Our Lady of the Wayside's Science Curriculum

General information	
Curriculum Champion	**Mrs Ashcroft**
Link Governor	**TBC**
SLT Oversight	**Mrs Ashcroft**

Our aspirations and aims for Science at Our Lady of the Wayside Catholic School
Our curriculum intent, implementation and impact

Intent

At Our Lady of the Wayside Catholic Primary School, the science curriculum aims to inspire a love for science, foster a healthy curiosity about our world and promote respect for living organisms and the physical environment. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. The science curriculum ensures that children will acquire and develop the key knowledge that has been identified within each unit and across each year group. 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. 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. Children are immersed in scientific vocabulary, which not only aids children's knowledge and understanding of the unit which they are studying, but also allows them to take part confidently in discussions about issues involving science. 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. Cross curricular opportunities are also identified to ensure contextual relevance. Children are encouraged to ask questions and be curious about their surroundings and a love of science is nurtured through a whole school ethos and a varied science curriculum.

Implementation

The planning and teaching of the science curriculum is designed to build on knowledge and skills taught in previous units and year groups. Key concepts and scientific enquiry skills are taught in a sequenced, progressive manner and support the acquisition and accumulation of knowledge. New vocabulary is planned and is taught explicitly to children. Retrieval practice techniques are used to help children to remember key knowledge for use in future science lessons and across the curriculum. When teaching practical science, teachers combine demonstrations with opportunities for children to carry out their own investigations, gaining hands-on experience handling specialist equipment and materials. Teachers use formative assessment techniques to monitor students' progress and adapt teaching strategies accordingly.

Impact

Our science curriculum provides the foundations for our children for understanding the world they live in. Through building up a body of knowledge and key concepts, our children develop a sense of excitement and curiosity and they understand how science can be used to explain what has occurred, predict how things will behave and analyse the causes. Our children understand the value of science and enjoy working scientifically. They are able to communicate their ideas and findings with confidence and using different styles. Our children have a passion for science and engage enthusiastically in their learning. As a result, they achieve well, are scientifically literate and are keen to continue studying science in the future.