

Science Curriculum Statement

At Holy Family, we encourage children to be inquisitive throughout their time at the school and beyond. The Science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. The curriculum is designed to ensure that children are able to acquire key scientific knowledge through practical experiences; using equipment, conducting experiments, building arguments and explaining concepts confidently. The school's approach to science takes account of the school's own context, ensuring access to people with specialist expertise and places of scientific interest as part of the school's commitment to learning outside the classroom.

INTENT	IMPLEMENTATION	PLANNED IMPACT
<p>Why our Science curriculum looks like this: At Holy Family we want our children to be naturally curious about the world around them. Our curriculum has been developed by staff to ensure full coverage of the 2014 national curriculum and to foster a sense of wonder about natural phenomena: Science should be exciting for young people, providing them with the skills and opportunities to improve their futures alongside the acquisition of knowledge, concepts and positive attitudes. Throughout our programmes of study, our children will acquire and develop the key knowledge that has been identified within each unit and across each year group. We will ensure that science is a largely practical subject, which develops curiosity, enquiry and reasoning skills. Children will therefore be able to apply their knowledge of science when using equipment, conducting experiments, building arguments and explaining concepts confidently and continue to ask questions and be curious about their surroundings.</p>	<p>We believe that students deserve a broad and ambitious Science curriculum, rich in skills and knowledge, which ignites curiosity and prepares them well for future learning or employment. Science will be taught in planned and arranged topic blocks by the class teacher. Our Science curriculum will give students the opportunity to:</p> <ul style="list-style-type: none"> • Articulate scientific concepts clearly and precisely; We build upon the knowledge and skill development of the previous years. As the children's knowledge and understanding increases, they become more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence. • Develop practical skills by working scientifically; Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching. This is developed through the years, in-keeping with the topics. • To accurately read and interpret technical terminology; 	<p>The successful approach at Holy Family results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world.</p> <ul style="list-style-type: none"> • Our engagement with the local environment, including our own wild flower garden, ensures that children learn through varied and first hand experiences of the world around them. • Through various workshops, trips and interactions with experts,, children have the understanding that science has changed our lives and that it is vital to the world's future prosperity. • Children learn the possibilities for careers in science, as a result of our community links and connection with national agencies including the STEM association.

<p>The key knowledge identified by each year group is informed by the national curriculum and builds towards identified phase 'end points' in accordance with NC expectations. Key skills are also mapped for each year group and are progressive throughout the school. These too ensure systematic progression to identified skills end points which are in accordance with the Working Scientifically skills expectations of the national curriculum.</p> <p>Every child will have:</p> <ul style="list-style-type: none"> • An understanding of how science relates to everyday life and appreciate its contribution both in the present, historically and to our society and other cultures • The opportunity to be prepared for life in an increasingly scientific and technological world. • Developed attitudes enabling them to be observant, curious and caring about our environment. • Fostered concern about, and active care for, our environment. 	<p>Teachers demonstrate how to use scientific equipment, and the various Working Scientifically skills in order to embed scientific understanding. Teachers find opportunities to develop children's understanding of their surroundings by accessing outdoor learning and workshops with experts.</p> <ul style="list-style-type: none"> • Understanding the uses and implications of Science today and for the future; Children are offered a wide range of extra-curricular activities, visits, trips and visitors to complement and broaden the curriculum. These are purposeful and link with the knowledge being taught in class. Regular events, such as Science Week allow all pupils to come off-timetable, to provide broader provision and the acquisition and application of knowledge and skills. These events often involve families and the wider community. • To see connections between subject areas and become aware of the big ideas underpinning scientific knowledge and understanding; At the end of each topic, key knowledge is reviewed by the children and rigorously checked by the teacher and consolidated as necessary. 	<ul style="list-style-type: none"> • They learn from and work with professionals, ensuring access to positive role models within the field of science from the immediate and wider local community. From this exposure to a range of different scientists from various backgrounds, all children feel they are scientists and capable of achieving. • Children at Holy Family overwhelmingly enjoy science and this results in motivated learners with sound scientific understanding. • The school's science provision is recognised by the achievement of the nationally recognised 'Primary Science Quality Mark', which the school currently holds at silver level.
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