nest' and we feel more able to promote what the children need rather than being constrained by subject areas. Science learning may be 'in the moment' for example, learning about the weather may take place spontaneously when the right weather conditions present themselves thereby allowing the children to experience the different types of weather first hand. The Equals Curriculum is divided into specific areas, many of which are science related.*



Assessment and recording

We assess children's work in Science by making informal judgements as we observe them during lessons. On completion of a piece of work, the teacher marks the work and comments as necessary. Where applicable, the teacher gives advice on the next steps for learning. We report progress in science to parents at the end of the year.

Records of progress in Science;

- Each child from Year 1-6 has a Science book which is used weekly.
- In Early Years Understanding the world (Science) activities are mainly evidenced in children's topic books, but due to the interlinking nature of the way that EYFS is structured, written, or indeed maths work may overlap with science so evidence can be found in maths and writing books. Additionally to this Reception has a whole class floor book (pink book) where activities are recorded using photographs and pupil comments relating to the photographs are collected and recorded.
- In Year 1 to 6 before each topic begins, the children will complete a prior learning quiz to demonstrate the knowledge that they have retained in previous years around topics that are relevant to their new one.
- At the start of each unit is a big picture sheet with the Learning objectives.
- At the end of each topic the children complete a short quiz to show their knowledge and understanding of what has been taught.

At the end of the term the children's science skills are assessed by the teachers to see if they are 'Working towards the expected standard', 'below expected standard' or 'above expected standard'. This data is used to inform future planning and teaching to ensure the children reach age related expectations. Pupils self assess using 'I can Statements' which are based on science specific national curriculum learning objective statements.

Resources

We have sufficient resources for all science teaching units in the school. We keep these in a central store accessible for all staff. A selection of science specific topic books are available in school and pupils have access to ICT equipment that can be used for scientific research. Staff inform the co-ordinator of any requirements for new apparatus.

Policy monitoring

The Science Co-ordinator at Moorcroft Wood Primary School is responsible for the monitoring and implementation of this policy. The subject leader reports to the Head of School / Executive Head Teacher on the effectiveness of the policy.