Science at St Mary's Primary School

Intent:

Science teaching at St. Mary's Catholic Primary School aims to give all children a strong understanding of the world around them whilst acquiring specific skills and knowledge to help them to think scientifically, to gain an understanding of scientific processes and also an understanding of the uses and implications of science, today and for the future. At St. Mary's we aim to promote a love of science and nurture and develop children as critical, creative and collaborative thinkers.

At St. Mary's, scientific enquiry skills are embedded in each topic the children study (where appropriate) and these topics are revisited and developed throughout their time at school. Science informs all topics taught and experienced in Early Years, ongoing learning is evident through provision, with the inclusion of discreet activities throughout the academic year. Topics, such as Plants, are taught in Key Stage One and studied again in further detail throughout Key Stage Two. This model allows children to build upon their prior knowledge and increases their enthusiasm for the topics whilst embedding this procedural knowledge into the long-term memory.

All children are encouraged to develop and use a range of skills including observations, planning and investigations, as well as being encouraged to question the world around them and become independent learners in exploring possible answers for their scientific based questions. Specialist vocabulary for topics is taught and built up, and effective questioning to communicate ideas is encouraged. Concepts taught should be reinforced by focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions.

SCIENCE			
YR	Through teaching and continuous provision, science in EYFS enables children to: • make comments about what they have heard and ask questions to clarify their understanding. • use a range of small tools, including scissors, paint brushes and cutlery. • work and play cooperatively and take turns with others. • explore the natural world around them, making observations and drawing pictures of plants and animals. • know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.	• participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. • understand some important processes and changes in the natural world, including the seasons and changing states of matter. • feel confident to answer simple questions about observable properties of objects and people, animals and plants around them • compare objects in their environment and talk about similarities and differences • ask questions about the world around them, and seek to find their own answers • know what a plant is	• know what a flower is • know where you see plants describe different plants and flowers know what an animal is • recognise and name a variety of different animals • know the names of different body parts of humans and animals they have experience of • recognise that different everyday objects are made from different materials • describe how different objects look and feel • know about different types of weather • observe changes in trees and plants as the seasons progress

Class	Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1 & 2
Y1/2	A	Identifying Animals	Identifying Plants	My Body	Everyday Materials	Seasonal Changes
	B	Living In Habitats	Growing Plants	Growth and Survival	Exploring Everyday Materials	Super Scientists
Y3/4	A	How Plants Grow	Health and Movement	Rocks, Fossils and Soils	Light and Shadow	Forces and Magnets
	B	Living In Environments	Eating and Digestion	States Of Matter	Changing Sound	Circuits and Conductors
Y5/6	A	Life Cycles	Changes and Reproduction	Properties and Changes of Materials	Earth and Space	Forces In Action
	B	Classifying Organisms	Healthy Bodies	Evolution and Inheritance	Seeing Light	Changing Circuits