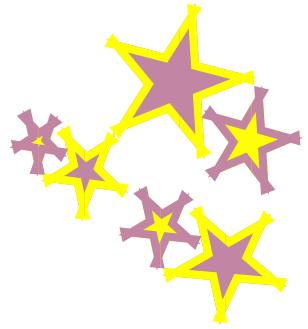




St Mary's CE Primary School



Science Policy

2026-2027

'... there is something extraordinary and wondrous in everybody as unique creations of God. We value all our children as children of God and celebrate difference and diversity within a safe, encouraging Christian school environment in which all flourish.

Therefore, all will aspire with God's strength to reach for the stars.

"I can do all things through him who strengthens me."

Philippians 4:13

Science Statement of Intent

At St Mary's it is our vision to distil a lifelong love of Science within our pupils and to develop children's knowledge, skills and understanding. We work hard to provide a rich and varied curriculum to challenge and meet the needs of our children. We are committed to providing a stimulating, engaging and challenging learning environment and throughout our school children are encouraged to develop and use a range of skills including questioning, researching and observing.

1. The Role of Science

Science teaches an understanding of natural phenomena. It aims to stimulate a child's curiosity in finding out why things happen and how they happen. Through working scientifically, it teaches methods of enquiry and investigation to stimulate creative thought. Children learn to ask open scientific questions and begin to appreciate the way in which science will affect our future, on a personal, national and global level.

2. Aims

Through the teaching of science, we aim for students to be able to:

- Ask questions and use scientific enquiries to answer them
- Plan a range of experiments, making judgements on what variables may need to be changed
- Work scientifically by setting up scientific enquiries, including comparative and fair tests, making careful observations and taking measurements, grouping, identifying and classifying and using secondary resources to find a range of scientific evidence
- Gather, record and report on findings from experiments which may include links to mathematics group work
- Evaluate and draw on conclusions once an experiment has been undertaken

- Know and understand seasonal changes, including weather - Know about life processes, including plants and animals and humans and their evolution and inheritance
- Know and understand aspects of physical geography, including rocks
- Know about the changes and properties of everyday materials and their uses and properties involving electricity, light, sound, magnetism, forces acting upon them and states of matter - Know about the nature of the solar system, including the moon and earth

3. Teaching and learning

At St Mary's science is taught through 'curriculum' topics, where we delve fully into the topic and become experts. We use a variety of teaching and learning styles and cross curricular links. Through this our principal aim is to develop children's knowledge, skills and understanding. Science is taught through whole class teaching as well as engaging the children in enquiry-based research where children have the opportunity to carry out experiments, collect their own data and analyse their results. Wherever possible, we involve children in real and practical scientific activities where children are encouraged to ask, as well as answer, scientific questions.

Science is taught through a variety of cross-curricular links. ICT is used in lessons to enhance learning and children take part in roleplay, discussions and present reports to the rest of the class. Children also write non-chronological reports around scientific topics and biographies about famous scientists, to name a few links to English. We offer opportunities for pupils to apply their mathematical knowledge to their understanding of science through the presentation and analysis of data. Teaching and learning of science at St Mary's expect children to read and spell scientific vocabulary at a level consistent for their key stage.

4. Resources

Resources are kept in the science cupboard, located along the KS2 corridor and are freely available to use across all key stages and all lessons. All equipment should be returned to the store and it is the teachers' responsibility to ensure all equipment is accounted for. If any equipment is broken the science lead will need to be notified for replacements to be ordered. Any equipment that we do not possess should be asked for in advance.

5. Planning

Science is a core subject in the National Curriculum therefore the National Curriculum is used to plan teaching and learning throughout the school. The curriculum offers teachers planning and teaching with a flexible approach. Science planning is carried out as long term plans to map out the science topics across the terms and year. Medium term plans are used to map out specific 'curriculum' topics which are based on the National Curriculum with cross curricular links. The science subject co-ordinator keeps and reviews the long term plans to ensure full coverage of the National Curriculum for each year group.

6. Cross-curricular links

Due to the structure of the curriculum, science is taught through 'curriculum' topics, where a topic is explored in depth and across the curriculum, making links between science and other subjects. These links are crucial as they ensure learning is meaningful and relevant.

6.1 English - Science contributes to the teaching of English by reinforcing skills taught such as speaking, listening, asking appropriate questions, researching information, writing reports/instructions and exposing children to new vocabulary. 6.2 Mathematics - Mathematical skills are applied to science through scientific enquiries being carried out. It provides opportunities to measure, collect and present data, as well as through problem solving.

6.3 ICT - Many computer programmes are incorporated into science lessons to show phenomena which are not possible to see with the human eye, to monitor and record data, use digital microscopes and to use the internet to research areas being covered. With the use of digital photography, children's work can be documented.

6.4 Design and technology - A lot of the knowledge and understanding learnt through science is also needed to complete aspects of design and technology for example, electricity, materials, forces and sound.

6.5 Citizenship - There are many opportunities should be taken for children to work together within science, learning and carrying out experiments as a team, learning to compromise on ideas, listen to, respect and encourage others and learn to share.

7. Assessment, recording and reporting

7.1 Topic assessment - After each science related topic teachers will complete an assessment sheet (on Insight) where the objectives covered, including working scientifically objectives, will be listed and pupils will be assessed as either working towards, working at for that unit.

7.2 Assessment within lessons - informal judgements will be made within lessons and after each completed piece of work the teacher will indicate the level of support (IS, LS, G, PW, DaC) and indicate judgement with a relevant stamp. Written or verbal feedback will be given where required.

8. Monitoring

It is the science co-ordinators job to ensure the quality of science being taught across the school, through observations, book scans and reviewing planning. Feedback will be given both verbally and in written form.

9. Science within foundation stage

Within the area of 'Understanding the world - The world', children will be supported to develop the knowledge, skills and understanding to help them make sense of the world around them. Learning will be supported by offering opportunities for them to use a range of tools, encounter creatures, people,

plants and objects in their natural environments and real-life situations. The children will be encouraged to undertake practical experiments, working with a variety of materials. This area of learning forms the foundation of later science work.

Next review: September 2027

Signed: (Headteacher)

Date:

Signed: (Chair of Governors)

Date:

Policy Date: September 2026