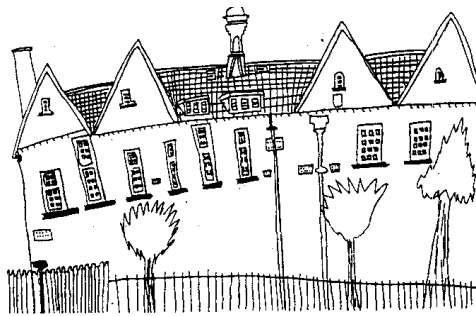


Letchmore Infants' & Nursery School Science Policy



September 2024

Review Date - September 2026

1. Introduction

Science is a core subject within the National Curriculum. This policy outlines the purposes, nature and management of science taught in our school.

This document was reviewed by the Science Subject Leaders in consultation with the teaching staff and has full agreement of the Governing Body.

The implementation of this policy is the responsibility of all the teaching staff who will ensure that Teaching Assistants are aware of the contents of this policy.

2. Aims

We aim 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 uses and implications of science today and for the future

3. Entitlement

All children will have an entitlement to a curriculum in science

For Years 1 and 2, the National Curriculum for Science is set out as follows:

- Working Scientifically

This is the approach through which children will acquire specific skills. The skills that will be developed are as follows:

- 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

These skills are integrated into the teaching of enquiry and activities associated with the statutory and non-statutory content:

Year 1 - Plants, Animals, Everyday Materials, Seasonal Changes

Year 2 - Living Things and their Habitats, Plants, Animals, Uses of Everyday Materials

For Nursery and Reception classes, Science is delivered within the 'Understanding of the World' section of the Foundation Stage.

4. Implementation

Science is taught discreetly once a week in KS1. Children in Reception and Nursery will have opportunities to experience a range of key science-based activities within each of their topics. The teaching objectives are based on the Developmental Matters in the EYFS. Children also have the opportunity to build on their knowledge and develop their exploratory skills during continuous provision and enhanced provision.

Most science learning should be done using first-hand practical experiences, but there should also be of some use of appropriate secondary sources such as books, photographs and videos.

Science sessions may include:

- teacher demonstration
- exploratory play to gain experience of a situation and to develop ideas
- experimentation to try out ideas
- investigations to test ideas and hypotheses
- focused observations to develop the ability to notice detail and changes that take place
- focused practical tasks to develop understanding of a concept
- sorting and classifying to group things by observable features
- activities that specifically develop new skills e.g. learning how to use equipment
- a variety of information sources

5. Organisation of teaching and learning

Science activities are organised using a variety of grouping strategies appropriate to the learning objective:

- whole class
- group work
- pairs
- individual

Children will be taught Science by the Class Teacher and support staff

A variety of teaching strategies will be used, including:

- knowledge given by the teacher
- individual and group enquiries
- questions and answers generated by the class
- fieldwork, i.e. school environment and visits
- interactive displays in the Science area or around school
- use of ICT
- use of fiction and non-fiction books
- role play and drama
- creative/technological activities linked to materials
- living things in school e.g. caterpillars, tadpoles, pets, etc
- capitalising on children's own interests and existing knowledge

6. Equal Opportunities

Activities are planned to ensure participation by all children irrespective of ability, gender, culture and ethnicity.

7. Recording Work

Children will be taught to use a variety of styles for presenting and recording their work, including:

- written reports/investigations
- diagrams, charts and graphs
- verbal discussion
- pictorial and photographic
- Role-play
- use of IT e.g. Purple Mash, Chrome books

Work will be presented in children's workbooks, whole-class topic books, floor-books, or displays.

8. Assessment and Reporting

Learning will be assessed using the outcomes stipulated on the '*Sticky Knowledge Grids*' in KS1 and through progression against the *Early Learning Goals* in EYFS. Copies of moderation documents / '*Progression of Working Scientifically Skills*' documents / '*Progression of Knowledge*' documents / Knowledge organisers are kept in the science storage unit in the KS1 corridor for teachers to refer to as needed, and teachers have also been given a copy of their own.

A variety of planned strategies will include:

- observations of, and discussion with, children carrying out activities
- written and diagrammatic responses
- teacher and child reviewing work together

The Annual Report to parents of infant children will include:

- the range of knowledge and skills taught in that year
- comments on the individual's progress and achievements during the year
- teacher assessments

9. Health and Safety

Pupils are made aware of health and safety issues that arise in topics or activities, including out-of-school environments. They will be taught how to use appropriate equipment and to carry out tasks in a safe and responsible manner. The school follows the advice published by ASE, 'Be Safe'. All adults working with children are made aware of the health and safety implications and of the school's First Aid policy.

10. Resources

Each year group has a range of scientific resources. Resources are also stored in the KS1 corridor arranged by topic. The resources will be regularly checked, and shortages/requests should be notified to the Subject Leader either in person or by writing the request on laminated sheet attached to the science storage unit.

11. Background information

This document was informed by reference to the 2013 National Curriculum for KS1 and the EYFS Curriculum.