



Science Policy May 2024
To be reviewed June 2025

Introduction

This policy outlines the purpose, nature and management of the science taught at Barwick and Stoford Primary School. The implementation of this policy is the responsibility of all teaching staff.

Aims

- To learn about the environment through first-hand experience and investigation.
- To construct new concepts and frameworks in response to new stimuli and experiences.
- To give all children access to the method of science and scientific ideas.
- To help children develop scientific skills, attitude and concepts in their own right and also skills that can be applied through the whole curriculum.

Teaching and Learning

Science teaching will be in line with the whole school teaching and learning policy. It will also be wholly compatible with the school aims and mission.

Delivery

All the children will be taught the knowledge and skills of science as outlined in the National Curriculum document (2014) for science. We follow 'White Rose Science' which outlines key learning broken down into small steps with a focus on providing opportunities for working scientifically. Our long-term overview of science outlines each year group's coverage and where possible each group is taught from the year group at which their children are working at. However, at Barwick and Stoford Primary School we aim to add our own 'edge' to our science teaching by making each learning experience as memorable as possible and individualise the delivery to meet the needs of each group of children.

Time Allocation

We aim to deliver Science for a period of 1.5 hours in KS1 and 2 hours in KS2 per week; however, due to the nature of our children at Barwick and Stoford School, this may be done over 2 sessions or through Forest sessions or observational tasks when out on park visits. Where possible Science is linked to other areas of the curriculum and practical opportunities explored to engage the children as far as possible.

Early Years

Within the Early Years Foundation Stage, children work towards the area of learning and development under 'The Natural World' (The New EYFS Framework 2021) by:

- Exploring the natural world around them, making observations and drawing pictures of animals and plants;
- Knowing some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class;

- Understanding some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Activities are planned that encourage children's interest and curiosity both indoors and outdoors. Opportunities are given for the children to tell each other what they have found out, to speculate on future findings or to describe their experiences; this enables them to rehearse and reflect upon their knowledge and to practise new vocabulary. Their learning is supported to allow them to develop the knowledge, skills and understanding that will help them to make sense of the world. Whenever possible, children are encouraged to take part in first-hand 'experiments'.

Assessments

Assessment, Recording and Reporting Children's knowledge and understanding is assessed in class through group discussion and observation during lessons as well as in marking written work.

Assessments are also completed using the White Rose Science Working Scientifically document to track progress and support staff in planning opportunities to deepen understanding. All children also complete an end of block assessment to ensure retention of core knowledge. We plan investigations through which we can elicit the children's ideas and ask probing questions to gain an insight into the depth of their understanding. These activities and pieces of work will be observed and retained in order to provide evidence of progress and scientific understanding. All children from Year 1 to 6 will record their findings in their Science Books.

The science leader will complete book scrutiny / monitoring walks each term to understand fully the progression across school from Reception to Year 6. Each class should focus outdoor learning, if appropriate, where they will collate any work done in Forest School and during their observation over time element of Science. A range of investigations are encouraged in each year group from Year 1 to Year 6.

Teachers produce reports to parents at the end of each academic year and there are opportunities for parents to discuss work at the parent's evenings twice a year. SEN Science activities will be differentiated to provide access to the science curriculum for all children.

Resources

Staff resources are located on shelving in the science cupboard located in the corridor by the Victorian Classroom. Many classrooms have science related books in their reading areas. Each classroom has access to digital resources stored on the shared drive.

Outdoor Learning and Cross-Curricular Links

Activities are also planned by teachers and forest school leads to support cross-curricular outdoor learning to provide a breadth of opportunities for children to learn in a variety of ways.