

## SCIENCE CURRICULUM

Children are encouraged to be curious and ask questions about what they notice. They are helped to develop their understanding of scientific ideas, knowledge and vocabulary by using different types of scientific enquiry to answer questions.

NURSERY	RECEPTION	YEAR 1	YEAR 2
<p><b>Understanding the World</b></p> <ul style="list-style-type: none"> <li>*Understand some ‘why’ questions like: ‘Why do you think the caterpillar got so fat’.</li> <li>* Begin to understand the need to respect and care for the natural environment and all living things</li> <li>*Use all of their senses in hands-on exploration of natural materials.</li> <li>*Explore collections of materials with similar and/or different properties</li> <li>*Make healthy choices about food, drink, activity and tooth-brushing.</li> <li>*Begin to make sense of their own life story and family’s history.</li> <li>*Explore how things work.</li> <li>*Talk about what they see, using a wide vocabulary.</li> <li>* Plant seeds and care for growing plants</li> <li>*Understand the key features of the life cycle of a plant and an animal.</li> <li>*Explore and talk about different forces they feel</li> </ul>	<p><b>Communication and Language</b></p> <ul style="list-style-type: none"> <li>*Learn new vocabulary.</li> <li>*Articulate their ideas and thoughts in well-formed sentences.</li> <li>*Describe events in some detail.</li> <li>*Use talk to explain how things work and why they might happen</li> <li>*Use new vocabulary in different contexts.</li> <li>*Ask questions to find out more and to check what has been said to them.</li> <li>*Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen</li> </ul> <p><b>Personal, Social and Emotional Development</b></p> <ul style="list-style-type: none"> <li>*Know and talk about the different factors that support their overall health and wellbeing:                             <ul style="list-style-type: none"> <li>- healthy eating</li> </ul> </li> </ul> <p><b>Understanding the World</b></p> <ul style="list-style-type: none"> <li>*Explore the natural world around them.</li> <li>*Describe what they see, hear and feel while they are outside.</li> <li>*Understand the effect of changing seasons on the natural world around them.</li> </ul> <p><b>EARLY LEARNING GOALS</b></p> <ul style="list-style-type: none"> <li>* Explore the natural world around them, making observations and drawing pictures of animals and plants <i>(The Natural World)</i></li> <li>*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. <i>(The Natural World)</i></li> <li>*Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <i>(The Natural World)</i></li> </ul> <p>*Make comments about what they have heard and ask questions to clarify their understanding <i>(Listening, attention &amp; understanding)</i></p> <p>* Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices <i>(Managing Self )</i></p>	<p><b>Plants</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>*identify and describe the basic structure of a variety of common flowering plants, including trees</li> </ul>	<p><b>Plants</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*observe and describe how seeds and bulbs grow into mature plants</li> <li>*find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</li> </ul>
		<p><b>Animals, including humans</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>*identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>*describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</li> <li>*identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</li> </ul>	<p><b>Animals, including humans</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*notice that animals, including humans, have offspring which grow into adults</li> <li>*find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> <li>*describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> </ul>
		<p><b>Everyday materials</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*distinguish between an object and the material from which it is made</li> <li>*identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>*describe the simple physical properties of a variety of everyday materials</li> <li>*compare and group together a variety of everyday materials on the basis of their simple physical properties</li> </ul>	<p><b>Uses of everyday materials</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>*find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</li> </ul>
		<p><b>Seasonal changes</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*observe changes across the 4 seasons</li> <li>*observe and describe weather associated with the seasons and how day length varies</li> </ul>	<p><b>Living things and their habitats</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>*explore and compare the differences between things that are living, dead, and things that have never been alive</li> <li>*identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</li> <li>*identify and name a variety of plants and animals in their habitats, including microhabitats</li> <li>*describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</li> </ul>