

St. Peter's Catholic Primary School

part of the wider Christus Trust, Multi Academy Trust



Mission Statement

Loving and learning together, with Jesus

Science Policy

Policy Ref No	CUR032
Date of Policy	March 2025
Review date	March 2026

St Peter's Intent

A rich and broad curriculum that develops the children's knowledge and skills, inspiring them through a journey of creativity, discovery and curiosity where everyone is equally respected and valued, equipping the children as independent, resilient, lifelong learners.

Science Curriculum Intent

In Science, we develop the pupil's knowledge and skills in line with the school's vision for knowledge and skills based curriculum.

We inspire creativity by providing thought-provoking and exciting concepts and ideas that we cannot always answer.

We encourage discovery by giving the pupils the means to explore a scientific concept independently and reciprocally.

We foster a curiosity by encouraging the pupils to think outside of the box.

We develop independence through child led learning.

We instil resilience by challenging the pupils with problem solving style investigations.

As a result, the pupils respect and value Science and are lifelong learners.

Purpose

A high-quality science education provides the foundation 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.

Aims

Science teaches an understanding of natural phenomena. We aim to stimulate a pupil's curiosity in finding out why things happen in the way they do. We teach methods of enquiry and investigation to stimulate thought. Pupils will learn to ask scientific questions and begin to reflect upon and appreciate the relevance of their discoveries to the world in which they live as well as the impact science has on a personal, national and global level. Pupils will be taught to use correct and appropriate scientific vocabulary to explain what they have observed. Science cultivates the skills needed to be an independent and inquisitive thinker in an increasing technological world whilst developing personal attributes such as resilience, resourcefulness and ingenuity.

Teaching and learning

Science forms part of our school curriculum which aims to provide a broad and balanced education for all pupils. In line with our school's intent, Science teaching strives to develop core transferrable skills to enable progress actively, personally and creatively.

When teaching Science all staff will provide learning opportunities that are matched to the needs of all pupils. Teaching will engage our pupils and in doing so further their learning and development of Scientific knowledge, skills and curiosity. Teaching will challenge and inspire pupils to take ownership of their progression throughout the Science curriculum and beyond. Teachers provide experiences for the pupils to explore, investigate and understand scientific concepts and ideas.

The teaching of Science develops the key scientific skills of:

- Hypothesising and predicting
- Planning and carrying out investigations
- Observing and measuring
- Presenting results by appropriate means including use of ICT
- Evaluating results and drawing conclusions

The aims of science learning at St Peter's are to:

- Enable the pupils to ask scientific questions and to investigate and experiment in order to progress towards answers to their questions
- Encourage pupils to be curious about things they observe, experiencing and exploring the world around them using all of their senses, taking advantage of the opportunities on offer on our site to use the natural environment and the changing seasons
- Teach the pupils to plan, carry out and evaluate scientific investigations with increasing independence
- Record their findings as accurately as possible in appropriate ways for their age and ability
- Draw conclusions and answers from their work and evaluate the evidence gathered
- To enable all children to take a full and active part in the science curriculum

Monitoring and Assessment

At St Peter's, assessments are made in line with the school assessment policy. Effective assessment for learning is used to ensure planning is based on prior attainment. Assessment is based on teacher judgement, and provides purposeful, effective verbal feedback is used to move the pupils' learning forward within lessons. Through the use of "pink questions" children are encouraged to deepen their understanding by making links across different topics, reflect upon what they have learnt as well as begin to ask scientific questions which can be investigated further.

Retrieval practice

At St Peter's we recognise the value and importance of retrieval practice. We have introduced four key areas to support children's recall of key facts and knowledge. In Science, children will retrieve key facts through brain dumps. These can be written or mental quizzes completed at the beginning of a new topic or lesson. Brain dumps encourage children to recall key facts and knowledge they have learnt so far in their current or previous

Science topic. Cops and Robbers is strategy which encourages children to work in partners to share and recall key facts in Science. Rapid recall is the process of recalling key facts during “lost time” moments throughout this day. This could be whilst lining up for lunch, break time or at the end of the day, where the class teacher will rapidly fire questions to promote quick retrieval of knowledge. Finally, “give me five” is another strategy adopted to support children’s retrieval of key scientific knowledge. This can be used at the beginning, middle or end of the lesson where children list five key things they have learnt or can remember about a specific scientific concept or topic.

Monitoring and Evaluation of this Policy

The policy will be regularly monitored and any necessary changes will be reported to the LGC.