



Science Policy

Mission Statement:

St Mary's is a welcoming school who: learn together; live out Catholic values; celebrate all achievement and believe all is possible in Christ's hands.

Intent

From their first day to their last at St Mary's, we support our children on a journey of learning and faith.

In learning, we want our children, by the time they leave our school: to be numerate and literate, to have received their full entitlement in all areas of the curriculum, and to have the opportunities to succeed in areas of particular interest to them.

At St Mary's, we understand that children are naturally curious and we encourage this inquisitive nature throughout their time with us and beyond. Science fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Through the programmes of study in the National Curriculum science document children will acquire and develop these skills throughout their Primary years. We ensure that both the Working Scientifically skills and the children's knowledge is built-on and developed throughout their school career so that they can use equipment, conduct experiments, build arguments and explain concepts confidently, using key words, and continue to ask questions and be curious about their surroundings.

As children progress through KS1 and KS2 we want them to:

- 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
- be equipped with the scientific skills required to understand the uses and implications of science, today and for the future.

Implementation

At St Mary's we strive to ensure pupils experience high quality Science learning which both develops their scientific knowledge whilst developing skills. Science units of learning are timetabled throughout most half terms explicitly, in addition to this, ongoing science units are taught across the whole year giving the children the opportunity to observe changes across a longer period of time. Through building up a body of key knowledge and concepts using creative and practical activities, pupils at St Mary's develop a sense of excitement and curiosity.

Opportunities available in our local area such as our school grounds and woodland, links with parents and connections with local secondary schools and STEM are taken throughout the year to enthuse the children, whilst creating vital links to the real world showing the importance of science around us.

Through the framework of the 2014 National Curriculum, Science taught at St Mary's School, aims to ensure that all children:

- develop age-appropriate, accurate knowledge
- are prepared for a life in an increasingly scientific and technological world
- foster concern about and actively care for our environment
- develop and extend their scientific concept of their world through their everyday experiences
- apply their mathematics knowledge to their understanding of science, including collecting, presenting and analysing data
- ask and answer scientific questions
- plan and carry out scientific investigations using a range of equipment
- evaluate evidence and present their conclusions clearly and accurately
- are given the opportunity to work scientifically
- know, apply and understand the matters, skills and process specified in our curriculum
- to be able to use scientific vocabulary which is appropriate and accurate and which develops and evolves from EYFS to KS1 and through to KS2
- to fulfil the requirements of the 2014 National Curriculum for Science

Roles and Responsibilities:

The Science Subject Leader will:

- Establish a secure profile of Science in school.
- Manage the implementation of the school policy, updating the policy and scheme of work on a regular basis in line with new initiatives
- Order, update and allocate appropriate and sufficient resources
- Model high quality teaching of Science
- Identify needs and arrange INSET so that all staff are confident in teaching and assessing Science
- Keep abreast of new developments and communicate these to staff
- Take an overview of the whole school planning to ensure that there is continuity and progression between year groups and learning is effectively planned for
- Support staff in developing pupils' capability within Science
- Attend appropriate courses and maintain links with the Lancashire advisory team
- Monitor and evaluate standards in teaching and learning in Science e.g.: looking at pupils' work and conducting pupil interviews
- Contribute to the School Development Plan on an annual basis to maintain and raise standards
- Assist colleagues in the planning and delivering of lessons
- Report to governors
- Use assessment of Science to inform future planning
- Identify opportunities for Science in the wider school curriculum.

The class teachers will:

- Plan and deliver Science lessons to their class.

- Ensure science lessons are carried out safely by speaking to the children about potential hazards and care of the equipment they are using
- Assess the work and progress of pupils and communicate to the subject leader.
- Identify any other opportunities for Science in the wider school curriculum.
- Have responsibility for the teaching, learning and assessment of Science and report on pupil progress to parents.

Impact

Assessment, Record Keeping and Reporting:

Assessment for learning is continuous throughout the planning, teaching and learning cycle. Pupil attainment is recorded in a manner to assist the class teacher, inform the subject leader of standards and to report attainment to parents.

Scientific knowledge and skills are taught and the assessment of the acquisition of these skills are assessed by: observation of pupils, discussion, practical activities, differentiation and use of open ended questions, marking with some opportunities provided for self-assessment and target setting, book moderations and assessment tasks.

Review:

The subject leader will review the policy annually. Policy reviewed March 2021