

ST JOSEPH'S CATHOLIC PRIMARY SCHOOL



SCIENCE POLICY

Reviewed: September 2025

To be reviewed: September 2027

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SCIENCE POLICY

SCIENCE AT ST JOSEPH'S

This Science Policy aims to outline our comprehensive approach to teaching Science at St Joseph's, in accordance with the 2014 National Curriculum in England, and to uphold the expectations set by Ofsted. Our commitment is to ensure that all learners develop a strong understanding of scientific concepts, foster a positive attitude towards learning, and achieve their full potential in Science. Through a carefully planned and engaging curriculum, we strive to nurture curiosity, encourage enquiry, and equip pupils with the knowledge and skills needed to explore and understand the world around them.

VISION STATEMENT

At St. Joseph's, our vision is to provide a high-quality science education that ignites curiosity, encourages exploration, and empowers children to understand and care for the world around them. Through a broad and balanced curriculum, we aim to develop confident, inquisitive learners who think critically, ask meaningful questions, and enjoy discovering how science shapes our lives and our future.

INTENT

At St Joseph's, we are committed to delivering a science curriculum that builds a secure foundation of knowledge and understanding across the disciplines of biology, chemistry, and physics. We aim to foster a sense of wonder and curiosity in every child, encouraging them to explore the world around them and ask thoughtful questions. Our curriculum is designed to develop pupils' ability to work scientifically, equipping them with the skills to observe, investigate, record, and evaluate. We also strive to promote environmental awareness and responsibility, helping children understand their role in caring for the planet. Above all, we ensure that science is accessible to all learners, regardless of background or ability.

IMPLEMENTATION

At our school, Science is taught as a discrete subject across all year groups on a two-year rolling programme, following the National Curriculum and a carefully sequenced progression of knowledge and skills. Lessons are practical and enquiry-based, encouraging children to work scientifically through observation, prediction, investigation, and evaluation. Teachers use a range of resources, including outdoor learning, digital tools, and cross-curricular links, to make science meaningful and engaging. Assessment is ongoing and informs planning, ensuring all pupils are supported and challenged appropriately. Opportunities for enrichment, such as science clubs, themed days, and visits, further enhance pupils' learning experiences.

IMPACT

The impact of our Science curriculum is that when children leave our school our pupils will have developed a secure understanding of key scientific concepts and vocabulary. They will be able to apply their scientific knowledge and skills confidently and independently, demonstrating curiosity, resilience, and enthusiasm for learning. Pupils will be well prepared for the transition to secondary education, equipped with the ability to think critically and solve problems. The impact of our science curriculum is monitored through assessment outcomes, pupil voice, and scrutiny of work, which together show that children make good progress and enjoy their science learning. Ultimately, our aim is for every child to leave primary school with a lifelong love of science and a deep appreciation for the role it plays in shaping our world.

ASSESSMENT

Assessment in Science is used to monitor pupils' understanding, track progress, and inform future teaching. Both formative and summative assessment strategies are employed throughout the academic year to ensure that children are developing a secure grasp of scientific knowledge and skills. Formative assessment takes place regularly through questioning, class discussions, observations, and the marking of written work. This allows teachers to identify misconceptions, respond to pupils' needs, and adapt their teaching accordingly. Summative assessments, such as end-of-unit quizzes, written tasks, and practical investigations, provide a more formal measure of pupils' attainment. These assessments evaluate children's ability to apply scientific vocabulary, carry out enquiries, interpret results, and explain scientific concepts and processes. The outcomes of these assessments are used to ensure that learning objectives are being met and to support pupils in becoming more confident and independent learners in Science. Children's attainment and progress are recorded in our in-house tracking system, which helps inform planning and supports transition between year groups.

RETRIEVAL

At St Joseph's, retrieval practice is used in Science to help pupils consolidate and retain key knowledge over time. Teachers regularly provide opportunities for children to revisit prior learning, both within individual units and across year groups. Before starting a new topic, pupils are encouraged to reflect on previously taught concepts, allowing them to make meaningful connections and build on their existing understanding. Lessons often begin with short quizzes, recap activities, or discussions that prompt pupils to recall scientific vocabulary, processes, and facts—such as identifying parts of a plant, describing changes of state, or explaining the effects of different forces. These activities are designed to strengthen memory and improve long-term retention by encouraging pupils to retrieve information independently, without relying on notes or prompts. This approach supports deeper learning and helps children become more confident in applying their scientific knowledge in a range of contexts.

PLANNING

At St Joseph's, Science is planned as a discrete subject and is supplemented by high-quality resources, including Inspiring Science, Oak Academy and PLANassessment matrices which support teaching and learning in alignment with the National Curriculum. These resources enhance science lessons by providing accessible content that promotes pupil engagement and

deepens understanding of key scientific concepts. Due to our mixed-age classes, we follow a two-year rolling programme to ensure full coverage of the Science curriculum for all pupils. Planning is carefully sequenced to ensure progression and continuity across year groups, allowing children to build on prior knowledge and develop their scientific skills over time. In addition to regular lessons, we incorporate special themed days and whole-school activities, such as Forest School and National Science Week, which provide opportunities for practical exploration and enrichment. This approach ensures that science learning is both structured and inspiring, helping pupils to become confident and curious learners.

CONTINUOUS IMPROVEMENT

At St Joseph's, we are committed to the continuous improvement of Science teaching and learning. Regular reviews of teaching practices and curriculum implementation are conducted to ensure high standards and effective delivery. Feedback is actively sought from staff, pupils, and parents to identify strengths and areas for development. Pupil performance data is carefully analysed to inform strategic decisions regarding curriculum planning, teaching approaches, and resource allocation. These findings are shared with the Senior Management Team and discussed collaboratively with staff to guide improvements. Outcomes and developments are then reported to the Governors through the Curriculum Committee, ensuring transparency and accountability in our pursuit of excellence in Science education.