



Intent

At Great Missenden Church of England School, we are committed to providing a high-quality science education that develops pupils' curiosity, confidence and understanding of the world around them. From the Early Years onwards, our curriculum is designed to ensure that all pupils, regardless of starting point, acquire secure and connected scientific knowledge while developing the skills to think and work scientifically.

Our science curriculum reflects our school vision and values. Through the study of science, pupils are encouraged to explore and appreciate the natural world, developing a sense of awe and responsibility for the environment and the communities within it. They learn to work collaboratively, respect evidence and consider the ideas of others, while developing the confidence to ask questions, think critically and seek answers through enquiry.

We aim to inspire a lifelong interest in science by enabling pupils to explore ideas, reflect on their understanding and recognise the relevance of science in their lives and the wider world. Through a carefully sequenced curriculum, pupils build both substantive knowledge and disciplinary knowledge, allowing them to make sense of scientific concepts and apply their learning in meaningful contexts.

Implementation

At Great Missenden, science is taught as a discrete subject, with opportunities to make meaningful links across the wider curriculum where appropriate. Our curriculum is structured around the key topics identified within the National Curriculum, ensuring full coverage and clear progression of knowledge across year groups.

In the Early Years, scientific learning is rooted in the areas of learning outlined in Development Matters, particularly Understanding the World, alongside Communication and Language and Personal, Social and Emotional Development. These experiences provide the foundation for later scientific learning, supporting pupils to explore, observe, ask questions and begin to make sense of the world around them. This early learning is carefully built upon as pupils move into Key Stage 1 and beyond.

Knowledge within each topic is carefully sequenced and supported by the explicit teaching of subject-specific vocabulary, enabling pupils to develop both understanding and fluency in scientific language. Working Scientifically skills are planned for progressively and are applied across all areas of the curriculum, ensuring pupils develop the ability to enquire, investigate and reason effectively.

Teaching is designed to build on prior learning, with opportunities for retrieval and consolidation embedded within lessons. A range of strategies, including questioning, discussion, practical enquiry and recording of results, supports pupils in developing a deeper understanding of scientific concepts.



Teaching is carefully scaffolded to ensure all pupils can access the curriculum, with appropriate support and challenge provided so that every learner can make progress and develop confidence in science.

Enrichment opportunities, such as science week, trips, themed days and extra-curricular activities, further enhance the curriculum and promote engagement, providing pupils with meaningful and memorable experiences of science beyond the classroom.

Impact

The impact of our science curriculum is reflected in pupils' secure knowledge, their ability to apply Working Scientifically skills and their confidence in engaging with scientific ideas. Pupils demonstrate curiosity, ask thoughtful questions and are able to explain their understanding using appropriate scientific vocabulary.

Assessment is used effectively to inform teaching and ensure progression. Teachers use a range of formative assessment strategies within lessons, including questioning, discussion and retrieval activities, to identify misconceptions and provide timely support through a 'keep up, not catch up' approach. Summative assessment is used at the end of units to measure attainment against clearly defined end points, including the use of carousel activities which allow pupils to demonstrate their understanding through practical and oral responses as well as written work. This enables teachers to make accurate judgements about pupils' knowledge and skills.

As a result, pupils leave Great Missenden with a strong foundation in science, a clear understanding of key concepts and the skills required to continue their scientific learning. They recognise the relevance of science in everyday life and are well prepared for the next stage of their education.