

Curriculum Intent statement for the teaching and learning of Science 2021/22



At St. Martin De Porres Catholic Primary School, we are committed to providing our children with a curriculum that has a clear intention and impacts positively upon their needs.

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| Intent | <p>When our children leave St. Martin De Porres, we expect them to be we recognise the importance of Science, as one of the core subjects, in every aspect of daily life. Our intention is to increase pupils’ knowledge and understanding of the world, with developing skills associated with Science as a process of enquiry. We aim to develop the natural curiosity of the child, encourage respect for living organisms as well as the physical environment and provide opportunities for critical evaluation of evidence.</p> <p>In conjunction with the aims of the National Curriculum, our Science teaching offers opportunities for children to:</p> <ul style="list-style-type: none"> • Develop scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics; • Develop understanding of the nature, processes and methods of Science through Science enquiries that help them answer questions about the world around them; • Be equipped with the scientific knowledge required to understand the uses and implications of Science, today and for the future. • Develop the essential scientific enquiry skills to deepen their scientific knowledge. • Use a range of methods to communicate their scientific information and present it in a systematic, scientific manner, including I.C.T., diagrams, graphs and charts. • Develop a respect for the materials and equipment they handle with regard to their own, and other children’s safety. • Develop an enthusiasm and enjoyment of scientific learning and discovery. • We aim to provide the children with the confidence and motivation to continue developing their skills into the next stage of their education and life experiences. <p>Throughout Key Stage 1 and 2, children have weekly lessons using various programmes of study and resources. Within Early Years, Science is taught through the children learning about the world around them in their play activities. We endeavour to provide additional opportunities through Science days and workshops as well as educational linked visits to places such as, the Science Museum or Natural History/Tring Museum.</p> | | |
| Underpinned by | High expectations | Modelling | Fluency |
| | All children are expected to succeed and make progress from their starting points. | Teachers teach the skills needed to succeed in Science, providing examples of good practice and opportunities for practical application whilst having high expectations. | Children apply enquiry, investigation and evaluation skills with ease across the whole curriculum. |

Implementation

At St. Martin's we want to create a positive attitude to Science learning within our classrooms and reinforce an expectation that all children are capable of achieving high standards in Science. Our whole school approach to the teaching and learning of Science involves the following;

- Science will be taught in planned and arranged topic blocks by the class teacher. This is a strategy to enable the achievement of a greater depth of knowledge and include Mastery.
- Through our planning, we involve problem solving opportunities that allow children to find out for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers. Planning involves the creation of engaging lessons and celebrating curiosity. Teachers use precise questioning in class to test conceptual knowledge and skills, and assess children regularly to identify those children with gaps in learning.
- We build upon the learning and skill development of the previous years. As the children's knowledge and understanding increases, and 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.
- Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's school career and new vocabulary and challenging concepts are introduced through direct teaching.
- 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.