

Featherstone Primary School

Science Policy:



Agreed by Governors: Standards, Curriculum and SEND

Approved date: Nov 2022

Review date: Nov 2024

Introduction

Science is a core subject within the National Curriculum. This policy document outlines the purpose and management of the teaching and learning of Science at Featherstone Primary School. It is a statement of the school's agreed approach to the Science Curriculum and informs teachers, support staff, governors, parents and the wider community.

The Nature of Science

Science builds upon children's natural fascination with the world in which they live and their desire to find out more about the phenomena occurring around them. This fascination is developed through first hand exploration which fosters curiosity, critical reflection, cooperation, problem solving, observation, independent learning, perseverance and open mindedness. Science teaching leads to an appreciation of science as a fundamental part of everyday life and allows children to develop confidently within a scientific society.

Aims and Objectives:

We aim to:

- Promote an enjoyment of science
- Encourage children to enquire, explore and observe the world around them
- Develop knowledge and understanding of important scientific ideas, processes and skills and relate these to everyday experiences
- Encourage children to make connections with other curriculum areas
- Learn about ways of thinking and find out about and communicate ideas
- Explore values and attitudes through science

Objectives

- In order to achieve our aims we will:
- Teach science in a positive, interesting and engaging way for all children
- Provide regular opportunities for children to plan, predict, carry out and evaluate their own investigations when appropriate
- Use practical, hands on approach wherever possible using everyday materials and experiences
- Ensure continuity and progression through adherence to the key objectives outlined for Reception, Key Stage 1 and Key Stage 2
- Provide opportunities for children to use skills from other curriculum areas to enhance science

Teaching and Learning Organisation of Science in School

The aims and objectives for Science reflect the requirements of the National Curriculum 2014 for Key Stage 1, Key Stage 2 and the Early Years Foundation Stage for the Reception Year. We

refer to these documents to inform our long-term planning and to plan differentiated learning to be covered in each year group to ensure continuity and progression.

Science is taught regularly so that children are able to sustain their progression throughout the Early Years Foundation Stage, Key Stage 1 and Key Stage 2.

Early Years Foundation Stage

In the Early Years Foundation Stage children follow the objectives from the Foundation Stage Profile. The Expected standard the 'Understanding the World' strand have considerable scientific content. The children participate in activities based on first hand experiences that encourage exploration, observation, problem solving, predication, critical thinking, decision making and discussion and are provided with an environment which offers a wide range of activities indoors and outdoors that stimulate children's interest and curiosity. The skills acquired in the Early Years Foundation Stage are further developed and refined in Key Stage 1.

Year 1

Science is organised into five different areas of study. These are:

- Working scientifically
- Plants
- Animals, including humans
- Everyday materials
- Seasonal changes

Year 2

Science is organised into five different areas of study. These are:

- Working scientifically
- Living things and their habitats
- Plants
- Animals, including humans
- Uses of everyday materials

Year 3

Science is organised into six different areas of study. These are:

- Working scientifically
- Plants
- Animals, including humans
- Rocks
- Light
- Forces and magnets

Year 4

Science is organised into six different areas of study. These are:

- Working scientifically
- Living things and their habitats
- Animals, including humans
- States of matter
- Sound
- Electricity

Year 5

Science is organised into six different areas of study. These are:

- Working scientifically
- Living things and their habitats
- Animals, including humans
- Properties and changes of materials
- Earth and space
- Forces

Year 6

Science is organised into six different areas of study. These are:

- Working scientifically
- Living things and their habitats
- Animals, including humans
- Evolution and inheritance
- Light
- Electricity

The children will attain a broad and balanced range of scientific activities that encompass the afore-mentioned areas of study and Attainment Targets. Science will be planned in and taught by the class teachers. The science leader will be responsible for monitoring continuity and progression.

The Role of the Teacher

It is the responsibility of the classroom teacher to select the most appropriate approach to achieving the learning objectives in the lesson. Teachers have flexibility and autonomy of where to teach science within broader curriculum. Links are always well planned and purposeful. Working scientifically is a continuous area of study in the National Curriculum for Science in England. It is the lifeblood of each and every area of subject matter and is what gives life and sustenance to learning new knowledge and developing understanding. It is the driving force of science teaching and learning at Featherstone Primary School.

Our teaching at all levels will include opportunities for;

- observation
- first-hand experience
- investigation and experimental work
- talking (child/child and child/teacher) - questioning
- teacher explanation
- the committing to memory and recall of a range of scientific facts
- the use of ICT
- consolidation and practice of basic skills and routines
- recording using a variety of methods, including, written work, pictures, diagrams, tables, labelling and photographs
- class work, group work and individual work

Writing in Science

During Science lessons there will be various opportunities for writing. All writing should be of high quality, in line with the English policy.

Health and Safety

All science work will be carried out with reference to the school's health and safety policy. Children need to recognise hazards and risks when working with living things and materials, and take actions to control these risks. They will be encouraged and supported in hazard assessment. Children are taught how to use resources appropriately and to learn responsibility for themselves and others.

Assessment, Recording and Reporting of Attainment

During the Early Years Foundation Stage ongoing assessment is taking place as part of the Foundation Stage profile for each child, via observations and dialogue with the children. Each class teacher continually assesses performance in Key Stage 1 and Key Stage 2 in accordance with the National Curriculum. Children's achievements are reported to parents at the end of each year in a written annual report.

Equal Opportunities

Every child will have access to our curriculum regardless of gender, ethnic or religious background, disability or learning ability. We will make every effort to use science-based topic work and resources to exploit the full potential for multi-cultural education that celebrates cultural diversity.

Monitoring and Review

The Head teacher, Senior Leadership Team and Subject Leader will monitor the effectiveness of this policy on a regular basis. The Head teacher and Subject Leader will report to the Governing Board on the effectiveness of the policy and, if necessary, makes recommendations for further improvements.