



Intent	Delivery	Impact
<p>Vision <i>The science curriculum at St Mark's is carefully designed to engage and inspire all learners, including disadvantaged pupils, to fulfil their God given potential. It promotes curiosity about the natural world and develops secure scientific knowledge and understanding. Through a well-sequenced curriculum, students are supported to think scientifically, apply their knowledge in different contexts, and develop a lifelong appreciation and enjoyment of science.</i></p> <p>The curriculum is designed to develop:</p> <ul style="list-style-type: none"> Scientific literacy: enabling pupils to explain phenomena, evaluate evidence and engage critically with scientific issues Disciplinary knowledge: working scientifically through enquiry, analysis, modelling and evaluation Schema development: secure mental models that allow pupils to connect ideas across biology, chemistry and physics <p>Pupils are explicitly taught to:</p> <ul style="list-style-type: none"> Use models, theories and representations to explain the world Apply mathematical skills within scientific contexts Develop precision in scientific language (oracy, reading and writing) <p>The curriculum provides cultural capital by exposing pupils to the role of science in society, future careers and</p>	<p>At KS3 the curriculum is carefully sequenced, knowledge-rich, and aligned to the National Curriculum, focusing on key scientific ideas such as particles, energy, forces, cells, and interdependence. A spiral model ensures concepts are revisited with increasing complexity, prior knowledge is built systematically, and misconceptions are addressed over time. Teaching prioritises explicit instruction of key concepts and vocabulary, alongside regular retrieval practice to strengthen long-term memory. Practical work is purposeful and linked to disciplinary knowledge. Students develop working scientifically skills, including planning investigations, analysing and evaluating data, and understanding variables, reliability, and validity. Adaptive teaching, including scaffolding, modelling, targeted questioning, and flexible support, ensures all learners, including SEND, EAL, and disadvantaged pupils, can access the curriculum.</p> <p>At KS4, students follow AQA GCSE Science through an ambitious curriculum that builds on KS3 and supports Combined and Separate Science pathways. It deepens conceptual understanding, develops application in unfamiliar contexts, and strengthens exam literacy and scientific reasoning through required practical work, data interpretation, and extended responses.</p> <p>At KS5, students study OCR Biology, OCR B Chemistry, and Edexcel Physics. The curriculum develops independent learners with strong conceptual understanding, synoptic links, and practical competence, preparing them for higher education, apprenticeships, and employment. Students are supported with exam preparation and learning via after school interventions.</p>	<p>The impact of the curriculum is seen through:</p> <ul style="list-style-type: none"> Strong outcomes at KS4 (attainment and progress) <ul style="list-style-type: none"> Over the last 3 years students have attained an APS of 6 and SPI of 1.3 Disadvantaged students have attained similar scores of APS 5.5 and SPI 1.1 High uptake of Separate Sciences Strong progression to A-Level sciences Successful transition to STEM-related higher education and careers Regular Student Learning Reviews ensure the curriculum remains relevant and engaging - feedback is shared with teachers Leaders use rigorous quality assurance (book looks, learning walks, and data moderation) to ensure consistency and to identify where further T&L adaptation is required. Students engage in extra-curricular activities including science club, science week and super-curricular events. <p>Pupils leave St Mark's with:</p> <ul style="list-style-type: none"> Secure and connected scientific knowledge The ability to think scientifically and critically Confidence in applying their understanding to new contexts

global challenges, fostering curiosity and aspiration for further study and STEM pathways.

Assessment is ongoing and integral, using retrieval, cumulative assessments, PPEs, and synoptic exams. Feedback supports progress and metacognition.

They are well-prepared to contribute to society as scientifically literate citizens.