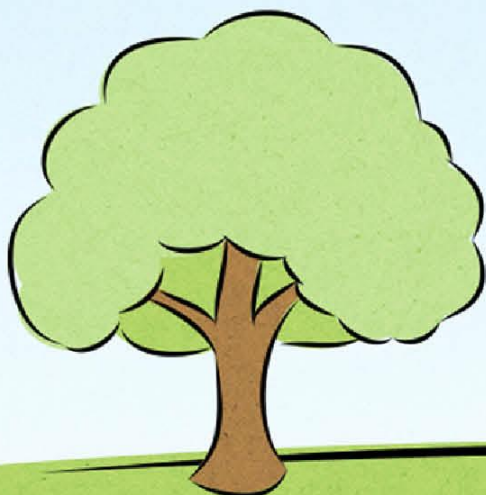




Glenfield Infant School



Science Policy

Revised: November 2020

Signed: Katharine Sharlott

Review date: November 2022

Date: 23.11.2020

Science Policy

Introduction

Science engages children in developing their understanding of the world around them. It stimulates, excites and satisfies pupil's curiosity about phenomena and events. Science links directly to practical experience whilst building on their own ideas and questions and because of this it can engage learners at many levels. Through science, pupils understand how major scientific ideas contribute to technological change – impacting on industry, business and medicine and improving the quality of life. They learn to question and discuss science-based issues that may affect their own lives, the direction of society and the future of the world.

Core Principles of Teaching Science at Glenfield

- ⊙ Children are encouraged to be curious, inquisitive and to ask and answer questions to extend their learning.
- ⊙ Science teaching is practical and hands on where possible and children are excited and motivated to learn.
- ⊙ Children learn from investigating by predicting, testing and evaluating. They can explain and share their learning.
- ⊙ Science teaching is linked to other subjects and topics when possible and builds on children's own experience and interests.
- ⊙ Resources are up to date, relevant and easily accessible and are used to engage and motivate the children.

Curriculum Aims

At Glenfield we aim to deliver a curriculum which is broad, challenging and creative. We also want to ensure that there is a clear progression in skills and knowledge from the Early Years to the end of Key Stage 1.

The Statutory Framework for the Early Years Foundation Stage aims to ensure 'Understanding the world' involves guiding children so they make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment

The National Curriculum for Science aims to ensure that all pupils:

- ⊙ develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- ⊙ develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- ⊙ are equipped with the scientific knowledge required to understand the use and implications of science, today and for the future.

The context of teaching

In the Foundation Stage, children will be supported in developing their understanding of the world through taught lessons, child initiated activities and small group work where they can explore, enjoy, learn, practise and talk about their increasing understanding of people and communities, science and the world plus technology.

Children will be seen engaged in activities that promote:

- ⊙ playing and exploring - children investigate and experience things, and 'have a go';
- ⊙ active learning - children concentrate and keep on trying if they encounter difficulties, and enjoy achievements; and
- ⊙ creating and thinking critically - children have and develop their own ideas, make links between ideas, and develop strategies for doing things.

In Key Stage 1, the National Curriculum is taught. The prescribed themes are followed and have been allocated to year groups as detailed below.

- ⊙ Year 1: Plants, animals, including humans, everyday materials and seasonal changes including all aspects of working scientifically
- ⊙ Year 2: Living things and their habitats, plants, animals including humans and uses of everyday materials including all aspects of working scientifically

During years 1 and 2, pupils will 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.

Cross curriculum teaching

Where possible, we integrate curriculum areas together so that children can build concrete links between their developing knowledge and understanding and applying skills. For example, teachers ensure that whenever possible, the application of information and communication technology, literacy and/or numeracy is embedded when teaching the wider curriculum subjects. Through Knowledge and Understanding of the World and Science we incorporate where possible activities which contribute to the children's health education. The subject also lends itself to raising matters of care for the environment allowing us to promote the concept of positive citizenship.

Equal Opportunities

The teaching of Science is planned with due regard for the school's Equality policy and SEND policy. Children with SEND are encouraged to be involved in all aspects of the school curriculum. Those with specific needs are catered for as appropriate and planning details modifications that can be made to taught sessions so that all children are included. Children who require extra challenge in Science are identified and their needs catered for appropriately.

Assessment for Learning

All children are assessed on a day to day basis through observation, questioning, discussion and written recording. This ensures teachers have a full understanding of learning and progress. In line with the school's Marking Policy it has been agreed that when marking written work any comments made will be linked directly to the learning objective or skill taught. This could be as simple as just ticking the learning objective to show the work has been checked by an adult. Children's verbal comments/responses will be captured by an adult and written in quotation marks, with pink pen, in the child's book.

Assessment in the Foundation Stage

In the Foundation Stage, children are regularly assessed against the developmental ages as given in the early years' outcomes followed by the Early Learning Goals. Final Early Learning Goal results for each child are included in their annual report. This information is also passed to the child's Year 1 teacher at the end of the year.

Assessment in Key Stage 1

In Key Stage 1 assessment foci have been carefully planned into each medium term plan. Based on conversations with and observations of the child in lessons and then reviewing written work in books, teachers will be able to assess whether children are working at age related expectations. Each half term children will be judged to be working towards, working at or working above the ARE for the relevant areas of the programme of study. Collating this information at the end of each year will enable teachers to make an informed judgement which will be included in each child's annual report and passed on to their next teacher. At the end of Year 2 children's Science attainment will also be reported as part of the end of Key Stage 1 data.

Monitoring of Science

The Science subject leader will monitor Science within the school through analysis of the assessment data, pupil interviews, work scrutiny, observations of displays and drop-ins.

Policy review

This policy will be reviewed every two years. The next review will be November 2022.