



St Marie's Science Curriculum

Intent

At St Marie's School, our intent is to give every child a broad and balanced science curriculum which reflects the equality and diversity practices in school. It enables them to confidently explore and discover what is around them, so they have a deeper understanding of the world we live in.

Our curriculum enables children to become enquiry-based learners collaborating through researching, investigating and evaluating experiences. It encourages respect for living organisms and for the physical environment.

The Early Years Foundation Stage Curriculum supports children's understanding of science through the planning and teaching of 'Understanding the World.' Children find out about objects, materials and living things using all their senses looking at similarities, differences, patterns and change.

Both the environment and skilled practitioners foster curiosity and encourage explorative play and children are motivated to ask questions about why things happen and how things work. Our children are encouraged to use their natural environment around them to explore.

We provide exciting, practical hands-on experiences that encourage curiosity and questioning. Our curriculum is well-planned and sequenced and has been carefully designed and developed with the need of every child at the centre of what we do. We equip our children with not only the minimum statutory requirements of the science National Curriculum, but prepare them for opportunities, responsibilities and experiences beyond their primary school years.

Implementation

At St Marie's, science topics are taught within each year group in accordance with the National Curriculum and are carefully sequenced to coincide with the season of the year which best allows the outcomes to be demonstrated.

- Every year group will build upon the learning from prior year groups, therefore developing depth of understanding and progression of skills.
- Children will build the skills to explore, question, predict, plan and carry out investigations and observations as well as conclude their findings.
- Children present their findings and learning using science specific language, observations and diagrams.
- To support children in their ability to 'know more and remember more', there are regular opportunities to review the learning which has taken place in previous topics as well as previous lessons.
- Children have access to a knowledge organiser for each topic which details some key science curriculum information, dates and vocabulary. This is not used as part of an assessment, but to support children with their acquisition of knowledge and is used as a reference document.
- Opportunities for CPD are regularly reviewed to ensure high levels of confidence and knowledge among teachers is maintained.
- Effective use of education visits and visitors are planned, to enrich and enhance the children's learning experiences within the science curriculum.

- Scaffolding is provided by teachers where necessary, to ensure each child can access the science curriculum. E.g., children are given clear success criteria to achieve the learning intention with differing elements of independence.
- Children are regularly given the opportunity for self or peer assessment.
- Cross-curricular links are planned for, with other subjects such as Maths, English and Computing.
- Science themed assemblies are performed to the school by different classes, both enhancing their own knowledge and that of their audience.
- Children in EYFS enjoy spending time outdoors exploring mini-beasts and their habitats, observing the changing seasons, plants and animals. Children participate in baking sessions which allow them to experience changes in state as ingredients are mixed, heated and cooled.
- By listening to children's opinions on their learning - and hearing them talk about their scientific knowledge and enjoyment of science - the Science Coordinator can gain an understanding of the status of science among the children, and act accordingly.

Impact

Through our enriched science curriculum, children from St Marie's will:

- Be able to question ideas and reflect on knowledge.
- Retain knowledge that is pertinent to science with a real-life context.
- Work collaboratively to investigate and experiment.
- Demonstrate a love of science and an interest in further study and work in this field.
- Achieve outstanding progress over time, across key stages, relative to their individual starting point and their progression of skills. Children will therefore be expected to leave St Marie's reaching at least age-related expectations for science.
- Be enthusiastic and resilient learners who are not afraid to make mistakes, and to test and challenge theories.