

Matlock Bath Holy Trinity CofE Primary School Science Policy

November 2025

Review date: November 2026

"Let us run the race before us and never give up" Hebrews 12:1

Purpose of Study

Science develops a sense of excitement and curiosity about natural phenomena. It has changed our lives and is vital to the world's future prosperity. All pupils are taught essential aspects of the knowledge, methods, processes and uses of science. Science is not just the acquisition of knowledge. It is the investigation and experimentation of ideas so that scientific knowledge, understanding and skills become meaningful.

Aims

- to develop pupils' enjoyment and interest in science and an appreciation of its contribution to all aspects of everyday life
- to build on pupils' curiosity and sense of awe of the natural world
- to use a planned range of investigations and practical activities to give pupils a greater understanding of the concepts and knowledge of science
- to introduce pupils to the language and vocabulary of science
- to develop pupils' basic practical skills and their ability to make accurate and appropriate measurements
- to develop pupils' use of information and communication technology (ICT) in their science studies
- to extend the learning environment for our pupils through outdoor learning opportunities
- to promote a 'healthy lifestyle' in our pupils

Key Stage 1 Content

Science teaching in key stage 1 is for pupils to experience and observe events, 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 books and the internet.

Key Stage 2 Content

Science teaching in Lower Key Stage 2 enables pupils to broaden their scientific view of the world around them. They do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments. Lower Key Stage 2 pupils should develop the asking of 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. Pupils begin 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.

Science teaching in Upper Key Stage 2 enables pupils to develop a deeper understanding of a wide range of scientific ideas. They do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. At Upper Key Stage 2, pupils encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict. They should also begin to recognise that scientific ideas change and develop over time. They should

select the most appropriate ways to answer science questions using different types of scientific enquiry.

Teaching and Learning Styles.

We place emphasis on working scientifically through conducting investigations and engaging pupils in practical activities which develop our units and topics. Science is taught throughout the week following clear assessment statements to develop specific skills and steps of learning. This approach ensures all groups of learners can access the curriculum and make progress in each session. Teaching builds on progression from EYFS through to key stages 1 and 2 by developing concepts, ways of researching, testing and finding out. When topics are revisited another layer of knowledge and skills are added.

Curriculum Planning

The teaching of science follows the 2014 National Curriculum. All units of science from the National Curriculum are mapped out in the schools long and medium term planning and refined as necessary in short term planning. This ensures statutory content and skills are covered. The Science lead has produced assessment statements which match each unit of work and these are used to form the basis of steps of learning and also assessment focus.

EYFS

Science in EYFS is introduced indirectly through activities that encourage pupils to explore, problem solve, observe, predict, think, make decisions and talk about the world around them. Science is an exciting way for young pupils to develop skills across the curriculum. All areas of learning and development at the foundation stage are interconnected. Through engaging in science activities, children not only learn about the world around them, they also develop key skills. By exploring the natural world around them they are making observations and drawing pictures of animals and plants. Pupils will know some similarities and differences between the natural world around them and contrasting environments. This will link to what has been read in class and will also include work on the seasons and changing states of matter.

Cross Curricular Links

Science has many strong links with other subjects as well as constantly reinforcing children's basic skills. It develops many of the skills used in English such as reading, writing, speaking and listening. Children enhance their mathematics skills by developing their ability to problem solve, measure, and represent and analyse information. Children use ICT through using computers and lpads whenever appropriate in science lessons to develop research and the presentation of their work. Science makes a significant contribution to a wide range of subjects as it provides opportunities for debates, discussions and investigations.

SEN

Science is for all of our pupils to learn from, engage in and develop knowledge and understanding. Targets of Plan, Do and Review are produced by teachers termly, to support pupils with specific needs. Where possible teachers and other adults in school provide pupils with support to enable them to gain the most from each session taught. This enables pupils with learning and/or physical difficulties to take an active part in scientific learning and practical activities and investigations and to achieve the goals they have been set.

Assessment and Recording

Pupil work is assessed in a range of ways. This can include direct observation of children at work, individually, in pairs, in a group, or as a class. Teachers use strategies of questioning, talking and listening to children, as well as considering work and investigations produced by them. Recording of pupil evidence and assessment is done through work in books, on display, online and also using our Insight Tracker Pupil Tracking system.

Monitoring and review

Monitoring of the delivery of science teaching and the quality of learning across the school is done through observations and planned pupil meetings to talk with pupils and share examples and evidence of science work.