



Science Curriculum Offer

Intent	<p>Purpose: Pupils will be inspired to see themselves as scientists. They will allow their curiosity to drive them to ask meaningful questions about the world around them and use scientific methodology to investigate and problem-solve. Pupils will be encouraged to recognise the importance of rational explanation and will be excited to learn about natural phenomena. They will recognise the importance of this field in an ever-changing world and the role that they can play within it.</p> <p>Relationships: Pupils will understand the interrelationship between the various areas covered in Science and between Science and other subjects. Cross-curricular links are made with Maths through taking measurements and analysing data; English when reading for research and when clearly recording and communicating their findings; Computing when using technology to collect, manipulate and share information; Geography when focusing on the environment, weather and habitats; Design and Technology when learning about materials and mechanisms; PSHE and RHE when learning about health and human development; History when learning about significant scientific developments through time and Music when learning about sound in Year 4.</p> <p>Impact: Pupils in EYFS will be confident to ask their own questions about the world and to select resources with which to explore their interests. They will be supported with developing a wider scientific vocabulary. Pupils in KS1 and KS2 will be able to talk confidently and enthusiastically about scientific concepts covered by the National Curriculum. They will be able to work scientifically, showing increasing sophistication and independence when planning, predicting, investigating, analysing results and drawing conclusions.</p> <p>Metacognition: Pupils are encouraged to build their scientific subject knowledge through practical experiences. National Curriculum objectives for 'Working Scientifically' are explicitly taught, enabling greater independence and understanding when planning investigations and experiments. In addition, teachers use various strategies, games and low-stakes quizzes to consolidate and extend pupils' understanding of key concepts, as well as highlighting any misconceptions. Knowledge organisers are used to support pupils' understanding of key concepts and vocabulary.</p> <p>Experiences: Pupils are exposed to a range of high-quality educational experiences. In the school environment, this includes access to our various outdoor zones, visitors and clubs. We utilise the surrounding environment by embarking on local area visits, providing the opportunity for children to apply their learning to a new context.</p>
Implementation	Science in EYFS is predominantly delivered as part of continuous provision. This is achieved through the use of high-quality learning environments and resources. As appropriate, EYFS teachers deliver adult-



	<p>led science inputs to inspire pupils, exposing them to new scientific concepts and vocabulary.</p> <p>Within KS1 and KS2, Science planning is based on the National Curriculum content for each year group/key stage and is supported by the White Rose Scheme. Concepts are strategically revisited to ensure that new learning builds on prior experiences. Learning is appropriately scaffolded to ensure that all pupils flourish as scientists as they move through the school.</p> <p>Teachers assess using a range of strategies, such as: oral questioning, partner talk, whole class discussions, low-stakes quizzes, and analysis of pupils' independent written work. Pupils are given the opportunity to self-assess and self-mark when appropriate, identifying opportunities for improvement and critical thinking.</p> <p>Pupils are considered to be GDS if they seek to extend their scientific understanding by asking further questions and suggesting ways in which these could be answered. GDS pupils demonstrate confidence and independence when working scientifically and applying their knowledge to new and challenging contexts.</p> <p>English and Oracy skills are used when recording learning and accessing key information. Pupils will be given opportunities to explain and present their learning about a variety of scientific concepts, both independently and as part of a group.</p> <p>Subject leaders have a high standard of subject knowledge, support the teaching of their subject, and ensure that staff feel confident to teach this area of the curriculum.</p>
Impact	<p>Pupils will see themselves as scientists. They are enthused about Science, and inspired to extend their knowledge and understanding. Pupils will be confident, curious and passionate, often taking their learning beyond the classroom.</p> <p>Pupils will be able to articulate ways in which they can answer scientific questions by using research, comparative and fair testing, pattern seeking, grouping and classifying, and observing changes over time.</p>