



St Mary's RC Primary School

Science Policy

MISSION STATEMENT

"All are welcome here to walk with Jesus as we love, learn and flourish."

Introduction and Rationale

At St Mary's RC Primary, science stimulates and excites the pupils' curiosity about natural phenomena and events in the world around them. Pupils understand how major scientific ideas contribute toward technological change; impacting on industry, medicine, business and improving quality of life. They learn to question and discuss science-based issues that may affect their own lives, the directions of society and the future of the world, encouraging and supporting the development of science capital.

Science should be a collaborative activity where ideas and suggestions are shared and investigated together. Through practical activities and teamwork, children experience and learn how to work together, have mutual respect for one another and value social cohesion. We believe that a broad and balanced science education is the entitlement of all children, regardless of ethnic origin, gender, class, aptitude or disability.

Through careful planning, we endeavour to teach science in ways that are imaginative, purposeful, well managed and enjoyable. We encourage and support children to ask questions about the world and use scientific processes to try and answer them. We support children to make links between science and other subjects.

Aims, attitudes and skills

Our aims in teaching science include:

- Preparing our children for life in an increasingly scientific and technological world.
- Fostering concern about, and active care for, our environment.
- Helping our children to acquire a growing understanding of scientific ideas.
- Helping to develop and extend our children's scientific concept of their world.
- Developing our children's understanding of the international and collaborative nature of science.

The attitudes we aim to foster include:

- Encouraging the development of positive attitudes to science.
- Building on our children's natural curiosity and developing a scientific approach to problems.
- Encouraging open-mindedness, self-assessment, perseverance and responsibility.
- Building our children's self-confidence to enable them to work independently.
- Developing our children's social skills to work cooperatively with others.
- Providing our children with an enjoyable and exciting experience of science, so that they will develop a deep and lasting interest and may be motivated to study science further.

The skills we wish to develop include:

- Giving our children an understanding of scientific processes.
- Helping our children to acquire practical scientific skills.
- Developing the skills of investigation - including observing, measuring, predicting, hypothesising, experimenting, communicating, interpreting, explaining and evaluating.
- Developing the use of scientific language, recording and techniques.
- Developing the use of ICT in investigating and recording.
- Enabling our children to become effective communicators of scientific ideas, facts and data.

How science is structured through the school

Planning for science is a process in which all teaching staff are involved. We deliver a broad and balanced science education to our children over a two year cycle. Science teaching in the school is about excellence and enjoyment. We adapt and extend the curriculum to match the unique circumstances of our school. Enquiry is at the heart of our children's scientific learning.

Our science curriculum grid and skills progression documents are visible on the school website, alongside the statement of intent for science. Together, these documents ensure clear knowledge and skills progression between year groups and guarantee topics are revisited as outlined in the science programme of study. Teachers adapt and modify the Lancashire Curriculum plans to suit their children's interests, current events, their own teaching style, the use of any support staff and the resources available. We plan enrichment activities such as visitors to school, visits, assemblies and science days to enthuse the children and reinforce and embed learning.

EYFS

We teach science to our Reception children as an integral part of the topic work covered during the year. We link the scientific aspects of the children's work to the EYFS framework. Science makes a significant contribution to developing a child's knowledge and understanding of the world, e.g. through investigating what floats and what sinks when placed in water. Scientific tasks also encourage the children to play and explore, develop critical thinking and participate in active learning as outlined in the characteristics of effective learning.

ICT in science

We use ICT widely in science. Children are given the opportunity to practice science skills and enhance presentations using carefully chosen software. ICT is used for enquiry work, including microscopes with digital cameras, video capture activities, and data logging.

Assessment and recording in science

We use assessment to inform and develop our teaching. Topics begin with an assessment of what children already know. We assess for learning (AfL). Children are involved in the process of self-improvement, recognising their achievements and acknowledging where they could improve. We mark work positively, making it clear verbally, or on paper, where the work is good, and how it could be further improved. Children's work is compared with age appropriate exemplification and assessment judgements are made using the KLIPS. The continuous informal assessment of children's work is used to highlight areas where intervention or catch-up work is needed. This assessment is used to inform teaching throughout the school. Reports to parents describe each child's attitude to science, his/her progress in scientific enquiry and understanding of the content of science.

Health and Safety

A risk assessment will be made, as part of the planning process, before any potentially dangerous scientific activity is undertaken. Children will be informed of any risks or hazards but will also be encouraged to assess and identify risks for themselves. They will be shown how to use scientific equipment safely. School is supported by CLEAPSS

Monitoring and Review

This Science policy will be reviewed annually by the Science curriculum leader.
Date for next review of this document: October 2021

Policy written by Sophie Nowell
Policy date – October 2020



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