

## Science Intent, Implementation and Impact Statement

<u>Intent</u>	<u>Implementation</u>	<u>Impact</u>
<p>Learners at St Margaret's to develop an enthusiasm and enjoyment of scientific learning and discovery.</p>	<p>Through our planning, we involve problem solving opportunities that allow children to find out for themselves which will build their <b>resilience</b>.</p> <p>Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. This <b>curiosity</b> is celebrated within the classroom. Planning involves teachers creating engaging lessons, often involving high-quality resources to aid understanding of conceptual knowledge.</p> <p>Teachers use precise questioning in class to test conceptual knowledge and skills, and assess learners regularly to identify those children with gaps in learning, so that all students keep up.</p> <p>Each lesson is delivered through the posing of a big question which will allow learners to engage and reflect throughout the lesson and science unit.</p>	<p>Children learn the possibilities for careers in science as a result of our community links and connection with national agencies such as the STEM association and links with Birmingham University.</p> <p>Children will be able to question ideas and reflect on knowledge maintaining their <b>curiosity</b>.</p> <p>Children enjoy and are enthusiastic about science in school.</p>
<p>To build a Science curriculum which develops learning and results in the acquisition of knowledge and enable children to become enquiry-based learners.</p>	<p>At St Margaret's, we have a clear and comprehensive planning in line with the National Curriculum. We build upon the learning and skill development of the previous years. As the children's knowledge and understanding increases, and they become more <b>independent</b> and proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident and <b>resilient</b> in their growing ability to come to conclusions based on real evidence.</p> <p>Scientific enquiry skills are embedded in each topic the children study and these topics are revisited</p>	<p>Children will achieve age related expectations in Science at the end of their cohort year. ☑ Children will retain knowledge that is pertinent to Science with a real life context.</p> <p>Our Science Curriculum is high quality, well thought out and is planned to demonstrate progression.</p> <p>Children are becoming increasingly <b>independent</b> in science, selecting their own tools and materials, completing pupil lead investigations and choosing their own strategies for recording.</p>

	<p>and developed throughout their time at school. Topics, such as Plants, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their <b>enthusiasm</b> for the topics whilst embedding this procedural knowledge into the long-term memory.</p> <p>A cycle of lessons for each subject, which carefully plans for progression and depth.</p> <p>Children will reflect on previous learning and cross curricular links will be made wherever possible.</p> <p>Children will be able to build on prior knowledge and link ideas together, enabling them to develop their <b>emotional intelligence</b> through questioning and becoming enquiry based learners.</p>	<p>Children will be able to explain the process they have taken and be able to reason scientifically.</p> <p>Children will work collaboratively and practically to investigate and experiment.</p> <p>Children will achieve age related expectations in Science at the end of their cohort year.</p> <p>Children will retain knowledge that is pertinent to Science with a real life context.</p> <p>Children will be able to question ideas and reflect on knowledge.</p> <p>Children will work collaboratively and practically to investigate and experiment.</p> <p>Children will be able to explain the process they have taken and be able to reason scientifically.</p> <p>There is a clear progression of children's work.</p>
<p>Learners at St Margaret's to be immersed in scientific vocabulary, which aids their knowledge and understanding not only of the topic they are studying, but of the world around them</p>	<p>Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career.</p> <p>New vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the topics.</p> <p>Specialist vocabulary for topics is taught and built up, and effective <b>questioning</b> to communicate ideas is encouraged.</p>	<p>There is a clear progression of vocabulary in children's work.</p> <p>A richer vocabulary which will enable to articulate their understanding of taught concepts.</p>

	Knowledge Organisers allows learners to have access to key language and meanings in order to understand and readily apply to their written, mathematical and verbal communication in Science.	
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- **Blue, bold writing refers to our whole school curriculum drivers.**