

CURRICULUM SUBJECT OVERVIEW - SCIENCE



<p style="text-align: center;">Our School Vision</p> <p>The children of The Hawthorns are at the heart of all that we do. As a whole school community, we nurture and challenge our children within a caring environment, so they grow both personally and academically.</p> <p>We are passionate about developing the whole child; encouraging them to have a growth mindset, believe in themselves, aspire to achieve their best and become resilient lifelong learners.</p> <p>We uphold a strong sense of belonging by valuing our children’s individuality and celebrating diversity to ensure all our children thrive.</p>	<p style="text-align: center;">Subject Intent</p> <p>At The Hawthorns, we aim to introduce the children to moments of genuine awe and wonder about the world, building on these with subject specific knowledge, vocabulary and scientific skills that will inspire a lifelong curiosity and interest in biology, chemistry and physics. We want to equip them with the ability to ask, and find the answer to, a range of scientific questions in a variety of ways, making connections between new and past learning, all the while reinforcing the understanding that scientific knowledge can change, as people are constantly building on the experiences of scientists from the past and present. We aim to ensure that our children understand the impact of science in everyday life, including the role it plays in solving challenges facing the world.</p>
<p style="text-align: center;">Our Curriculum Vision</p> <p>At The Hawthorns Primary School, we aim to provide a unique and creative learning experience with high aspirations for all our pupils.</p> <p>Our exciting and innovative curriculum is tailored to inspire and challenge each individual child so they develop a passion for learning and aspire to be successful.</p> <p>The curriculum offers a wealth of knowledge through real life experiences to foster a spirit of curiosity and purpose, encouraging children to make connections and equipping them with the skills needed for their futures.</p>	<p style="text-align: center;">Cultural Capital</p> <p style="text-align: center;">The essential knowledge that children need to be educated citizens</p> <p>Children know that it is okay to NOT know the answer – we promote a safe environment for children to ask questions (“I don’t know, let’s see if we can find out”). We make sure that children are aware of the wide range of career options with science from an early age by increasing exposure to the wide variety of STEM careers, challenging popular stereotypes around STEM career choices for boys and girls. We create different opportunities for children to explore STEM and provide opportunities for children to explore STEM at museums, galleries and science centres, as well as welcoming visitors with a science background into the school to enhance children’s awareness of the scientific world, from bee-keeping to engineering. We develop children’s understanding of the natural world through our annual Living Eggs and butterflies projects, as well as linking science to our gardening year with children learning about the different ways of propagating plants. and ensuring that children can appreciate the relevance of science in all aspects of our lives – including the importance of scientists from the past and present. Through this, we aim to show children that science is constantly changing with new emerging evidence and information. Outside of science lessons, children are reminded about the important role science plays in the challenges facing the world – for example tackling plastic pollution in the oceans.</p>
<p style="text-align: center;">Implementation</p> <p>At Hawthorns Primary, reception children are introduced to scientific ideas as set out in the Early Years Foundation framework. Across both KS1 and KS2 the National Curriculum set out for Science in 2014 is followed. We implement these foundations through our threshold concepts, building upon the knowledge and skills attained previously, and linking to our termly topics as applicable. Science lessons include the teaching of topic specific subject knowledge, the development of a good understanding and use of specific scientific vocabulary as well as teaching children to use the relevant scientific skills required when undertaking scientific enquiry.</p>	<p style="text-align: center;">Impact</p> <p>All children will have:</p> <ul style="list-style-type: none"> An age appropriate subject knowledge of the scientific concepts taught. A wide variety of skills linked to scientific enquiry, including those related to maths (e.g. statistics and data handling) A rich, scientific vocabulary which will enable children to clearly articulate their understanding of taught concepts. High aspirations which will see them want to engage in further scientific study and careers that encompass the sciences.