



South Hill Primary School – Science overview

School vision

All pupils at South Hill flourish through a nurturing environment, which builds confidence and resilience and a lifelong love of learning.

Science vision

To develop a sense of excitement and curiosity about natural phenomena and equip children with the scientific knowledge required to understand the uses and implications of science, how it has changed our lives and how it is vital to the world's future.

Intent	Implementation	Impact		
<p>At South Hill, we follow the National Curriculum for Science and use 'The Learning Challenge Curriculum' (The Weave) for our progression of skills and knowledge across the school.</p> <p>Our intent is to deliver a Science curriculum:</p> <ul style="list-style-type: none"> • To regularly incorporate outdoor learning within Science lessons to develop engagement, curiosity and applying Science learning to the real world • To ensure working scientifically skills are developed through frequent practical experiences and investigations • To record in a variety of ways (KS1 and KS2) that are engaging and appropriate and increase writing opportunities (particularly in KS2) to demonstrate scientific knowledge and use of scientific vocabulary <p>The sequence for our Science topics, showing our progression of skills and knowledge throughout the school, are mapped out in our:</p> <ul style="list-style-type: none"> • Science long term plan • Science action plan • Science Knowledge organisers • Science progression document • Science Subject policy <p>Through our teaching of Science, we want all of our children to develop a mastery of scientific knowledge, skills and understanding broken down in the National Curriculum and The Learning Challenge Curriculum (The Weave).</p> <p>Through our teaching of Science, we want all of our children to develop a mastery of the following working skills:</p> <table style="width: 100%; border: none;"> <tr> <td style="vertical-align: top; width: 50%;"> <p>KS1</p> <ul style="list-style-type: none"> • Observing closely • Performing tests • Identifying and classifying • Recording findings </td> <td style="vertical-align: top; width: 50%;"> <p>KS2</p> <ul style="list-style-type: none"> • Planning • Obtaining and presenting evidence • Considering evidence and evaluating </td> </tr> </table>	<p>KS1</p> <ul style="list-style-type: none"> • Observing closely • Performing tests • Identifying and classifying • Recording findings 	<p>KS2</p> <ul style="list-style-type: none"> • Planning • Obtaining and presenting evidence • Considering evidence and evaluating 	<p>In the EYFS, the building blocks to Science are taught through 'Communication and Language', 'Physical Development' and 'Understanding the world'.</p> <p>In Key Stage 1, pupils will experience, observe and investigate the world around them through first-hand practical experiences as well as secondary sources such as books, photographs or videos. They will be encouraged to be curious and ask questions. Pupils will develop understanding of scientific ideas by using different types of scientific enquiry and using simple scientific language.</p> <p>In Lower Key Stage 2, pupils broaden their scientific view of the world around them through exploring, discussion, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and beginning to develop their ideas about functions, relationships and interactions. Pupils will continue to develop working scientifically skills and make some decisions about which type of enquiry is most suitable. They will draw conclusions and use increasing scientific vocabulary to discuss and write about their learning. In Upper Key Stage 2, pupils develop a deeper understanding of a wide range of scientific ideas through exploring and discussion; asking questions; and analysing functions, relationships and interactions more systematically. They will encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates as well as recognising that scientific ideas change and develop over time. Pupils will select the most appropriate ways to answer science questions using different types of scientific enquiry and draw conclusions based on their data and observations, using evidence to justify their ideas, and scientific knowledge, understanding and vocabulary to explain their findings.</p> <p><u>Teaching and learning sequence for Science</u></p> <p>Inspire/ Cultural capital</p> <ul style="list-style-type: none"> • Hook/ inspiration lesson to immerse the children in their new topic or to end a topic and to promote a love of learning and love of Science itself <p>Investigation and Enquiry</p> <ul style="list-style-type: none"> • Fieldwork and trips to inspire learning and give 'hands on' scientific experiences • Encourage the pupils to be curious, critical thinkers through open ended tasks and questions • Encourage the children to relate science to the world around them <p>Clear learning journey</p> <ul style="list-style-type: none"> • A clear learning journey (Knowledge organisers), from EYFS to Year 6, where skills and knowledge are built upon continually • Revisit learning regularly to ensure children can make links between different topics covered and so they can commit this to their long term memory <p>Application</p> <ul style="list-style-type: none"> • Mastery curriculum where pupils deepen and develop their understanding • Pupils acquire skills and knowledge to research, investigate, evaluate, understand, present, analyse and communicate a range of scientific theories <p>In every lesson, teachers will:</p> <ul style="list-style-type: none"> • Ensure lessons are accessible for all pupils • Promote British values • Use regular 'Assessment for learning' • Make use of excellent quality texts or sources of information • Create a rich vocabulary environment 	<p>Pupils will be assessed by teacher's reviewing skills and knowledge taught from the NC and Weave. This will be recorded termly using our 'Foundation assessment tracker'.</p> <p>Pupils will have developed Scientific knowledge and skills to help them understand the world and know how to carry out investigations to answer scientific questions.</p> <p>Pupil's will fulfil the requirements of the National Curriculum and become competent Scientists who are passionate and engaged citizens, whilst at South Hill.</p> <p>The impact of the Science curriculum will be evidenced through continuous and effective monitoring by the subject leader and SLT, through:</p> <ul style="list-style-type: none"> • Action plan • Learning walks • Pupil voice • Staff voice • Parent voice • Lesson studies • Book scrutiny • Staff CPD • Effective planning
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