

# Science Pathway



	Nursery	Reception	Year 1	Year 2	Expectation
<b>Plants</b>	Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal.	<b>Explore the natural world around them, making observations and drawing pictures of animals and plants.</b>	Can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.  Can identify and describe the basic structure of a variety of common flowering plants, including trees.	Can observe and describe how seeds and bulbs grow into mature plants.  Can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Pupils should be able to:  Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees  Identify and describe the basic structure of a variety of common flowering plants, including trees.
<b>Vocabulary</b>	<i>Leaf, tree, flower, petal, growth, seed</i>		<i>Roots, seed, bud, bulb, blossom, deciduous, evergreen</i>	<i>Germinate, lifecycle, mature, seedling, shoot</i>	
<b>Animals Including Humans</b>	Begin to understand the need to respect and care for the natural environment and all living things.	<b>Explore the natural world around them, making observations and drawing pictures of animals and plants.</b>	Can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common animals.  Can identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Can notice that animals, including humans, have offspring which grow into adults.  Can find out about and describe the basic needs of animals, including humans, for survival (water, food and air).  Can describe the importance for humans of exercise, eating the right amounts of	Pupils should be able to:  Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals  Identify and name a variety of common animals that are carnivores, herbivores and omnivores

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			<p>Can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Can identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>	<p>different types of food, and hygiene.</p>	<p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>
<b>Vocabulary</b>	<i>head, shoulders, legs, hands, feet, ears, eyes, taste, touch, sight, hearing, smell</i>		<i>Senses, vertebrates, invertebrates, herbivore, omnivore, carnivore</i>	<i>Survival, exercise, diet, protein, carbohydrate, vitamins, minerals</i>	
<b>Living Things and Habitats</b>	<p>Talk about what they see, using a wide vocabulary</p> <p>Explore and talk about different forces they can feel.</p>	<p>Recognise some environments that are different to the one in which they live.</p> <p><b>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.</b></p>		<p>Can explore and compare the differences between things that are living, dead and things that's have never been alive.</p> <p>Can 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</p>	<p>Pupils should be able to:</p> <p>Explore and compare the differences between things that are living, dead and things that have never been alive</p> <p>Identify most living things live in habitats to which they are suited and describe how different habitats provide for basic needs of different kinds</p>

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				<p>how they depend on each other.</p> <p>Can identify and name a variety of plants and animals in their habitats, including micro -habitats.</p> <p>Can 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.</p>	<p>of animals and plants and how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>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.</p>
<b>Vocabulary</b>	<i>Underground, woods, trees, sea, minibeasts, ladybirds, bees, beehive, caterpillar, butterfly, lifecycle</i>			<i>Living, habitat, biome, microhabitat, food chain, organism, life processes</i>	
<b>Everyday Materials</b>	<p>Use all their senses in hands on exploration of natural materials.</p> <p>Talk about the differences between materials and changes they notice.</p>	<p>Talk about the differences between materials and changes they notice.</p>	<p>Can distinguish between an object and the material from which it is made.</p> <p>Can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>Can describe the simple physical properties of a</p>	<p>Can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>Can find out how the shapes of solid objects made from some materials can be changed</p>	<p>Pupils should be able to:</p> <p>Distinguish between an object and the material from which it is made</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>

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	Explore collections of materials with similar and/or different properties.		variety of everyday materials.  Can compare and group together a variety of everyday materials on the basis of their simple physical properties.	by squashing, bending, twisting and stretching.	Describe the simple physical properties of a variety of everyday materials  Compare and group together a variety of everyday materials on the basis of their simple physical properties.
<b>Vocabulary</b>	<i>wood, paper, plastic, metal, glass, rock, brick, fabric, elastic, hard, soft, rough, smooth</i>		<i>Waterproof, absorbent, transparent, opaque, magnetic, floating, sinking, texture</i>	<i>Shock absorbent, suitability, reflective, rigid, flexible</i>	
<b>Seasonal Changes</b>		Understand the effect of changing seasons on the natural world around them. <b>Understand some important processes and change in the natural world around them, including seasons and changing states of matter.</b>	Can observe changes across the four seasons.  Can observe and describe weather associated with the seasons and how day length varies.		Pupils should be able to:  Observe changes across the four seasons  Observe and describe weather associated with the seasons and how day length varies.
<b>Vocabulary</b>	<i>Autumn, winter, spring, summer</i>		<i>Day length, sunrise, sunset, weather, monsoon,</i>		
<b>Working Scientifically</b>			Can ask simple questions and recognising that they can be answered in different ways.	Can ask simple questions and recognising that they can be answered in different ways.	Pupils should be able to use the following practical scientific methods, processes and skills:

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			<p>Can observe closely, using simple equipment.</p> <p>Can perform simple tests.</p> <p>Can identify and classify using their observations and ideas to suggest answers to questions.</p> <p>Can gather and record data to help in answering questions.</p>	<p>Can observe closely, using simple equipment.</p> <p>Can perform simple tests.</p> <p>Can identify and classify using their observations and ideas to suggest answers to questions.</p> <p>Can gather and record data to help in answering questions.</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Observing closely, using simple equipment</p> <p>Performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions, gathering and recording data to help in answering questions.</p>
<b>Vocabulary</b>	<i>What can you see? What do you think will happen? What do you notice?</i>		<i>Predicting, questioning, recording, testing, observing, measuring, interpreting, evaluating</i>		