



St Matthew's C E Primary

Science Curriculum

Science is a core subject in the National Curriculum and is an essential part of a child's education. It provides the foundation for our understanding of the world and how it works through the study of biology, chemistry and physics. Our aim at St Matthew's is for the children to develop a sense of curiosity and a drive to know more, to ask questions and use what they know to help them find answers. We aim for them to be engaged with science and to think about how it affects their everyday lives as well as encouraging them to believe that science is for everyone.

Provision

At St Matthew's, we use a range of effective teaching and learning techniques to deliver the curriculum in an engaging, relevant and meaningful way, which meets the needs of our children. Where possible lessons are taught using practical, hands on methods and children are encouraged to ask their own questions. We aim for children to develop their skills as scientists by providing them with opportunities to work collaboratively to investigate scientific concepts using a variety of techniques and use their findings to help reinforce their understanding and knowledge. We ensure that children are given experiences of a range of different enquiry types: pattern seeking, sorting, grouping and classifying, researching and using secondary sources, observing over time and fair/comparative testing. Where possible links are made with other curriculum areas including maths (analysis of numerical data), English (opportunities for writing non-fiction reports and linking investigations with stories) and history (helping pupils to understand how scientific ideas have developed over time).

EYFS

Children in our Early Years unit follow the Early Years Foundation Stage Framework. Links with scientific concepts can be found across the EFYS curriculum but the area most clearly connected with scientific learning is entitled "The World". Through learning about the world, children learn to look closely at similarities differences, patterns and change; they explore features of their local environment including the outdoor classroom area and learn about how plants and animals change over time; they are encouraged to talk about why things happen and how things work. We encourage children to ask questions about the things that they are observing every day and to carry out their own investigations. In addition to providing open ended stimuli for investigation as part of continuous provision, the children carry out investigations on specific topics such as plant growth (planting beans and sunflower seeds), floating and sinking and materials. The children have the opportunity to observe the lifecycle of a chicken first hand when we have eggs from Living Eggs in school to hatch and we arrange trips that link to the curriculum for example to Reddish Vale Farm.

Key Stage 1 and 2

In Key Stages 1 and 2 the children follow the National Curriculum. This covers a range of subject areas incorporating physics, biology and chemistry each of which is subdivided as shown on the table below.

Children also develop an understanding of the nature, processes and methods of science (“Working Scientifically”). Here children are encouraged to develop scientific ‘skills’ by asking simple questions and recognising that they can be answered in different ways. Children learn to use simple and appropriate scientific equipment to take measurements and make observations. They record their findings in a variety of ways and learn to evaluate the reliability of their investigations.

Children are also encouraged to recognise the uses and implications of science, directly applying their knowledge and skills in creative and productive challenges. Children are beginning to consider different approaches to science, considering the application of the science they are learning about to the world around them and learning about the contribution of real life scientists.

Additionally, children in KS2 have the opportunity to attend an after school Science Club where they are able to experience a range of scientific activities and learn more about the different ways in which scientists work.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
B I O L O G Y	Animals Inc Humans	Animals Inc Humans	Animals Inc Humans	Animals Inc Humans	Animals Inc Humans	Animals Inc Humans
	Plants	Plants	Plants			
	Seasonal Change					Evolution and Inheritance
		Living Things and Their Habitats		Living Things and Their Habitats	Living Things and Their Habitats	Living Things and Their Habitats
CHEMISTRY	Everyday Materials	Uses of Everyday Materials	Rocks	States of Matter	Properties and Changes of Materials	
P H Y S I C S			Light			Light
				Sound		
			Forces and Magnets		Forces	
				Electricity		Electricity
					Earth and Space	
	Working Scientifically					
						