



**ETHOS STATEMENT**  
St Peter's Catholic Primary School

Science Policy (2023)

Date policy agreed:

Chair of Governor's Signature:

Policy to be reviewed bi-annually.

Next Policy review -

# ST PETER'S CATHOLIC PRIMARY SCHOOL

## Science Policy

### **Introduction**

Science adds to the broad and balanced provision for all pupils and is taught as a part of the core subjects in the National Curriculum. This policy will outline the purpose, nature and management of how science is taught in our school and will inform new teachers of expectations.

### **Aims and objectives**

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 uses and implications of science, today and for the future

It is the aim of this policy that all pupil's needs are met so that their full scientific potential can be met. Pupils should be provided with the opportunity to develop their understanding of science and lay the foundations for continued development of skills in the future.

Science is concerned with investigation and children using their observations to add to their knowledge of the world around them. Throughout St. Peter's School, from Nursery to Year 6, children will develop their scientific skills of observing, predicting, recording, drawing conclusions and, in Years 5 and 6, evaluating. This will lead to children learning to work as scientists, planning and undertaking scientific investigations.

## **Curriculum Organisation**

### **EYFS**

Science in Early Years follows the EYFS framework which is organised through seven areas of learning. The most relevant statements for science are taken from the areas of learning in Communication and Language, Physical Development and Understanding the World.

By the end of Reception, pupils will have been given opportunities within their learning that will allow them to:

- make comments about what they have heard and ask questions to clarify understanding.
- manage basic hygiene and understand the importance of healthy food choices.
- explore the natural world, make observations and draw pictures of animals and plants.
- know similarities and differences between the natural world around them and contrasting environments.
- Understand important processes and changes in the natural world around them, including seasons and changing states of matter.

### **KS1/KS2**

KS1 and KS2 currently follow the Twinkl plan-it scheme of work for science as the basis for curriculum planning. This is organised by year group and topic which help teachers deliver high quality science education supported by subject specialists.

The Twinkl scheme of work provides topics for each year group which link to the programme of study within the national curriculum along with links to the working scientifically aims. Teachers are also encouraged to adapt work for their pupils to promote a love for learning and scientific vigour.

Through these topics children are able to learn about:

#### **KS1**

- Plants
- Animals, including humans
- Everyday materials

- Uses of everyday materials
- Seasonal changes
- Living things and their habitats

### **Lower KS2**

- Plants
- Animals, including humans
- Rocks
- Light
- Forces and magnets
- Living things and their habitats
- States of matter
- Sound
- Electricity

### **Upper KS2**

- Living things and their habitats
- Animals, including humans
- Properties and changes of materials
- Earth and space
- Forces
- Evolution and inheritance
- Light
- Electricity

## **Teaching and Learning**

Our children are given a mix of practical scientific experiences and informed, factual teaching. We provide children with a supportive and constructive environment to extend and deepen their scientific skills.

Pupils are taught to:

- Be curious and ask questions
- Observe nature and the humanly-constructed world around them
- Use scientific enquiry to answer their own questions
- Use a range of scientific language to communicate ideas and findings
- Perform fair practical tests
- Gather and record data to help form conclusions
- Identify scientific evidence to support or refute ideas and arguments

- develop scientific knowledge and conceptual understanding of the three sciences.
- understand the nature, processes and methods of science
- understand the uses and implications of science today and for the future.

We provide children with learning opportunities to build on previous experiences and where possible, and relevant, links are made with science to other curriculum areas. These are only made when the links will enrich the curriculum.

## **Resources**

There is a large selection of scientific resources available at St. Peter's. The school is committed to expanding and updating equipment where necessary and possible.

Teachers are responsible for ensuring the safety of the children during all science lessons and instructing them of the safe and appropriate use of resources. The school are responsible for the general care for all equipment, any damages should be reported to the science lead as soon as possible.

## **Assessment**

Children are assessed currently through class teacher's professional judgement made through observations, key questioning, marking work. This allows staff to identify those working towards the age related expectation, above or below. Assessment options are also available for staff via the Twinkl scheme.

Any practical work which takes place is recorded via photographs or videos which are kept by each year group. These are used to support future plans and to aid ongoing learning.

The science leader can monitor teaching and progression in science by:

- Discussions with teachers and children
- Resource audits
- Assessing work against progression of skills map
- Observing lessons

- Photographic and video evidence.

## **Health and safety**

The health and safety of our pupils and staff is paramount in St Peter's. Therefore, the following guidelines will be followed in order to ensure safety of both children and adults:

- Resources will be regularly checked to ensure they are in good condition and quality. Any broken equipment will be disposed of immediately.
- Heavy equipment will be stored at an easily accessible height to prevent climbing.
- All resources will be kept in the staffroom to ensure safety of pupils.
- Liquids will be kept away from any electrical equipment.
- Where experiments are taking place, staff will carry out risk assessments for resources prior to the lesson to ensure activities are appropriate for all pupils.
- Staff will make pupils aware of the safe way to use equipment.
- Resources will be returned to the correct storage area.

## **Review**

This policy is to be reviewed by staff and governors every two years. Parents are welcome to request a copy of this document.

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