

Science Curriculum Statement

At St Mary's Middle School, our science curriculum is designed to develop curious, knowledgeable and confident young scientists. Through a carefully sequenced programme of study based on the Wessex Shared Curriculum, pupils build a strong foundation of scientific knowledge alongside the practical and investigative skills needed to understand and explain the world around them. The curriculum is underpinned by working scientifically, enabling pupils to ask questions, plan and carry out investigations, analyse evidence and communicate conclusions with increasing accuracy and confidence.

Across Years 5 to 8, pupils study a broad range of topics from biology, chemistry and physics. Learning begins with key concepts such as materials, Earth and space, forces and living things before progressing to more complex ideas including particle theory, cells and body systems, energy, chemical reactions, electromagnetism, respiration, photosynthesis and the structure of the Universe. This carefully planned progression ensures that knowledge is revisited and built upon over time, helping pupils make meaningful connections across different areas of science.

Practical science is at the heart of our curriculum. Pupils develop proficiency in using scientific equipment safely and accurately, including microscopes, electrical circuit components and Bunsen burners. Through regular investigations and hands-on experiences, pupils learn how scientists gather evidence, test ideas and solve problems. Opportunities for enquiry are embedded throughout all year groups, fostering resilience, critical thinking and a deeper understanding of scientific concepts.

Our curriculum encourages pupils to appreciate the relevance of science in everyday life and to understand its importance in addressing global challenges. By exploring topics such as evolution, energy transfer, ecosystems, health, space and technology, pupils develop scientific literacy and are equipped to engage with the world as informed citizens.

We aim for every pupil to leave St Mary's with a secure body of scientific knowledge, the confidence to think scientifically, and an enthusiasm for continuing their scientific journey beyond Key Stage 3. Through challenge, curiosity and practical exploration, we inspire pupils to become lifelong learners who can question, investigate and understand the world around them.