

SCIENCE POLICY

South Walney Infant & Nursery School



Approved by: Staff & Governors

Date: Spring 2026

Last reviewed on: Spring 2024

Next review due by: Spring 2028

Aims.

Through the teaching of science we aim to:

- Develop a positive and enquiring attitude to science within all children.
- Provide a science curriculum that reflects the diversity of learning styles within our school.
- Give the children the opportunity to learn through first-hand experience to play with and explore, enabling and encouraging children to ask and answer scientific questions.
- Value children's existing ideas, experience and knowledge, while addressing common misconceptions and building on existing skills and knowledge.
- Provide a safe and secure learning environment, in which children are confident to experiment, will accept, enjoy challenges, and become independent scientific thinkers.
- Develop skills and knowledge in the following areas:

Nursery – Electricity, light and shadows, new life of animals and babies, plants, materials and forces, sound, seasonal changes and humans.

Reception – Humans, Materials including changing materials, Animals excluding humans, forces, light and shadow, living things and their habitats, seasonal changes and sound.

Year 1 – Animals Including humans, Everyday materials, Plants, Working scientifically and seasons.

Year 2 – Use of everyday materials, Plants, Animals including humans, living things and their habitats and working scientifically.

Strategies to achieve these aims

During the Early Years Foundation Stage, science is included in one of the specific areas known as Understanding the World. Scientific learning occurs through:

- Access to a range of developmentally appropriate practical activities based on first hand exploratory experiences. For example, outdoor nature play, magnifiers to explore natural objects, manipulating wet/dry sand, etc.
- Enthusiastic and meaningful interaction with adults, who provide opportunities to develop communication skills, use correct scientific language and carefully framed open-ended questioning techniques to develop thinking skills.
- Exploration of both indoor and outdoor environments linking all areas of learning.
- Recognition and extension of their existing knowledge and understanding gained from their home setting.
- The ability to ask and answer simple questions.

At KS1 pupils observe, explore and ask questions about plants, living things, materials and the seasons. They begin to work together to collect evidence to help them answer scientific questions and to link this to simple scientific ideas. They begin to evaluate evidence and consider whether tests are fair. They use reference materials to find out about more scientific ideas. They share ideas and communicate them using scientific language, drawings, charts and tables, with the help of IT if it is appropriate.

We will:

- Assess the children's knowledge to ensure appropriate planning for children of all abilities, learning styles and interests.
- Work in a variety of ways through investigation, experimentation and discussion, collaborating in pairs, groups or individually; in a climate conducive to developing scientific skills, e.g. questioning, predicting, hypothesising, in which all children are encouraged to share, both equipment and ideas.
- Provide access to a wide variety of resources including the school pond and other outside areas. Educational visits and visitors to the school of scientific interest will be made available when possible, i.e. S.T.E.M. Ambassadors from BAE Systems during science week.
- Carefully scaffold children's work and through our positive marking policy, their learning will be appreciated and extended.
- Make children aware of the importance of health and safety issues through each unit of work taught.
- Link our science work to other areas of the curriculum through creative topics.

The contribution of Science to teaching in other curriculum areas:

English

Science contributes significantly to the teaching of English by actively promoting the skills of reading, writing, speaking, listening and questioning. Children develop their reading skills whilst reading texts of a scientific nature both within and outside of the English lesson. Oral skills are developed in science through discussion and the recounting of their observations of scientific experiments and investigations. Children develop their writing skills through writing reports and by reading information during project work.

Maths

Science contributes to the teaching of Maths in a number of different ways. The children use weights and measures and learn to apply number. Through working on investigations they learn to estimate and predict. Children develop the skills of accurate observation and recording of results. The use of number helps children to reason and draw conclusions.

Computing

Where appropriate, IT is used within science lessons. It is used to support work by allowing children to learn how to find, select and analyse information on the internet. Children can use IT to present and interpret data.

Health and Safety

Every care will be taken in carrying out scientific activities, which will comply with the guidelines in the school's health and safety policy. Equipment and materials will be stored safely and appropriately in accordance with assessments identified in the Risk Assessment File. Where children take part in activities outside the classroom, a risk assessment is carried out prior to the activity taking place to ensure the activity is safe and appropriate for all pupils.

Curriculum Planning

The school uses the National curriculum, which is adapted accordingly to suit the children's needs. The curriculum map shows the school's long-term science plan across both the Early Years Foundation Stage and Key Stage One. Learning menus are sent out each term to show the programmes of study to be covered each term.

Weekly/topic plans identify learning intentions, activities and differentiation.

Assessment

Children's work is assessed through a variety of means, i.e. observation, discussion, marking of written work, etc. formal judgements made during observations of lessons. EYFS assess against the Early Learning Goals. In Key Stage 1, pupils' progress is tracked on a simple class spreadsheet.

Curriculum Leader's Role

It is the responsibility of the Science subject leader to monitor the standards of the children's work and the quality of the teaching. The Science subject leader is also responsible for supporting colleagues in the teaching of Science, for being informed about current developments in the subject and for providing a lead and direction for the subject in the school.

South Walney Infant & Nursery School is fully committed to safeguarding and promoting the welfare of all its pupils. Every member of staff recognises that safeguarding against radicalisation and extremism is no different to safeguarding against any other vulnerability