



# St Faith's

Church of England  
Infant and Nursery School

## Science Policy

### Introduction

As a Church School, the distinctive Christian values of respect, compassion, trust, justice, friendship and community are promoted through the experiences we offer to all our pupils, to give pupils the knowledge, skills and understanding that they require to lead confident, healthy and independent lives. We promote the teaching and understanding of fundamental British values in order to prepare pupils for life in modern Britain. We positively teach the values of democracy, the rule of law, individual liberty, mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Teaching the fundamental British values helps the children to become informed, active and responsible citizens.

This policy outlines the purpose, nature and management of **Science** in our school. It reflects the consensus of opinion of all members of staff. It is based on current practice and has the full agreement of the governing body. The implementation of this policy is the responsibility of the Head teacher, teaching staff and support staff. It is our collective responsibility to raise awareness and that all policies are known, understood and used appropriately.

Through Science the children should develop an awareness and understanding of the world around them. By investigation and experimentation, the children will learn about living things, seasonal changes and everyday materials and their properties.

### Vision for teaching

The teaching of science is lively and engaging, involving a blend of imaginative approaches that direct the children's learning. The children are provided with good support but are also encouraged to work independently with confidence when required. The children will also be encouraged to initiate their own learning, using and applying skills that they have acquired. The pitch and pace of lessons ensure that the children make good progress as teaching expectations are high. A strong interdependence of speaking and listening, reading, writing and maths underpins our provision.

### Nature of subject

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

### Science Intent

At St Faiths the children will deepen their knowledge of all areas of science in a progressive manner, through a carefully planned cycle of teaching new knowledge whilst recapping and overlearning prior knowledge.

The subject encourages children to become competent at using investigative skills, through following lines of scientific enquiry outlined in the National Curriculum and EYFS curriculum.

### Implementation of Science

- We aim to encourage our children to remember knowledge and build on their prior learning by ensuring we carefully consider how knowledge is sequenced.
- Through the use of the Progression and Skills Document (which is in line with EYFS and National Curriculum) teachers will plan for learning carefully throughout the year in order to ensure progress is made in each term and across each year group.

- All learners will be assessed within their classes and then supported in line with the school's commitment to inclusion, through careful planning that is adapted to stretch, guide and support every member of every class.

### **Early Years**

In the EYFS, the ways in which every child engages with other people and their environment – playing and exploring, active learning, and creating and thinking critically – underpin learning and development across all areas and support the child to remain an effective and motivated learner.

Children are taught Science through the following areas of learning:

Understanding the World:

3-4 year olds:

- Use all sense in hands on exploration.
- Explore collections of materials with similar and/or different properties.
- Talk about what they see, with a wide range of vocabulary.
- Plant seeds and care for growing plants.
- Understand the key features of the life cycle of a plant and an animal.
- Begin to understand the need to respect and care for the natural environment and all living things.
- Talk about the differences between materials and changes they notice.

Reception children will be learning to:

- Explore the natural world around them.
- Describe what they see, hear and feel when they are outside.
- Understand the effect of changing seasons on the natural world around them.

### **Key Stage 1**

In accordance with the National Curriculum, children are taught to:

Work scientifically by:

- 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

### **Year 1 programme of study**

Plants

Pupils should be taught to:

- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- identify and describe the basic structure of a variety of common flowering plants, including trees

Animals, including humans

Pupils should be taught to:

- identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- identify and name a variety of common animals that are carnivores, herbivores and omnivores
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)
- identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense

Everyday materials

Pupils should be taught to:

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties

## Seasonal changes

Pupils should be taught to:

- observe changes across the 4 seasons
- observe and describe weather associated with the seasons and how day length varies

## Year 2 programme of study

Living things and their habitats

Pupils should be taught to:

- explore and compare the differences between things that are living, dead, and things that have never been alive
- identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- identify and name a variety of plants and animals in their habitats, including microhabitats
- describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

## Plants

Pupils should be taught to:

- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

## Animals, including humans

Pupils should be taught to:

- notice that animals, including humans, have offspring which grow into adults
- find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene

## Uses of everyday materials

Pupils should be taught to:

- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

In Key Stage 1, Science is taught through the half termly topics throughout the year, so that children can achieve depth in their learning. Teachers have identified the key knowledge and skills of each topic and consideration has been given to ensure progression across topics throughout each year group across the school.

At the beginning of each topic, children are able to convey what they know already as well as what they would like to know or find out. This ensures that lessons are relevant and take account of children's different starting points. Consideration is given to how greater depth will be taught, learnt and demonstrated within each lesson, as well as how learners will be supported in line with the school's commitment to inclusion.

The distinctive Christian values of respect, compassion, trust, justice, friendship and community are promoted through the experiences we offer to every child, in all areas of the curriculum.

## Entitlement in Key Stage One

Pupils in Years 1 and 2 should explore the world around them and raise their own questions. They should experience different types of scientific enquiries, including practical activities, and begin to recognise ways in which they might answer scientific questions. They should use simple features to compare objects, materials and living things and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they should begin to notice patterns and relationships. They should ask people questions and use simple secondary sources to find answers. They should use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out

simple tests, record simple data, and talk about what they have found out and how they found it out. With help, they should record and communicate their findings in a range of ways and begin to use simple scientific language. The children will have the knowledge of the whole science curriculum that is expected within their respective year groups, through carefully considered planning of the staff.

There is a separate programme of study for Years 1 and 2 and so by the end of Year 2 the full programme will have been covered. Pupils are not expected to cover each aspect for every area of study.

### **Entitlement in the Foundation Stage**

The children have activities planned from the appropriate age and stage of the Understanding the World section of the Development Matters in the Early Years Foundation Stage Guidance document. They are taught to observe, use all of their senses and to sort and classify everyday objects. They work through the appropriate age and stage and aim towards achieving the Early Learning Goals for Understanding the World by the end of the Foundation Stage.

Provision in the Foundation Stage will allow children continuous opportunities to investigate their surroundings and these will be observed and recorded by adults in their setting to provide evidence towards achieving their Early Learning Goals.

### **Assessment**

In this subject, we use two main types of assessment to help us to support all pupils in their achievement:

**In school formative assessment** is our day to day assessment, based on what children show us they can do in a lesson. This can be in the form of observation, discussion, feedback, questioning, note taking, photo or video evidence, use of Tapestry or marking and is used to guide the teachers planning for the next lesson.

**In school summative assessment** is usually carried out at the end of a topic or a term. This can be in the form of the above, or in the form of a quiz or an independent task or activity. It measures what particular level a child has reached in their learning and whether they are below, at or above the nationally expected level for their age. In this school, we track progress across each year group in the different areas of science, using grids to show whether children are working below, at or above the expected level in science.

### **Monitoring and Evaluation**

The subject leader regularly monitors planning, assessments, work and teaching and learning in classrooms.

### **Review**

The Headteacher and staff will review this policy document annually. Any amendments will be presented to the Governors for consideration at their next Committee meeting after that date.

Approved by the governing body on:-	
Signed (Governor)	
Signed (Subject Leader)	Rachel Smith September 2025
Review Date	September 2026