

Science Policy

Science makes an increasing contribution to all aspects of life. Children are naturally fascinated by everything in the world around them and Science makes a valuable contribution to their understanding.

Children learn by playing with things in their world. They pick up clues about what they see, touch, smell, taste and hear in order to makes sense of it all. Eventually they come to conclusions which they match up with all the experiences they have had.

Teachers and parents/carers can help children to take a careful look at the world. By talking together children can be encouraged to explore and observe so that they can group objects and events and look for similarities and differences. They will need to measure and record the things they have found out in ways that make sense to them so that later they can talk to other people about what they have discovered. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

<u>Aims:</u>

The National Curriculum for Science and the Understanding of the World strand of the Early Years Foundation Stage curriculum, aims to ensure that all pupils:

- Develop lively, enquiring minds and the ability to question.
- Learn scientific skills and knowledge.
- Build on their natural curiosity and enable them to understand and care for the world in which they live.
- Are provided with an environment where they can work in an investigative way and can communicate their findings in a variety of ways.
- Can use equipment safely and sensibly.

- Develop the potential scientific links with all other areas of the curriculum.
- Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific guestions about the world around them.

• Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

<u>Curriculum</u>

At Abbey Infant and Nursey School we use the Oak National Academy units as our scheme of work. This ensures that a clear progression of knowledge, skills and vocabulary is evident throughout each child's Science learning journey across the school.

This scheme ensures us that the Understanding of the World strand for Development matters and Early Learning Goals, and the National Curriculum requirements are being met.

Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions

<u>Oak Academy Overview of Units-</u>2023-24

Non Oak academy learning

	Autumn	Spring	Summer
Nursery	Autumn Healthy foods	Polar Habitat Materials	Growing plants Growing animals (on the farm) Under the sea Summer
Reception	Growing babies Healthy Eating Woodland Seasons	Winter Hot/ Cold Spring Colour and light	Habitats Float and sink
Year 1	Sound Material	Building things Plants	Seasons and changes The animal kingdom
Year 2	Human Lifestyle Space	Changing materials Mixing and making	Extraordinary scientists Habitat

<u>Assessment</u>

Assessment in Science is based upon scientific knowledge and understanding. In the Foundation Stage we assess children's knowledge and understanding according to the EYFS Learning and Development Stages. In KS1 we use a range of assessment materials to ensure that children are making appropriate progress, including assessment tasks and observations.

Pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. All staff strive to ensure that our children reach their full potential in Science and that they understand and enjoy their experiences.

Assessment should:

- Be formative and summative
- Be used to inform the teacher for future planning
- Promote continuity and progression

Children's recording will take many forms according to the nature of the activity; for example: verbal, pictures, diagrams, graphs, write ups and photographs.

Teaching Science to children with special educational needs

The school strives to enable all pupils to reach their potential. Science forms part of the school curriculum policy to provide a broad and balanced education for all children. Science activities are carefully chosen to match the needs of children with special educational needs.

Health and Safety

Any potentially hazardous activity performed in science lessons will be conducted by the class teacher prior to the lesson. In order to assess the risks adequately, the following will be considered:

- The age and ability of the children
- The location
- Harmfulness of the substance (if appropriate) if the children were to come into contact eg. vinegar
- Opportunities for not using equipment carefully and correctly
- Quantities being used
- Class information eg. allergies
- The use of protective clothing, goggles, etc.

The Role of the Science Co-ordinator:

The Science teaching and learning is subject to continual review, evaluation and monitoring.

The science coordinator is responsible for this and will:

- Monitor the standards of the children's work and the quality of teaching in science.
- Analyse data to consider trends or issues such as patterns of attainment.
- Be responsible for the support of colleagues in the teaching of science
- Provide a strategic lead and direction for the subject, which indicates areas for further improvement; develop an Action Plan
- Attend relevant CPD courses for Science as appropriate in line with the School Development plan.
- Arrange staff meetings to discuss the scientific aspects of the themes contained in the school's current scheme of work and how these might be presented in the classroom.

Ellie McCann (Science Lead) September 2023

Next review date- September 2024